The Economics of Psychiatric Services in the UK and Ireland, 1845-1985

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ABSTRACT

This study empirically describes the activity and costs associated with the psychiatric services in England & Wales, Scotland & Ireland from 1845 to 1985. Basic economic concepts are employed to structure data. Key hypotheses from the three historical schools (Progressive, Social Control and Epidemiological) are tested, using a neo-Popperian methodology.

The literature is reviewed in Chapter 2 (general and socio-economic) and Chapter 3 (epidemiological). Chapter 4 sets the comparative legal and financing context. Chapters 5, 6 and 7 outline activity and financial data for each country. Major points common to each included:

- relative stability in admissions and costs up to around 1945,
- a major change after 1945 when admission rates (both first and total) rose sharply,
- inflows exceeded outflows until around 1955 when the number of resident inpatients began to fall,
- despite the fall in resident inpatients, spending,which was predominantly publicly financed and hospital orientated, continued to increase.

Chapter 8 suggests that three hypotheses were not obviously falsified by the data:

- a pharmacological hypothesis linking new drugs in the mid-1950s to the changes which occurred then,
- Wagner's Law, which predicts continued high levels of spending despite reductions in hospital places, and
- Hare's epidemiological hypothesis which relied on the increase in first admission rates between 1850 and 1900.

Four other hypotheses related to costs were rejected. Three paradoxes are identified for further investigation.

Chapter 9 shows that the decline in the stock of inpatients occurred almost entirely in the long-stay (over 5 years) group, due mainly to deaths rather than live discharges. This pattern helps explain the continued high levels of spending. Ireland's outlier status is linked to both demand and supply side factors. Chapter 10 draws some overall conclusions and offers priorities for further research.

Acknowledgments
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The greatest debt remains to Maryrose Tarpey and Luke Raftery, both of whom taught me the meaning of 'opportunity costs' in terms of the time taken to complete this work. Maryrose Tarpey not only carried the brunt of these costs but also added helpful comments, detailed proof-reading, and continual encouragement.

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CHAPTER 1
INTRODUCTION

Introduction

This introductory chapter sets the scene for the study that follows, the objectives of which are:

- to describe and compare in quantitative terms the evolution of the psychiatric services in England & Wales, Scotland and Ireland from 1845 to 1985[1],
- to identify and test central hypotheses in the literature on the history of psychiatric services,
- to outline, on the basis of the above analysis, the most satisfactory account of that history, and
- to suggest further work that might extend understanding of these matters.

This chapter provides a brief overview of:

- psychiatric illness and services,
- the various schools in the history of psychiatric services, and,
- the potential contribution of an economics approach, including the approach adopted to hypothesis testing.

Successive chapters review the literature (Chapters 2 and 3), set the comparative context (Chapter 4), describe each country (Chapters 5, 6, and 7)[2] before subjecting the key hypotheses to empirical testing (Chapter 8). Chapter 9 builds on the foregoing chapters to develop a more satisfactory account of the key factors in the evolution of the psychiatric services. Chapter 10 reviews the findings of the study and proposes directions for further research.

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[1] While the time period is broadly 1845 to 1985, the exact period depends on the data available, which varies with some series (residents in certain types of accommodation) available from 1845, others (expenditure series) only from around 1870, and with some other series continuing to 1980, others to 1987.

[2] On the basis of a detailed review of the data sources in Appendices 1, 2 and 3.

Psychiatric Illness and Services

International Context

Mental illness imposes an extraordinarily heavy burden on society. The World Health Organisation (Cohen, 1988)[1] has put the total number of psychiatrically ill in the world at no less than 250 million, or around 4% of the global population. Psychiatric epidemiologists have suggested a prevalence of schizophrenia at around 1% of the population, which would mean that out of a world population of 6 billion persons, there were 60 million schizophrenics. The prevalence of other mental illnesses has been less well studied, but since schizophrenia accounts for only a fraction of all recorded cases, the figure of 4% being mentally ill at any one time does not seem implausible. Population based studies suggest much higher figures, however: 20% of the population require psychiatric help annually according to a large US study (Robins & Regier, 1991). UK studies suggest that between 25% and 32% of the population experience psychological distress each year (Goldberg, 1991).

Service Norms

The World Health Organisation has attempted to set norms for inpatient bed provision, at between 0.5 and 1.0 beds per 1,000 persons (Freeman et al., 1985). Although these suggested targets were intended to apply internationally, the range of provision continues to vary widely. Hafner (1987) has queried these norms, but only on the basis of widening the range. Very little attention has been paid to the norms appropriate to the third world (Cohen, 1988).

Service Contacts

In the UK around 1% of the population are in regular contact with the specialised psychiatric health services each year (Raftery, 1991), mainly as outpatients. Many more consult General Practitioners (GPs) for psychiatric ailments. Estimates that 80% of all psychiatric illness is dealt with by General Practitioners in primary care imply that some 4% to 5% of the UK population are being treated for mental illness. Broadly

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[1] References are noted by author, date and, where appropriate, page, in the text, with full details in the bibliography. The titles of references of particular interest are also footnoted for convenience.

similar estimates apply to the United States, with 3% of the population in 1975 identified as receiving specialised psychiatric services each year (Regier, 1978, quoted in Mollica & Astrachan, 1991, p.577).

Table 1.1 summarises some of the international trends. While many industrialised countries, such as the UK, Ireland, US, Belgium, Germany, France, Finland, Sweden, Italy have been reducing their level of inpatient services (Mangen, 1987; Bennett, 1991) some others have been moving in the opposite direction. Japan is the most notable example, and for this purpose can be classed with the third world in that many of those countries are also increasing their supply of inpatient beds (Cohen, 1988). Both India and Pakistan are increasing their inpatient facilities, but from very low levels.

Table 1.1

Direction of Change in Industrialised Countries

UK	- beds down by two thirds since 1955
Ireland	- beds falling since 1955
US	- beds down sharply since 1960
Germany	- beds down since 1970s
Belgium	- beds down since 1974
France	- hospital expenditure falling
Finland	- inpatient rates down since 1974
Sweden	- beds down from 1970
Italy	- beds rose to 1963, decline since
Japan	- 1984 peak in beds

Source - Bennet (1991), Mangen (1987).

The UK and the US

A recent analysis (Raftery, 1992) has provided a more detailed comparison between the UK and US. While inpatient places have been drastically reduced in both countries few hospitals have closed. Neither country has reduced direct expenditure on mental health services, which remain inpatient-orientated.

The number of residents in all types of mental hospitals per 1,000 population in both the UK and US peaked in each country at around 4 places per 1,000 persons in the mid-1950s. In the UK the number of inpatients reached maxima before each of the major wars and again in 1955, while in the US, inpatient residents peaked in 1946 and again in 1955. The pace of both expansion and contraction was more rapid in the US than in the UK, so that by 1986 the US had just under 1 inpatient per 1,000 persons compared to around 1.5 in the UK.

These declines in inpatient places have been accompanied by major expansions in the numbers of outpatient episodes, and by more rapid turnover of patients who are admitted. Although the data are collected on different bases in the US and the UK (care episodes in the US, attendances in the UK), it is clear that outpatient activity comprises the bulk of service contacts in each country. General hospitals have become the setting for the bulk of psychiatric admissions in the US, with relatively shorter lengths of stay offsetting these hospitals' small share of total beds.

Spending, however, remains focused on the mainly inpatient-oriented mental hospitals. Inpatients accounted for some 70% of spending in the US (Kiesler & Sibulkin, 1987; Redick et al. 1987; Mollica & Astrachan, 1991) and the UK equivalent has been put at around 80% (House of Commons, 1989).

The Burdens of Disease

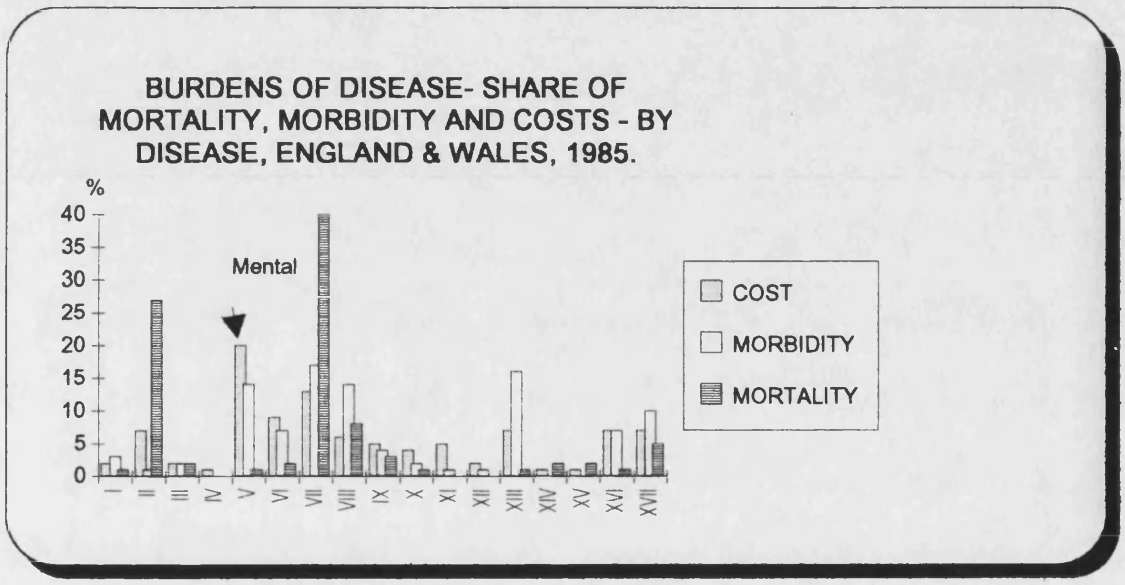
The 'burden of disease' can be examined in three ways:

- mortality,
- morbidity, and
- costs.

Detailed analyses of these for England & Wales (Department of Health,1988) for 1985 by each of the 17 Chapter headings of the International Classification of Disease (ICD) are shown in Figure 1.1. Mental Illness is included under ICD Chapter V, which despite

imposing a relatively low burden in terms of mortality and (to a lesser extent) morbidity, imposed the highest burden of any disease on health service costs. While cancer and cardiovascular disease imposed the major mortality burdens, mental illness hardly featured, accounting for less than 1% of all deaths. The fact that very few death certificates specify mental illness may, of course, underestimate the mortality associated with the disease: the proximate cause of death of a mentally ill person may not generally be regarded as due to that illness even when the patient has, for example, committed suicide.

FIGURE 1.1



Key to ICD Chapters

I Infectious	VII Circulatory	XIII Musculo-skeletal
II Cancer	VIII Respiratory	XIV Congenital
III Endocrine	IX Digestive	XV Perinatal
IV Blood	X Genito-urinary	XVI Ill Defined
V Mental	XI Pregnancy & childbirth	XVII Accidents, Poisoning, Violence
VI Nervous	XII Skin	

Source: Department of Health, 1988.

Mental illness (ICD Chapter V) contributed a somewhat higher burden of morbidity, at 15% of the total. This result was based on analysis of days off work due to the various diseases, and thus was confined to those at work covered by the relevant national insurance. To the extent that the mentally ill are less likely than average to be employed, such a measure of morbidity will underestimate the morbidity due to this disease heading.

The cost of mental illness was the largest of any of the 17 ICD Chapters at 20%. This is due largely to the costs of inpatient care, which in turn relates to the long-term inmates of the mental hospitals. However, sizeable burdens are imposed in the forms of relatively high usage of services such as outpatients, General Practitioner consultations and especially drugs.

The above estimates of cost to the NHS included both mental illness and mental handicap. A special analysis has been carried out to disaggregate components of NHS costs as shown in Table 1.2, which indicates that the burden of mortality and NHS costs are spread fairly evenly between the four headings of Organic Psychoses, Other Psychoses, Neuroses etc, and Mental Retardation. 'Neuroses etc.', however, accounted for relatively more morbidity days than any of the other categories.

Table 1.2

Burdens of Disease by Sub-Heading within Mental Illness

1985 data, England.

	% Deaths	%Life Years	% Morbidity	% NHS Costs
Organic Psychoses	0.5	0.2	0.1	3.2
Other Psychoses	0.1	0.1	2.8	5
Neuroeses etc	0.1	0.2	11.9	5.8
Mental Retardation	0	0	0.5	6
Total	0.7	0.5	15.2	20

Source: Department of Health, unpublished.
(Totals do not add due to rounding).

NHS mental health costs were dominated by inpatient costs and by GP prescription costs (23% of each of total inpatient and of prescribing costs), with relatively low shares of other services devoted to mental health (3% of total outpatient and 8% of total GP consultation costs) (Department of Health, unpublished).

A more recent British attempt at costing neurotic disorders in general practice (Croft-Jeffries & Wilkinson,1989) used a similar method to derive broadly similar results.

In the United States, estimates of the burden of disease have been confined to the costing of mental illness, including those costs due to health service use and to private costs imposed by time-off work. Overall, the US spends roughly the same amount as the UK on mental health services, as measured by the proportion of GDP accounted for by total (public plus private) spending (Raftery, 1992).

Fein's (1958) study *The Economics of Mental Illness* marked the first of a series of attempts to estimate the cost of mental illness, whether more should be spent, and if so how it should be funded. Fein, who included direct and indirect costs, along with estimates of the earnings foregone by being ill, suggested that large savings could be made if patients could be discharged earlier or if admission could be avoided. Although the assumptions made to estimate total direct and indirect costs were heroic, the study provided a milestone in the methodology of disease costing, which has since been developed by a growing number of studies (McGuire, 1991; Mollica & Astrachan, 1991; Cruze et al, 1981; Harwood et al, 1984; Rice et al, 1990), but without the comparisons between mortality, morbidity and costs or the cross disease comparisons in the UK work discussed above.

While the burden of disease approach provides a useful background to service use and cost levels, it tells nothing about the cost-effectiveness of various interventions. If all interventions were equally effective, then the costs of intervention would broadly mirror the pattern of morbidity and mortality. Not all interventions are equally effective, of course, so the appropriate relationship between mortality, morbidity and costs remains unclear. The cost effectiveness of some of the major interventions, particularly those relating to institutional and community-orientated care is reviewed in Chapter 3.

History of UK Psychiatric Health Services: the Three Schools

Kuhn's (1970) concept of 'paradigms' can be used to classify the three schools in the history of psychiatric services in the UK[1]. Paradigms refer to 'world views' or perspectives that shape how the topic is perceived, including what is allowed as evidence. Thus, what might count as proof in one paradigm might well be discounted in another. Although the concept of paradigm may be somewhat stronger than that of different 'schools', the two terms are used interchangeably in what follows. Much of the

[1] Similar differences between schools or paradigms can be applied to the history of psychiatric services in other countries, notably the US (see Scull, 1989) and France (see Castle & Castel, 1981).

controversy, and indeed the energy, in the literature on the history of psychiatric services derives precisely from the existence of competing paradigms.

Although the classification of the history of psychiatric services into three schools runs the risk of imposing this classification on all contributors, it usefully summarises the main features of a complex on-going debate. In what follows, due attention will be given to those relatively few scholars whose work does not fall into any of these schools.

The three main schools in the historiography of psychiatric service provision, discussed below, are:

- the progressive school,
- the social control school,
- the epidemiological school.

Progressive School

The Progressive school can be characterised as depicting certain historical developments as in some sense marking 'progress'. The objective to which progress is being made is often left undefined, but has usually been informed by philanthropic ideals. As recently as 1972 Kathleen Jones published *A History of the Mental Health Services* which, besides being the first English history of the subject, presented that history largely as one of progress, albeit with complications. No sooner had that reassuring picture been painted than it began to be attacked as naively philanthropic. Jones' history of benevolent progress was re-presented in more pessimistic terms as one of 'social control'; or of the incarceration and 'decarceration' of social misfits. Kathleen Jones, who has repeatedly defended her position (Jones, 1972, 1982) is taken in what follows as the doyenne of the Progressive School.

The Progressive School might as easily be termed the 'naive' school in that it has tended to be less reflective about its methodologies. Although Jones' (1972) study provides the main example, to her name might be added Busfield (1986) and

Unsworth (1987). It is suggested below that most of the proponents of the other schools, while nominally attaching more importance to methodology, have been no less 'naive', at least judged by their lack of concern with checking the plausibility of their key hypotheses and assumptions against the available empirical evidence.

Social Control School

There has been fierce debate over the exact meaning of social control, especially as applied to the United States:

> 'At times, the protagonists in the debate on the meaning of lunacy reform have given the impression of attempting to destroy, not just one another's work, but each other' (Scull, 1981, reprinted 1989, p.33).

That debate, which has centred on the relationship between structure and ideology in the history of mental health services in the United States (Rothman, 1971 & 1981; Scull, 1990), has been extended to the UK by Scull. To the *cognoscenti*, the 'Jones - Scull debate' is used to denote the clash of these paradigms. The term 'social control' is used in this study in its wide sense to classify those who see the development of the mental institutions as motivated largely by attempts to control society and particularly its misfits.

Andrew Scull, the most sophisticated exponent of the social control school, has identified Foucault as his inspiration (Scull, 1989). Foucault's (1973) vision of the mental health services as policing the boundaries of the emerging rationality in European society struck chords which have reverberated through many subsequent studies. For Foucault, the rupture around the birth of the asylum was marked by a 'Great Confinement' whereby the 'irrational' were labelled and excluded. Foucault saw the psychiatric institutions as separating out the irrational (personified in the mad) in the name of 'Reason' as embodied in the embryonic capitalist state. Thus lunatic asylums served a social control rather than a medical function. Although argued in compelling rhetoric, Foucault provided no empirical justification:

> 'it would be a mistake to assume that on many topics its (Foucault's work) roots in historical evidence are very secure" (Bynum, W. 1985, p.5, bracketed phrase added).

Foucault's considerable influence has been subject to intense criticism, not least for his lack of empirical evidence. Such criticisms have not, however, prevented the heirs to the Foucault tradition from continuing to ignore empirical matters. While some studies provide data for various periods, none have comprehensively mapped out the changing scale of activity of the mental health sector.

Foucault developed a complex theory based largely on the epistemological premise that only an archaeological type approach to knowledge could be of value (Foucault, 1972). He then applied this archaeological approach to various key themes, such as medicine and illness, sexuality and, of course, madness.

In *Mind Forg'd Manacles, A History of Madness in England from the Restoration to the Regency,* Porter (1987) denied the relevance of Foucault's theory (and also those of Doerner, 1983) as constituting key themes to the English experience. Not only was there a lack of evidence of a "great confinement" in the eighteenth century, but what provision there was, was private rather than state organised.

> 'The age of the "great confinement" in England was not the Georgian era but its successor' (Porter, 1987, p.8).

Porter, while acknowledging Foucault's point that a history of 'Reason' was a necessary condition for a history of madness, denied the latter's account of how "Reason" stigmatised those beyond the bourgeois work ethic in England. Demystification and secularisation were more relevant factors, according to Porter, who suggested that the belief that madness might be remediable was premised more on a waning of belief in original sin. Further, Foucault's absolute distinction between 'Reason' and 'Unreason' left no ground for the intermittent rationality that characterised many of those in the early madhouses, Porter suggested.

Although Scull (1989), and even Foucault himself (in *Archaeology of Knowledge*, 1972), have each taken some distance from Foucault's early and starkest vision of the

history of mental health services, the latter's influence remains. Scull's criticisms of Foucault related to the latter's failure to present:

> 'either a systematic discussion of politics or a serious discussion of economic structures ...(or) any coherent or persuasive account of how professional control over madness was achieved by physicians' (Scull 1981, reprinted 1989, p.19).

Such criticisms, which aim at developing rather than repudiating Foucault's core themes, summarise Scull's main concerns. Scull attempted to develop Foucault's approach by discussing the influence of politics, economics and professional control on the basis of a neo-marxist account of economic structures.

Foucault's liberties with historical evidence prompted a response from a number of specialists in medical history, culminating in the three volume work *The Anatomy of Madness: Essays in the History of Psychiatry*[1]. These articles, which are referred to as appropriate below, provide a wealth of illuminating evidence of the history of mental illness, both in the way it was thought about and treated. Dissatisfaction with the omission of the economic aspects of the development of psychiatric services in these articles, however, provided an impetus to the present study.

Epidemiological School

Epidemiological history is a relatively recent development which has been motivated, at least in part, by attempts to harness history in trying to explain the aetiology of particular diseases. In particular, there has been considerable interest in schizophrenia, both cross-nationally and historically. Both approaches have attempted to demonstrate a fixed level (whether incidence or prevalence) of schizophrenia at least in the short run, with some scholars suggesting that this disease might be transmitted by infectious mechanisms.

The methodology of epidemiology has developed in complex and often ingenious ways, often in order to rule out possible bias. The emphasis on removing bias has come at least in part from the struggle to convince clinicians that some practices should be changed.

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[1] *The Anatomy of Madness; Essays in the History of Psychiatry,* ed. Bynum,W. F. Porter,R. Shepherd,M. 3 volumes, London, Tavistock, 1985.

The necessity to test new pharmacological products as well as novel interventions has contributed to the development of rigourous standards.

Although epidemiology is rigourous in a quantitative sense, its links with the natural sciences tend to be seen by the social control school as providing an alibi for methodological naivete. The use of historical data in epidemiology has been rare to date, partly perhaps because historical research tends not to have the kind of customised data that trials generate.

Epidemiological studies of the historical evolution of psychiatric services have provided an empirical, if rather narrow orientation, notably Hare (1983)[1], who raised two provocative theses. Firstly, Hare argued that provision of the public lunatic asylums in the period 1850-1900 had been due to a major increase in the incidence of mental illness, as measured by first admissions per 100,000, rather than vice versa as the nosocomialists would have it[2].

Hares' second thesis was more controversial, suggesting that the rise in incidence signalled an epidemic of mental illness, specifically of schizophrenia, spread by infection, perhaps viral in nature.

Scull, in reaction, suggested that Hare's ingenious (epidemiological) explanation 'would do credit to a Professor at the Grand Academy of Lagado'[3]. Scull, in an article 'Was Insanity Increasing?' argued the contrary view, namely that the expansion of the numbers deemed lunatic between 1850 and 1900 was largely attributable 'to the development of a more expansive view of madness'. This more expansive view included:

- doctors' self interest;
- professional imperialism;

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[1] Hare, E. Was insanity on the increase? *British Journal of Psychiatry* 142:439-455, 1983.

[2] 'Nosocomial' or hospital-like was Hare's pithy epithet for the social control theorists who saw the mental hospitals as preceding and perhaps calling into being the mentally ill.

[3] Lagado is a city in Jonathan Swift's satire 'Gulliver's Travels'.

- provision by the asylums of a convenient and culturally legitimate alternative to coping with 'intolerable' individuals within families; and
- central state subsidies (Scull, 1989[1]).

Scull suggested that

> 'the most satisfactory way of deciding between the rival hypotheses offered by Hare and myself would be to look at a random sampling of admissions over time to see whether the increase occurs among mild or severe cases' (Scull, 1989, p.247)

Such (an impossible) sampling would indicate the extent to which the increase was due to increased incidence (Hare) or lower admission thresholds (Scull). A key contention of the present study is that these rival hypotheses can be evaluated using the available empirical data.

Subjective School

Although this school is tangential to the present study, the increasing popularity in historical studies of more personal accounts by historical subjects has constituted one of the innovations in recent historiography. Porter has published a valuable account of how lunacy was perceived by those who were deemed lunatic in *A Social History of Madness* (1989) in which he attempted to give the mad a voice with which to speak for themselves.

The relationship between lunacy and gender were explored in a generally subjective manner in the Showalter's *The Female Malady*[2] (1987), which used women's personal accounts of madness in letters and diaries and in English literature. Showalter took as given the predominance of females in the lunatic asylums, without taking account of the degree to which this imbalance might be due to factors other than prejudice against women - for example, the influence that women's greater life expectancy might have

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[1] Scull, A.T. Was Insanity Increasing? in *Social Order / Mental Disorder: Anglo American Psychiatry in Historical Perspective* Routledge, London, 1989.

[2] *The Female Malady , Women Madness and English Culture, 1830-1980.* Showalter, E. London Virago, 1987.

on the number of women in any institution with long-stay inmates. Her account, however, shows how mental illness was perceived in literature and especially by women writers. In addition, she provided an illuminating discussion of shell shock in World War I.

The Historiography of Madness

A number of points can be concluded at the historiographical level, as follows.

First, despite the existence of a number of schools, few have been sophisticated on a methodological level. Not only has methodology rarely been discussed, but none of the studies reviewed above have examined the plentiful historical data that are available.

Second, it is clear that despite the emphasis on economic structures that was prompted by Foucault's work, no one has considered the methods by which provision for lunatics was funded, nor the costs of the main forms of provision relative to other options for care and treatment. A strategy for social control on a grand scale might be expected to have provoked some discussion on its relative costs and benefits. However, remarkably few researchers have analysed the empirical data on the number of patients confined, let alone the pattern of admissions and discharges, or the costs entailed.

Third, there has been a lack of work on the comparative aspects of lunacy provision in England & Wales, Scotland and Ireland. The proximity of the three countries (four from 1920) along with their largely shared, albeit differentiated, statutory framework might suggest similar responses to mental illness, while their differences in terms of economic and demographic development might suggest varying levels of response.

The complexity of researching the history of mental illness has been underlined by the schools discussed above. Madness by definition raises questions about rationality, which in turn prompts questions about single or multiple rationalities. These dichotomies are parallelled by similar debates about methodologies.

Potential Contribution of an Economics Approach

A glaring omission in the above debates has been any serious concern with the economic aspects, such as how much did the asylums cost, who paid for them, and how. Although Culyer and Jacobs' important article[1] provides a single exception to this generalisation, they confined themselves to England & Wales for the period 1919-1960 and avoided any comment on the implications of their findings, except as providing an exception to Wagners's Law. Wagner' Law, which is discussed further below, states (by implication) that public spending is not flexible downwards, or more precisely, that an expanding role for the state is an inevitable feature of economic development (Heald, 1983). The lack of concern with economic aspects in the more recent debates (which have shown no awareness of the Culyer & Jacobs article) is surprising given the neo-marxism of many of the social control school and of Scull in particular. Scull, as discussed below, attributed a key role to cost minimisation strategies by the authorities, both in the expansion of the asylums (relatively cheap and acceptable warehousing) and in their decline (increases in relative costs).

The present study focuses on the economic aspects of the history of mental illness services. Economic aspects are taken here to include measures of activity by mental health institutions and their associated expenditures, as well as the cost effectiveness of interventions. Without such a perspective, it is argued, no satisfactory account can be provided of the historical development of the mental health services. Further, as discussed further in Chapter 2 and 3, economic data may be used to test many of the key hypotheses of both the social control and the epidemiological schools.

The remainder of this chapter reviews the actual and potential contributions of economic analysis.

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[1] Culyer, A.J. and Jacobs, D. *The War and Public Expenditure on Mental Health Services in England and Wales - The Postponement Effect. Social Science and Medicine* 6:35-56, 1972.

Economics of Mental Health Services

In general, the economics of the mental health services have received little attention. Besides the cost of illness approach reviewed above, economic analysis has had a largely microeconomic focus, as surveyed for the UK in *The economic evaluation of mental health care: a review*, by O'Donnell et al[1]. The effectiveness and cost effectiveness of particular treatments, are discussed more fully in Chapter 3.

Policy and performance reviews of the mental health sector have in general been noticeable for their neglect of economic issues, even to the neglect of the simplest economic concerns such as the cost of the services. Neither of the last two Royal Commissions (HMSO, 1926, 1957), discussed costs. *Better Services for the Mentally Ill* (HMSO, 1975), which set objectives for the services, devoted no more than half a page to costs. Maynard & Tingle (1975), in one of the few quantitative reviews of the objectives and performance of the mental health services in England & Wales in the 1960s, showed that by and large these objectives were not met and did not look like being met. Inequalities in psychiatric care in England & Wales, as measured by inputs such as beds, and labour, were also highlighted by Maynard (1972).

More recently, the Audit Commission's (1986) report on community care provided estimates of the costs of alternative provision. By contrast, the Short Committee Report of the House of Commons Select Committee on Social Services (House of Commons, 1985) omitted any consideration of costs. However, the regular reports of the Select Committee on Social Services (House of Commons,various years) provide the best source of data on activity and costs of the various mental health services, but only from 1976/7.

Many more economic studies have been carried out of the mental health sector in the United States, which are usefully reviewed in by Kiesler & Sibulkin (1987).

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[1] O'Donnell, O. Maynard, A. and Wright, K. *The economic evaluation of mental health care: a review*, York: Centre for Health Economics, York, 1988.

The Science and Rhetoric of Economics

While both economics and economic history are relevant to the present study, the relation between these two disciplines is complex, due in part to their different discourses. Although economics has limitations as applied to history, it also has strengths. An economist, Jones (1990) provides a useful review, listing the following weaknesses:

- economists often see themselves 'as the privileged purveyors of rationality' (in Arrow's phrase, quoted by Jones, 1990), with rationality interpreted in terms of maximisation within market structures,
- economics offers only one kind of explanation, namely that of market forces,
- economics lacks a theory of institutional change.

Each of these weaknesses is clearly relevant to the concerns of the present study.

Some of the more interesting recent trends in economics have attempted to remedy these deficiencies, particularly in relation to institutional change. Under the broad heading of 'Neo-Institutional Economics', economic theory has been extended to provide an account of institutional behaviour by drawing on various strands such as the contracting of property rights, the existence of information asymmetries, the costs involved in transactions, and the agency role of the state where it acts for the individual (Eggertsson, 1990). This work remains at an underdeveloped level, however, particularly in relation to public institutions such as mental hospitals which were both funded and provided by the state[1]. The central insight, however, is that institutions can be seen as responding to incentives within constraints.

The dangers of reductionism and of functionalism inherent in the enterprise of neo-institutional economics have received little attention. By reductionism is meant the fallacy of attempting to reduce history to one single set of influences. For example, a reductionist history of mental health services would reduce the motive forces to perhaps

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[1] Barr (1987) emphasises the distinction between public and private funding on one dimension and between public and private provision on the other, giving a four way classification. The County and Borough asylums which developed in England & Wales after 1845 represent the fully publicly financed and publicly provided mode. A similarly public/public model was adopted by the NHS in 1948.

a single factor. While the history of mental health (or any other) institutions cannot be assumed to be so reducible, an examination of the influence of incentives and constraints may, however, inform our understanding of how institutions evolve and perform. Functionalism similarly attempts to identify explanatory factors on the basis of their functional roles in the organisation or in society. The social control school is essentially functionalist in that it sees the history of psychiatric services in terms of meeting the functions of social control. Functionalism can be seen as a more sophisticated form of reductionism, but one which runs up against the problem of obtaining agreement on what the essential functions of any organisation might be.

Despite his critique of economics in assisting the understanding of history, Jones (1990) came down in favour of including economics, based on its strengths.

> 'Against this sorry catalogue, what can be said of the merits? As it happens the answer is largely contained in the demerits.... Used with care many of the economists habits of thought are at once powerful, useful and stimulating. Chiefly it is the simple things that seem most meritorious, the elementary terminology of economics, the elementary concepts like comparative advantage or economies of scale, the overall conceptualisations, the habit of considering logical opposites and the value of explicit modelling. (Jones, 1990, p.169).

The present work uses basic economic concepts, such as supply and demand and various definitions of cost to structure quantitative descriptions of both the activities and the costs of the mental health sector. An outline of the the methods of finance and the legal frameworks in each country sets the context for the economic analysis. Hopefully, the provision and analysis of the basic data, besides generating insights, will also provide material for further developments in economic history and economic theory.

Methodology and Hypothesis Testing

Economic history, partly because it has been less self-assured about both its methods and its models of human behaviour, has provided an impetus to a renewed debate with economists over methodology. Indeed, some economic historians have seen economists as placing undue reliance on 'scientific' models and methods and their associated 'rhetoric' (McCloskey 1990).

'Popperianism' has been seen as a major part of the rhetoric of economics presenting itself as science (McCloskey, 1990). Popper's major contribution to the philosophy of science has been his characterisation of science as the attempt to falsify hypotheses. Hypotheses are deemed scientific to the degree that they are capable of being falsified (Popper, 1958). Since this study employs the language of hypothesis testing, some clarification is in order.

Despite attempts to develop an economic methodology based on Popperianism (see De Marchii, 1988), econometrics employs a notion of testing that differs from that of Popper. Rather than confront theory with facts, applied economics takes place in a middle ground where 'evidence is developed to appraise excess content' (De Marchii, 1988, p.20). Excess content here refers to developments of the theory based on empirical evidence which is then tested both for power both to falsify and to corroborate.

For the purposes of the present study, an empirical hypothesis testing approach is adopted which develops evidence 'to appraise the excess content' of the key hypotheses in the history of psychiatric services, subject of course to the limitations on the data available. Thus, the derivation of hypotheses and the testing of their plausibility against the available empirical data constitutes the method of this study. Hypotheses here are taken as the underlying key assumptions put forward by three different schools: Progressive, Social Control and Epidemiological.

For Popper, the degree to which hypotheses can be falsified constitutes (to at least some degree) the extent to which they can be described as scientific. However, it has to be

acknowledged that despite occasional talk of hypotheses (see Scull, 1979, p.240:1981, reprinted in Scull (1990), quoted in Chapter 2 below), none of the advocates of the three schools has claimed to be 'scientific'. The value of a demarcation criterion between science and non-science based on empirical falsifiability has been seen as its capacity 'to keep us honest' (De Marchii, 1988, p.22). If some of the key assumptions put forward by the historians and critics of mental health services cannot be expressed in falsifiable terms, their relationship to empirical data is at least clarified. And if they can be falsified or corroborated by the evidence, so much the better.

Falsifiability, of course, may be more ambiguous than Popper made out, as many critics have pointed out (Kuhn,1970; Caudwell,1991; Root-Bernstein,1989). Popper himself, although denying that empirical evidence could verify any statements, allowed that evidence might 'corroborate' a statement. The method employed in this study allows collaboration as well as falsification of hypotheses. This approach is employed in a critical manner to compress and to test certain key assumptions in the form of hypotheses. By 'test' is meant the critical evaluation of the plausibility of each hypothesis, using empirical data.

The lack of interest in the empirical aspects of the history of the psychiatric services, particularly by the social control school, but also by the progressive and the epidemiological schools, underlines the degree to which each has operated within its own paradigm. Kuhn (1970) challenged Popper's view of progress by proposing that progress occurred more by way of 'paradigm changes' than by the falsification of ever more refined hypotheses. By paradigm change Kuhn meant an entire world view or 'gestalt' (whole). The 'gestalt switch' between the Ptolemaic and Copernican systems of astronomy constituted one of Kuhn's major examples, wherein the definition of evidence and tests varied by paradigm.

The social control view of psychiatric services can be seen as constituting a paradigm shift from that of standard histories such as those of Jones (1972) and Hunter & McAlpine (1963), which saw the history of the subject in essentially benevolent rather

than malevolent terms. Similarly, the epidemiological school represents another paradigm, different from the social control school, but with possible links to the progressive school.

Concluding Remarks

This chapter has argued for the potential value of a quantitative economic description of the evolution of the mental health services in the comparative perspective of the UK and Ireland. As many as 4% of the population appear likely to suffer from mental illness at any one time. Mental illness costs more than any other Chapter heading in the International Classification of Diseases at around 20% of NHS total expenditure in England and Wales in 1985.

Three schools of thinking on the history of the mental health services have been distinguished: Progressive, Social Control and Epidemiological. These different approaches, which are discussed in more detail in subsequent chapters, share a disregard for quantitative and particularly economic history. It has been suggested that an analysis of the data on the history of the mental health services can shed light on at least some of the key questions dividing these schools.

The merits of a hypothesis testing approach have been argued for. Hypotheses in this context refer to the key assumptions of particular schools[1], particularly those involved in the three-way debate between the Progressive, the Social Control and the Epidemiological schools. The approach adopted implies firstly that the hypotheses have to be hewn from the literature where they lurk as underlying assumptions, and secondly, use of 'testing' in a way that is looser than Popper's strict falsificationist position would imply. The core contention of the present study is that it is worthwhile to evaluate each of the key hypotheses against the available empirical data.

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[1] In more colourful language, 'Hypotheses are concubines that are retained when they fruitful and abandoned when they become barren' (Root-Bernstein, 1989, p. 255).

A key methodological point of the present study is that hypotheses in the different paradigms or schools can be 'tested', or evaluated[1], against the available empirical data. While the term 'falsifiability' may set unrealistically high standards, the alternative terms 'evaluation' and 'testing' run the risk of replacing Popper's external criterion of falsification with looser criteria to do with plausibility. It remains to be seen whether adoption of such looser criteria is sufficient to raise serious doubts about some of the major hypotheses in the different schools on the history of psychiatric services as well as to prompt new insights and directions for further work. Further discussion on these matter is resumed in Chapters 8 to 10.

[1] The terms 'evaluation' and 'testing' are used interchangeably. While it might be argued that evaluation relies more on consistency and coherence, the same might apply to testing hypotheses using historical data.

CHAPTER 2

LITERATURE REVIEW

Introduction

The voluminous literature related to psychiatric[1] provision in the various countries presents an initial problem of how to structure a literature review; a problem exacerbated by the scope of the present study, which includes associated issues such as epidemiology on one hand and methods of finance on the other. This study deals with this problem by devoting two chapters to the review. This chapter reviews the literature on the development of the psychiatric services in each country, including their funding, while Chapter 3 considers the epidemiology of psychiatric illness in general and in each country. Successive sections in the present chapter review the literature relating to England and Wales, Scotland and Ireland.

Given the discussion in Chapter 1, Chapters 2 and 3 not only summarise the literature but also attempt to derive hypotheses which could be subjected to empirical testing. The hypotheses identified in Chapters 2 and 3 are tested in Chapter 8, using the data on each country, summarised in Chapters 5 to 7 (and in Appendices 1 to 3).

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[1] The term 'psychiatric' is used interchangeably with 'mental illness' and with 'insanity' and 'lunacy' in what follows, generally following the usage in the period under discussion. Similarly, the terms 'Idiots and Imbeciles', 'mentally deficient' and 'mentally handicapped' are used interchangeably, according to the period.

Section 1

England & Wales

The major legal Acts provide a set of pegs on which to hang an overview of the development of psychiatric services in England & Wales. Six major Acts can be identified:

- the 1845 Lunacy Act,
- the 1890 Lunacy Act,
- the 1913 Mental Deficiency Act,
- the 1930 Mental Treatment Act,
- the 1959 Mental Health Act, and.
- the 1983 Mental Health Act.

These Acts provided the framework for the dramatic increase in the psychiatric hospital sector between 1845 and 1955 and its equally dramatic decline thereafter. One of the major concerns of the different schools has been to describe and explain the key turning points.

The difference between the legal situation before and after 1845 can be characterised as that between a largely unregulated market and one which was not only regulated but was dominated by public provision and finance. This change was spurred on by concern over widely reported abuses in the free market. Hardly surprisingly, concern over how to interpret these changes has been a major item on the historical agenda, with very different interpretations by the three schools.

If the 1845 Lunacy Act initiated an era of publicly provided, inpatient-orientated psychiatric services, the 1959 Mental Health Act can be seen as signalling a down-turn in the emphasis on inpatients and a shift to other types of care, commonly referred to as 'community care'. Once again, debate has been vigourous on these issues between the various schools.

This chapter outlines the broad pattern of development in England & Wales, followed by the interpretations of the various schools. Funding issues are discussed in a separate section. The more restricted literatures on developments in Scotland & Ireland are also dealt with briefly with more extended accounts in Chapter 4 which sets the comparative context.

The Period of Expansion, 1828-1959

Lunatics were provided for under the old Poor Law dating from the 1597 Vagrancy Act, updated by the 1744 Vagrancy Act (17 Geo. III c.5). The emphasis in the old Poor Law, which varied widely in its provision from place to place, was to encourage work; only the most destitute were provided for in workhouses. Persons who were mentally ill made up unknown proportions of the inmates of workhouses and Bridewells, both of which ensured that conditions were so bad as to discourage entry. The 1744 Vagrancy Laws, however, marked the first recognition of the mentally disordered (referred to as 'Lunaticks or Mad Persons' as a group requiring special attention (Jones 1972, p.26).

Private madhouses provided the only specialist care available. Pressure to regulate the private sector arose from recurrent scandals therein. Parry-Jones (1972) has described the activities of these institutions in the period 1750-1850 with the memorable phrase as being engaged in a 'trade in lunacy'. The private madhouses were regulated under the 1774 Act for the Regulating of Private Madhouses (14 Geo.III c.9), with further regulations added during the nineteenth century. The legal position governing the private asylums and their inmates was thus different from the emergent public sector, and remained so until 1959.

Porter's (1987) account of developments in provision for lunatics in the eighteenth century fills a void which Jones (1972) delineated and which Parry-Jones (1972) only partly filled in regard to the private asylums. Besides a searching critique of Foucault, Porter showed that provision for lunatics in the eighteenth century was more varied than other accounts have allowed. Donnelly (1983) has provided a

valuable account of the medical psychology relating to lunacy and the emerging lunatic asylums in the early nineteenth century. However, because few empirical data are available before 1845, developments prior to that date are only discussed briefly below.

The County Asylums

After successive scandals in the later years of the 1700s (Scull 1979; Jones, 1955, 1960 & 1972; Porter, 1987) reformers became convinced of the need for regulation through a national inspectorate and the compulsory erection of county asylums to cater for pauper lunatics. It took until 1845, several select committees and many reports later, before these objectives were achieved.

The 1807 Select Committee report (HMSO,1807), which was only able to gather partial information, showed that lunatics were catered for in a variety of institutions: subscription hospitals, private madhouses, workhouses and prisons. The report revealed that neglect and malnutrition was common (Scull,1979, p.80). Private madhouses, which provided the bulk of places, were subject to particular criticism. The subscription hospitals catered mainly for the care of the physically ill, but, exceptionally, the York Retreat, which developed under Quaker influence, provided an important, more humane example of the care of the mentally disordered (Digby, 1985).

County asylums were initiated by the 1808 County Asylum Act, also known as Wynn's Act (48 Geo. III c.96), which allowed but did not compel the County authorities to build lunatic asylums. Only nine asylums were built within the first 20 years of its operation. Jones characterised the importance of the Act as laying down 'a conception of treatment of a non-deterrent type as a public responsibility' (Jones, 1972, p.60).

The pace of reform quickened with the work of the Select Committees of 1815 and 1816, which arose out of concern with abuses in York County Asylum and in the

Bethlem, Guy's and St. Luke's hospitals. These reports again raised questions about the quality of care provided for lunatics. However, three attempts to legislate on the basis of these reports failed between 1816 and 1819 (Scull, 1979, p.82).

The same issues, raised again by a Select Committee report in 1827, led in 1828 to the County Asylums Act (9 Geo IV c.40) and the Madhouse Act (9 Geo. c.41). The former Act required returns to be submitted to the Home Office of all psychiatric admissions and discharges. The Madhouse Act established the Metropolitan Commissioners in Lunacy, who were made responsible for the inspection of all asylums in the London metropolitan area (except Bethlem Hospital). The role of inspection of private madhouses, which had been delegated to the Royal College of Physicians under the 1744 Madhouses Act, was judged by the 1827 report to have failed. Attempts, however, to make the new Commissioners full time and to give them nation-wide powers were unsuccessful.

In 1842 the chairman of the Metropolitan Commissioners succeeded in having Parliament agree to a comprehensive nation-wide inspection of all asylums and madhouses. The resulting report in 1844 exhibited 'instances of about every degree of merit and defect' (quoted in Scull, 1979 p. 109) and made the following nine recommendations (Jones, 1972):

1.compulsory erection of county asylums,
2.a national inspectorate,
3.improved provision of specified information to central authorities,
4.more standardised certification,
5.legal safeguards,
6.enabled separate provision for incurable lunatics,
7.prohibited sending curable pauper patients to workhouses,
8.provided for inspection of all pauper lunatics,
9.established a new body to approve sites, plans and estimates for all new asylums.

The detailed documentation of the poor quality of existing provision helped enable the resulting bill become law with Government support and minimal opposition in 1845. The 1845 Lunacy Act (8 Vict c.126) compelled County authorities to build

lunatic asylums for pauper lunatics and also established the Commissioners in Lunacy as a national inspectorate. The capital costs of the new asylums were financed from mortgages on the County Rate, with the upkeep of pauper lunatics financed through the Poor Rate. The 1845 Act can be seen as marking the start of a major phase of the provision of separate care for lunatics. Since the public sector was now involved, it also marked the start of a period for which reliable nation-wide data were published, with increasingly detailed annual reports published by the Lunacy Commissioners.

The 1890 Lunacy Act

The 1890 Lunacy Act (53 Vict. c.5) introduced greater legal rights for detained patients, particularly private patients, who for the first time had to have an order made out by a judicial authority (except in emergencies when an urgency order became appropriate). Pauper lunatics continued to be committed by a Justice of the Peace with one medical certificate, but tighter regulations were introduced to prevent non-paupers being confined as paupers for financial reasons. The alternative of a joint order by a clergyman and the relieving officer was abolished. Terminability of certificates for all classes of patients was introduced, replacing the practice of indefinite commitment. Medical certificates were required for mechanical constraint. Patients were given greater rights of correspondence and any person could have a patient examined by two medical practitioners and subsequently discharged with the consent of the Commissioners (Unsworth, 1987).

Mental Defectives[1]

Few studies have focused on the mentally handicapped despite the fact that they were included under the heading of lunatics, cared for under the same law and sometimes in the same institutions. The 1890 Lunacy Act defined lunatics in the following terms: 'Lunatic means an idiot or a person of unsound mind'. Jones (1972) suggested that although the distinction between idiots and insane had existed long

[1] In this study, the general approach to the terminology has been to use what was current in the period being discussed. This does not imply any agreement with the derogatory values usually attached to the terms.

before 1890, and that while the 1886 Idiots Act had allowed for special asylums for idiots, most idiots had remained in lunatic asylums.

The Idiots Act of 1886 recognised idiots as a different group and initiated the movement to separate provision for them. From 1870, the Metropolitan Asylum Board had been providing such separate accommodation for this group in the London area. The 1886 Act had been influenced by a Charitable Organisation Society report on the topic (Charitable Organisation Society, 1884), but the Act achieved little, according to Jones, and clearly failed to affect the 1890 Lunacy Act, which failed to recognise idiots as a separate group. The eugenics movement, however, in the period 1886 to 1904 led to greater segregation of idiots and imbeciles through special schools, and to the later development of colonies for the "feeble minded" (Jones, 1972, p.186).

The Royal Commission on the Care of the Feeble Minded (HMSO, 1908) came down in favour of the argument that heredity played a large part on mental deficiency and although noting the "prolific nature" of this group, it set itself against the eugenic policy of sterilisation, preferring instead to advocate guardianship and, as required, permanent segregation.

The Mental Deficiency Act 1913, which resulted from the Royal Commission, was introduced after long delays and pressure, and was met with accusations of being anti-Christian in Parliament (Jones, 1972, p.202). It led to four classes of mentally deficient being identified: idiots, imbeciles, feeble minded persons and moral defectives. Only those "to be dealt with" (i.e. those who attracted the attention of the authorities) came under the Act. Such persons might be sent to an institution or placed under guardianship. Certification required two medical certificates (Jones, 1972, p.206). According to Jones, the 1913 Act made possible the rapid growth of institutions caring for mental defectives. That Act also replaced the Lunacy Commissioners by the Board of Control, which was charged with overseeing both lunatics and mental defectives.

The 1930 Mental Treatment Act

The 1930 Mental Treatment Act, which relaxed the custodial aspects of provision for the insane by introducing voluntary and temporary admissions to the County asylums, has been characterised as initiating the shift towards community care. The background to the 1930 Act included the influence of World War I, and the administrative reforms which followed, such as the setting up of the Local Government Board, and the MacMillan Committee Report of 1926 (Jones,1972).

The decline in the number of inpatients which occurred after 1955 is generally seen as marking a major change in the history of psychiatric services. Although the details of these changes are discussed in detail in subsequent chapters, all discussion of the post-World War II period takes place against the dramatic background of a decline in the number of psychiatric inpatients in England & Wales from around 150,000 in 1955 to under 60,000 in 1986.

The 1959 Mental Health Act

Major legislative changes accompanied the decline in inpatients, notably the 1959 and 1983 Mental Health Acts. The 1959 Act, which followed the recommendations of the 1957 report of the Royal Commission (HMSO, 1957) abolished the concept of certification so that informal admission became the norm, with formal procedures reserved only for the residual resistant categories of patient, amounting to around 20% of all admissions. Non-volitional patients could be admitted informally, as the Act authorised their reception rather than their detention - a move which had been urged by the psychiatric profession prior to the 1930 Act. The 1959 Act has been seen (Unsworth, 1987, p.230) as part of the set of measures carried into law by the 1945-51 Labour Government, which finally replaced the Poor Law with a more comprehensive, rationally organised, and freely available Welfare State service. On the negative side, these reforms also removed some of the safeguards which had

existed previously, with the abolition of the Board of Control and its associated supervisory role concerned with the protection of individual patient's rights.

Judicial intervention prior to commitment was dispensed with and decision-making power was transferred to medical practitioners. The Act also endorsed the concept of community care, whose focus on less formal treatment facilities parallelled the move towards informal admissions.

The 1983 Mental Health Act

The 1983 Mental Health Act marked a swing back towards supervision by restoring formal legal safeguards to a central place. A new condition for compulsory admission or treatment was introduced, namely the requirement to show that treatment was likely to alleviate or prevent a deterioration in a patient's condition. The duration of periods of detention under admission for treatment were halved, and reviews were made automatic by tribunals. The role of the nearest relative (redefined as the person most closely connected to the patient) was expanded both in relation to admission and discharge, and provisions were made for the exercise of guardianship. A new Mental Health Act Commission, consisting of a Chairman and ninety one members was established as a special health authority with three duties: to review the care and treatment of detained patients, to appoint medical practitioners to give second opinions, and draw up a code of practice and review decision to censor correspondence.

Against this summary background, the legal and economic aspects of which are discussed more fully in Chapter 4, the positions of the various schools can be outlined.

Progressive School

Jones (1972) epitomised the 1845 Lunacy Act as the highlight of the social approach, which was superseded by the legalistic victory of the 1890 Lunacy Act:

> 'The 1845 Act marked the culmination of a slow process of social revolution which transformed the 'Lunatick or Mad Person' of 1744 into the 'person of unsound mind' of 1845' (Jones, 1972, p.149).

The tide then swung first to the legalism of the 1890 Act and then back towards a more medically oriented model with the 1930 Act. Jones describes this development:

> 'as the gradual emergence of the mental health services out of the general provision, mostly punitive, for the social misfits of the eighteenth century, the building up of a specialist and highly distinctive tradition in the nineteenth century and destruction of that tradition in the twentieth' (Jones, 1972, p.341).

Much of the criticism of Jones' work has focused on her notion of progress, perhaps unfairly in that at the time she was writing there was less critical awareness of concepts such as "progress" and less concern with the attribution of motives for various historical developments.

Jones' notion of progress was linked to her perception of pressure groups as the dynamic of change. For her, both progress and pressure groups operated in fairly straightforward ways. Her view of the future relied on a belief that a social work model, as outlined in the Seebohm report (HMSO, 1968) would rise to dominance[1]. All of these assumptions were challenged in later studies.

Jones paid little attention to the funding of the services, dealing with the 1874 Grant-in-Aid (which provided for the first time central government funding of pauper lunatics) in passing. Concurring with the worries of the Lunacy Commissioners (in their 1875 report) that the grant might lead to the unnecessary transfer from workhouses to asylums of chronic cases, Jones considered that :

> 'The Lunacy Commissioners forebodings were fulfilled to some extent. Numbers of chronic cases were transferred to county asylums, which increased their custodial role and diminished their function as centres of treatment; but the frontier between asylum and Poor Law care was to remain blurred for many years'. (Jones 1972, p.162.)

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[1] Jones assumed that the social services had come of age and were to enjoy a professional status similar to medicine or law.

Jones characterised the 1890 Lunacy Act as 'The Triumph of Legalism', which encapsulated her view that the social advances represented by the 1845 Act were subject to a swing in favour of "legalism" in the 1890 Act. The legalism of the 1890 Act was succeeded, according to Jones, by a period of medical dominance under the 1930 Mental Treatment Act, succeeded in turn by a swing back to the social approach epitomised by the 1959 Mental Health Act. The reasons she provided for these swings were as follows:

> 'The movement for social reform of the law became an affair of the pressure groups - and the pressure groups were unequal. The legal profession had been fully established for centuries. Medicine was engaged in throwing off the shackles of a long association with barbering and charlatanism, and did not achieve full status until the passing of the Medical Registration Act of 1858, which set up a register of doctors who had passed prescribed examinations. Social work and social therapy were to remain occupations for the compassionate amateur until well into the twentieth century. It is therefore not surprising that the legal approach took precedence, to be followed after 1890 by the medical approach. It is only now (1972), when the social services have developed a comparable professional status, that the social approach is coming into its own again.' (Jones, 1972, p.153).

Unsworth[1] has proposed a more sophisticated account of the legal structures associated with lunacy than Jones, or Bean (1976), and Baruch & Treacher (1981). Unsworth's "intention is to trace in historical detail the relationship between the general social and political and the specific psychiatric and mental health conditions

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[1] Unsworth's book, *The Politics of Mental Health Legislation,* (1987), resulted from an M Phil thesis submitted to Oxford University in 1985. He provided the best, most detailed account of the evolution of the legal aspects of mental provision in England and Wales. Besides three general chapters on :

* Psychiatry , Law and Politics,
* Mental Disorder and Legal Status, and
* Foundations of the Modern Mental Health System,

the remaining seven chapters comprised detailed accounts of the 1890, 1930, 1959 and 1983 Acts. Unsworth differs from Jones in that his approach was more detailed on the legal aspects, and perhaps consequently, raised issues that have otherwise received little attention. Further, his account of the pressure groups involved showed them as more complex than suggested by Jones, in that the major groups, such as the medical doctors, had both conservative and radical factions. As Unsworth acknowledged in his introduction, his work was prompted by the critique of MIND and other organisations in the mid-1970s of the comparative neglect in the 1959 Mental Health Act of legal procedures to safeguard patients liberties.

which have produced the alternating bold advances and submissive retreats'. (Unsworth, 1987, p. 3).

Unsworth's painted a more complex picture of these retreats and advances than Jones, centred on his critique of her use of the term 'legalism'.

> 'It would seem that legalism is resorted to at times of pessimism or uncertainty about how society should respond to the problems posed by mental disorder. Faith in procedure provides a substitute for conviction as to the solution to these problems...the rule of law serves as a framework for stability where there are competing social interests, none of which is sufficiently powerful to gain permanent ascendancy. So in the field of mental health, rival professional interests and philosophical perspectives are maintained in balance by means of the complex legal procedures and structures of the Mental Health Act of 1983.' (Unsworth, 1987, p.351) .

Unsworth did not see the legal profession as one of the competing professions, but rather as helping to provide a framework within which disputes take place. Opposing the simple opposition of medical discretion and legal intervention, Unsworth argued that law provided the framework for medicine to take place. Legalism, he suggested, was used by Jones (1972) and by Butler (1985) in a pejorative sense. Unsworth's definition of legalism was as follows:

> 'the ethical attitude that holds moral conduct to be a matter of rule-following and moral relationships to consist of duties and rights determined by rules' (Unsworth, 1987, p.20).

Unsworth suggested that legalism can be separated from its potentially pejorative aspects, such as legal formalism, legal vandalism, legal overkill and legal stigmatisation :

> 'The degree of legalism may serve as an index of significant changes in the relationship between state and society...there are demonstrable links between the decline of legalism in the first half of the twentieth century and the growth of social intervention culminating in the creation of the welfare state. The recent revival of legalism may be interpreted as evidence of the disintegration of the political consensus upon which the institutional fabric of the welfare state was built and the emergence of an influential individualist critique of its original paternalistic ethos' (Unsworth, 1987, p.23).

In a review of critiques of legalism, Unsworth detected certain common themes:

> 'It is intriguing to detect in these critiques of legalism advanced from such divergent political positions certain basic common themes: the primacy of the social over the individual, of substance over form, of the concrete over the abstract. This compatibility is matched by the comparable spread of support for legalism - which in the 1970s stretched from the New Left to the New Right - and makes for some strange even startling, alliances and counter alliances.' (Unsworth, 1987, p.35).

Unsworth employed this more complex concept of legalism to survey the pattern of English lunacy legislation in general and then in greater detail for each of the major legislative Acts. His second chapter explored the changing legal status of the mentally disordered, showing that to be defined as mentally disordered was to lose one's legal status as a 'legal personality'. Once lost, major problems were involved in regaining one's 'legal personality'.

One of the most novel aspects of Unsworth's work relates to his stress on the compulsory nature of care and treatment in mental institutions until the 1930s which was only finally abolished in 1959. This point was noted in passing by many other commentators who, however, failed to explore its ramifications. The degree to which admission was compulsory and the mechanisms of admission and discharge are discussed for each country in Chapter 4 below.

The richness of Unsworth's approach is well illustrated by his account of the medieval origins of different jurisdictions over the property of idiots and lunatics. Idiots were deemed incurable, while insanity was acknowledged as being capable of remission or cure - the property of the former fell to the monarch, that of the latter had to be held in trust in case the patient recovered.

Unsworth emphasised the lack of any definition of the terms such as 'lunatic', 'idiot', 'insane person', or 'person of unsound mind' in the various Acts. He

suggested that it was left to the officials charged with the implementation of the legislation to define these terms. Although there were attempts at sub-classifications, notably in relation to mentally handicapped under the 1913 Mental Deficiency Act, the lack of legal definitions of the key terms has survived through to the 1983 Act, reflecting, Unsworth suggests, the notorious susceptibility of the term(s) to an infinite range of competing interpretations. (Unsworth, 1987, p.51)

For Unsworth, the expansion of the institution in the late eighteenth and through the nineteenth century was part of a more general move towards greater institutionalisation, as evidenced by the erection of the workhouses and prisons, and later the county asylums. Unsworth noted that complex incentives governed flows between workhouses and asylums, drawing mainly on Hodgkinson's account (1966 & 1967). This view, which recurs in Scull (1979), is discussed further below.

Unsworth examined the foundation of the modern mental health system before embarking on a detailed examination of each of the major legislative acts. Three points may be briefly noted of interest in his account:

* first, Unsworth reviewed the various 'causes célèbres' that motivated lunacy legislation reform, at least in part, along with the emergence of pressure groups which championed patients' rights. Unsworth attributed the relative lack of success of such pressure groups in the nineteenth century (compared with that of MIND which he shows to have influenced the 1983 Act) to factors such as the hostile views of ex-patients against their former curators, the degree to which ex-patients were so incensed by their treatment that they were prone to intemperate attacks, and finally the lack of clarity of the demands made by these societies (Unsworth, 1987, p.68).

* second, Unsworth showed that far from the medical profession having a single strategy to gain professional dominance, as some other writers have tended to

suggest, there were divisions between conservatives and radicals, each with cautious and ambitious goals.

* third, Unsworth's account of the work of the Lunacy Commissioners suggested that although they became part of the lunacy establishment, and were popularly reviled as such, the role of an independent supervisory body was and remains important. Although the Board of Control was abolished by the 1959 Mental Health Act, the 1983 Mental Health Act restored a supervisory role with the Mental Health Act Commission.

The rest of Unsworth's book was taken up with an account of each of the major acts, which while not summarised here, informs the comparative analysis of the legal frameworks in each country in Chapter 4.

The post-World War II Revolutions

In considering the period after 1948, Jones made explicit her judgement that the recent history of mental health services, including the move to community care, all hinged on three progressive revolutions having taken place:

- a pharmacological,
- an administrative and
- a legislative revolution.

These, she argued, interacted to produce a major policy change in the 1950s. Since this aspect of Jones' work, and in particular the role of the pharmacological revolution, has attracted considerable criticism, it is worth examining her views in greater detail.

The pharmacological revolution

The pharmacological revolution was built around chlorpromazine (Largactil and Thorazine), to which Jones attributed a strong role:

> 'The use of the new drugs quickly spread and by the summer of 1955 they were being widely prescribed. Within the hospitals, they created a totally different atmosphere. There was no longer any justification for 'refractory' wards, for wired-in airing courts, for strong arm tactics on the part of the

> staff. ...The hospital atmosphere changed and this undoubtedly facilitated both the concurrent open-door policy and the movement to bring psychiatric nurses into closer contact with general nursing. At the same time it meant that some patients could go home sooner; once a condition was stabilised, there might be no need for further hospitalisation provided the patient had home support and his doctor could be sure that he would continue to take his pills. It also meant that some patients did not have to come into hospital at all, because their symptoms could be controlled and the illness treated while they remained at home. Imperceptibly, the emphasis began to shift from talk of 'after-care' to talk of 'alternative care'. Jones, 1972, p.292).

The hypothesis that a pharmacological revolution took place around this time has also been put forward by Taylor (1979, 1989) who has linked the decline in the number of resident inpatients in the mental hospitals from 1955 to the introduction of the new drugs. Although the importance of these drugs is widely assumed, not least among the medical profession, this view has been vigourously contested by the social control school, as discussed below. The effects of the new drugs on levels of service use should be capable of empirical testing. Since the drugs became internationally available around 1955, one might have expected a similar pattern of change in each country.

The notion that a pharmacological revolution in the mid-1950s led to the decline in the number of psychiatric inpatients constitutes the <u>first hypothesis</u> to be tested.

The administrative revolution, according to Jones, centred around factors such as the World Health Organisation (1953) policy statement on mental hospital services, the development of an 'open door' policy in the mental hospitals, and the development of new types of services such as outpatient clinics, therapeutic communities, day hospitals and hostels, psychiatric units in District General Hospitals, and community social workers.

A legislative revolution was brought about, according to Jones, by the 1959 Mental Health Act which provided for the first time a single code for all persons suffering

from mental disorders. It also abolished the Board of Control, leaving for the first time since 1845 no agency to supervise the mental hospitals. While Jones welcomed this, Unsworth pointed to the removal of the element of judicial safeguard that had existed since the 1890 Act whereby medical opinion had to be sufficient to convince a lay authority, and to the transfer of decision making powers from the law to medical practitioners (Unsworth, 1987, p. 232).

Jones saw the background to the "Community Care" orientation of the 1960s as deriving from several factors, including the 1961 hospital plan which planned to reduce by half the number of psychiatric beds by 1976. That plan led to moves to ascertain by means of hospital censuses how many patients would need hospital services in the future. At the same time further training of social workers was provided, and an anti-psychiatry movement emerged.

Busfield (1986) has provided, besides a critique of the social control school, a more sophisticated account of the interplay between medical practice and the state. Her goal was first to:

> 'examine the forces and pressures that have determined the form and nature of psychiatry and of the mental health services in which psychiatric work is carried out. This is the first and overriding objective of this book.'
> and secondly,
> 'to provide an overview of the historical development of the mental health services' (Busfield, 1986, p. 8).

The first part of Busfield's work reviewed theoretical issues, including the classifications used by psychiatry, and the conflict between medical and social models of madness, which along with her critique of the social control school, is drawn on below. Her second part, which dealt with the history of mental illness provision, is of more interest to the present chapter. She classed the pharmacological revolution, along with other treatments such as electroconvulsive therapy (ECT), insulin therapy and psychosurgery as representing 'methods of care that did not attach any intrinsic value to the institution itself' (Busfield, 1986, p.360).

More generally, she analysed the evolution of the liberal, scientific view of medicine in terms of continual negotiation with the state. She dismissed the conspiracy view of medicine:

> 'To describe these nineteenth and twentieth century changes as the medicalisation of insanity or mental disorders is to say little more than that the healing activities in this sphere, like other healing activities, increasingly took on the character and shape that we now take to be distinctively medical'. (Busfield, 1986, p.360).

Hervey[1] (1987) provided a detailed account of the running of asylums in Kent and Surrey and the role of Dr. A. Morrison, an eminent figure in the history of psychiatry. Hervey argued that the Lunacy Commission had considerable influence on the various legislative changes, due to its close connection with both the workings of the system and with the political structures. He also showed that the Lunacy Commission exerted considerable power inside the boundaries within which it was legally obliged to operate. Hervey (1985)[2] also published an account of one of the main pressure groups, the Alleged Lunatics Friends Society (ALFS) . This account must however be read with Unsworth's account of the pressure groups referred to above (Unsworth, 1987).

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[1] *The Lunacy Commission 1845-60, with Special Reference to the Implication for Policy in Kent and Surrey,* (Hervey, N. 1987 Unpublished University of Bristol PhD. Thesis), and see also "*A slavish bowing down - the Lunacy Commissioners and the psychiatric profession, 1845-90* (Hervey, N.,1985), in *The anatomy of madness*, vol III, ed Bynum, Porter, Shepherd, 1985.

[2] Advocacy *or folly: the Alleged Lunatics Friends Society,1845-1863*, N. Hervey, *Medical History*, 1986,30:245-275.

Social Control School

Andrew Scull, whose three books[1] have contributed much to the development of a debate on the history of mental health services in England and Wales, can be classed the main advocate of the social control school. This section first reviews Scull's contribution to the early history of psychiatric provision, along with other advocates of the social control school such as Butler (1985) and Mellett (1982), and concludes with a review of the development of community care policies as seen by the exponents of that school. In general, proponents of this school have seen the rise and decline of the lunatic asylums as means whereby society, or rather its ruling elites, exercised control over the mass of poor persons. This group of people, according to the social control school, was displaced by the development of capitalist society in the early nineteenth century, with the awkward and inconvenient warehoused in publicly provided lunatic asylums. Later, rising costs in these institutions, it is argued, led to a movement of 'decarceration' which expelled these persons from the lunatic asylums and other custodial institutions.

While in some ways such an approach can be seen as part of the mainstream sociological tradition stemming from Weber, Scull added a marxian [2] flavour which Grob (1990) characterised as involving large scale explanations but with little substantiating evidence. However, Scull's intellectual energy generated a number of hypotheses which are to some extent capable of being checked against the empirical evidence available.

Scull (1979) offered a radically different theory of how the major shift from free market to expanded state provision of psychiatric services had occurred between

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[1] *Museums of Madness: The Social Organisation of Insanity in Nineteenth-Century England 1800-1860*, A T Scull,1979.
Decarceration: Community Treatment and the Deviant, A Radical View. A T Scull, 1977, (see also revised edition with new afterword 1984.
Social Order / Mental Disorder: Anglo-American Psychiatry in Historical Perspective, Andrew Scull, 1989.

[2] Scull made his intellectual debts clear with dedications to Marx and Foucault on page 1 (Scull, 1979).

1800 and 1860 in England & Wales. Rejecting not only the 'facile equation of history with progress' (Scull, 1979, p.255), Scull also attacked the what he termed the 'revisionist' accounts of Szazs (1973) and Rothman (1971), as well as those of Mechanic (1969) and Jordan (1959).

Scull offered a more sophisticated account than Szasz or Rothman, who, he suggested, had:

> 'portrayed the lunatic as a put-upon victim with the social control agencies as the villains of the piece. But this is to oversimplify and distort what happened. It romanticises those incarcerated as crazy and plays down the degree to which their behaviour was (and is) problematic' (Scull, 1979,p.256).

Instead Scull attempted to combine a Weberian[1] approach with a marxian opposition to these developments.

> 'Indeed the trajectory taken by lunacy reform in nineteenth century England must be seen as the product of historically specific and closely related changes in that societies' political, economic and social structure: and of associated shifts in the intellectual and cultural horizons of the English bourgeoisie'. (Scull, 1979,p.257).

Mechanic (1969) and Jordan (1976), according to Scull, had seen urbanisation as the moving force prompting the provision of the lunatic asylums. Against this, Scull argued that most of the asylums built under the permissive legislation prior to 1845 were rural:

> 'No clear cut connection exists therefore between the rise of the large asylums and the growth of large cities. Instead, I suggest that the main driving force behind the rise of a segregative response to madness (and to other forms of deviance) can much more plausibly be asserted to lie in the effects of the advent of a mature capitalist market economy and the associated ever more thoroughgoing commercialisation of existence'. (Scull, 1979 p.30) .

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[1] Scull quoted Weber as follows:
'As local communities came to be defined and to define themselves as part of a single over-arching political and economic system, it made less and less sense for one town to dispose of its problems by passing them on to the next. There was a need for some substitute mode of exclusion. All of which contributed to 'the monopolization of all legitimate coercive power by one universalist coercive institution....(Weber, 1968) and to the development of a state sponsored system of segregative control'. (Scull, 1979, p.48)

Scull suggested instead that:

> 'institutional control mechanisms were impracticable earlier, because of the absence of both the necessary administrative techniques and also of the surplus required to establish and maintain them' (Scull, 1979, p.45.).

To Scull, the early private madhouses resulted from the state contracting with private entrepreneurs to provide services by whatever methods feasible. However, with the development of stable tax revenues and the state's ability to borrow, a change to a state-run system became more attractive (Scull, 1979, p.46).

Scull saw the need for social control as resulting from a disparity between, on one hand, the breaking down of barriers to state appropriation of the social product, and on the other hand, political barriers (Scull, 1979, p.47). The traditional influence of local kinship groups, which had previously played a large role in the regulation of social life, was reduced if not destroyed. Public institutions were developed to provide places and to control the displaced. But local opposition to these changes remained so that central control of the social control apparatus was not won easily, according to Scull.

Scull provided an immensely readable and valuable account of the history of lunacy reform in the period 1800 to 1860, which, while drawing zeal from his ideological position, failed to empirically substantiate his central arguments. No data were provided on the demographic, structural or economic factors which he so freely invoked. In particular, the costs of the services were ignored along with how these were met. The social changes referred to in the family and institutions were sketched out only at a broad level. If his central thesis on the role of economic and social changes was to be substantiated it would require empirical data of the sort that only a more detailed study than that provided by Scull.

Two hypotheses can be gleaned from Scull's work on the development of the lunatic asylums. First:

*** that the lunatic asylums were part of a trend towards greater institutional provision required by the break-up of traditional families and by the labour market.**

While Scull (1979) tended to take the hypothesis of greater institutionalisation as given, the degree to which this claim has empirical foundation has received little attention. Abel-Smith & Pinker (1959) have warned of the possibility of substitutions between institutional types over time. Their analysis of Census of Population data between 1911 and 1951 showed major changes by type of institution within an overall level of social institutionalisation[1] which hardly changed. Remarkably little attention has been paid to the possibility that the lunatic asylums could have acted as alternative institutions to, for example, workhouses. Scull's hypothesis, that the awkward and the inconvenient made up the bulk of the asylums' inmates, requires to be cross-checked with the level of provision of institutional accommodation, such as workhouses and prisons, which might have served as alternatives for such a group.

A second, related hypothesis can be attributed to Scull:

*** that the emergent public lunatic asylums were relatively cheap ways of warehousing awkward persons.**

Although Scull did not state this in the form of a hypothesis to be tested[2], he repeatedly pointed to the asylums as dumps or warehouses:

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[1] As measured by the proportion of the population resident in institutions at any one time.

[2] Scull does at one point claim to have a hypothesis:
'The importance of the asylum lies in the fact that it makes available a culturally legitimate alternative, for both the community as a whole and the separate families that make it up, to keeping the intolerable individual in the family. The very existence of the institution not only provides a dump for all sorts of inconvenient people; it also, by offering another means of coping, affects the degree to which people are prepared to put up with inconvenience. Thus I would argue that the asylum inevitably operated to reduce family and community tolerance (or to put it the other way round, to expand the notion of the intolerable) to a degree that varied with how grandiose and well

'I have suggested that asylums were largely dumps for the awkward and inconvenient of all descriptions' (Scull, 1979, p.250)

'Asylums became a dumping ground for a heterogeneous mass of physical and mental wrecks - epileptics, tertiary syphilitics, consumptives in the throes of terminal delirium, cases of organic brain damage, diabetics, victims of lead poisoning, the malnourished, the simple minded, and those who had simply given up the struggle for existence' (Scull,1979, p.252)

'Aware of the overwhelmingly lower class composition of the awkward, inconvenient and troublesome people the asylums had collected within their walls, and conscious of the lack of alternative structures for coping with such a potentially disruptive lot, most of those who counted in Victorian England found it easy to reconcile themselves to the collapse of the earlier pretensions to cure. With scarcely a murmur of protest, both national and local elites were converted to the merits of a holding operation which kept these undesirables, the very refuse of society, out of sight and presumably out of mind.' (Scull, 1979, p.231.)

'It is indicative of the success of saving money through excessive overcrowding of facilities and the practice of cheese paring economy, that at county asylums claiming to provide a therapeutic treatment costs were not very different... (from the large asylums for chronic lunatics.) (End of section headed 'Warehousing the patients'. - Scull, 1979, p.219).

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accepted the claims of those who ran it were. In so doing, it simultaneously induced a wider conception of the nature of insanity.

The historical evidence does not allow a direct test of this hypothesis, but there are a number of indirect ways of deciding whether or not it is correct.' (Scull, 1979, p.240, emphasis added)

Scull goes on to suggest three indirect ways of testing this 'hypothesis':
i) that it implied that those with fewer resources will contribute most to the increase in lunatics in care,
ii) that estimates of the prevalence of insanity will vary along with the degree of institutional provision, and
iii) that the asylums will in time come to be filled with the awkward and inconvenient.

Although Scull argued that each of these subsidiary hypotheses is supported by the evidence, it is not at all clear, even if this were so (a debatable point), that it would support his central hypothesis. A disproportionate number of admissions from the lowest tiers of society could be due to the pauperising effects of the disease. A correlation between prevalence and institutional provision could imply causality in either direction. Finally, to define the 'awkward and inconvenient' retrospectively runs the risk of adjusting the facts to meet the case. Scull not only neglected such problems but also failed to provide the data he claims in support. No data were provided on the proportion of inpatients who suffered from the list of conditions he refers to. Even basic data on the age profile of inmates, which would help establish the likelihood of these diseases, were not provided. As shown in Chapter 5, the bulk of inmates were young throughout the 1800s.

Other Exponents of Social Control

A number of other studies of the early history of the psychiatric services can be loosely grouped in the social control camp, including Butler (1985) and Mellett (1982), each of which is discussed briefly.

Butler (1986), although espousing a marxist approach, provided only a slightly more detailed addition to the accounts of Scull and Jones. His concern was with the :

> 'persistence of certain themes in social policy...principal among these themes is the role of politics in the making of social policy' (Butler, 1985, p.1)

and

> 'There are five themes in particular which are remarkable for their persistence over the whole period. These are firstly, the belief that social policy on mental disorder is to do with the regulation of individual conduct; secondly, that this regulation should be expressed through law; thirdly, that the law should be enforced by specialists of central and local government; fourthly, these expert administrators should direct the mentally disordered towards institutional detention under recognised medical supervision, fifthly that none of these actions is taken maliciously but rather in the name of the patients or societies' best interests'. (Butler, 1985, p.9)

These hardly novel themes were meshed in with a concern with social class, as expressed mainly by the number of pauper lunatics. However, Butler, despite his 'marxist' banner, provided a largely descriptive account which, while adding little to those of Jones and Scull, emphasised particular periods and agencies.

Useful contributions made by Butler include:

* his discussion of the ways that Pauper Lunatics were funded under the Poor Law,

* the shift in provision for lunatics from part of the relief of poverty to being part of the health services, which Butler located in the wartime period 1939-45,

* his more extended account of the politics behind the emergence of separate provision for the mentally deficient under the 1913 Mental Deficiency Act.

These strengths resulted largely from Butler's concern with the detailed political arguments underpining mental health legislation and particularly of policy development.

Some weaknesses in Butler's approach must also be noted:

* despite various references to the cost of lunacy provision being a force in policy development, he discussed neither the costs of the lunatic asylums, nor their costs relative to provision for other poor or ill,

* he omitted any reference to the capitation payments introduced in 1874 to assist the Poor Law authorities in meeting the costs of provision for pauper lunatics, (although he noted in passing that the 1886 Idiots Act provided for such a capitation grant for idiots (Butler, 1985, p.71).

* Butler's account was at too general a level to be used in developing hypotheses which could be tested by empirical data. Indeed, Butler's work is noticeable by its lack of single table of data.

David Mellett[1] (1982) examined the asylum from a wide variety of approaches:

> '... an attempt was made to investigate the origins and nature of the asylum from as many perspectives as possible' (Mellett, 1982,p.2).

Mellett was, however, also guided by a social control framework, namely that outlined by Kittrie (1963) who coined the phrase "therapeutic state". Indeed, Scull concluded his 1979 work *Museums of Madness* with a section titled 'The Therapeutic State' in which he stated:

> 'At least since the end of the Second World War we have been moving away from a punitive and towards what Kittrie has termed a therapeutic state, that is one which enshrines the psychiatric world view. Just as in the eighteenth and

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[1] *The Prerogative of Asylumdom: Social, Cultural and Administrative Aspects of the Institutional Treatment of the Insane in Nineteenth Century Britain* D Mellett, Garland, London,1982.

> nineteenth centuries a host of phenomena - never before conceptualised in medical terms - were renamed or reclassified as mental illness, so in the present most of the other forms of deviance are being assimilated to a quasi-medical model, being relabelled as illness and 'treated' rather than punished' (Scull, 1979, p.265-6).

The therapeutic state was defined by Kittrie (1971) as:

> 'one in which the apparently descriptive scientific terms (for example mental illness or alcoholic) replaces moral judgement, and in which the application of science to government social welfare programmes results in the imposition of "beneficial" services compulsorily on the recipient, who is deemed to be in some way incompetent'. (cited in Mellett, 1982, p.12.)

While noting that Kittrie's model was designed to explain contemporary American social controls, Mellett judged that its salient components:

> 'provide an apt framework for considering the development of asylums and lunacy laws in Victorian Britain...The model of the therapeutic state .....forms an essential scaffolding for the structure and organisation of chapters 2, 3 and 4 which analyse the evolution of the institutional and the scientific (medical) contexts of one territory in the therapeutic state, that is asylumdom' (Mellett, 1982, p.13).

Unfortunately, Mellett's choice of Kittrie's 'therapeutic state' framework prevented him from carrying out his project of examining as many perspectives as possible and limited his discussion of those that he did examine. Successive chapters reviewed:

* the institutional context,
* the dimensions of asylumdom,
* the medical context,
* images of lunacy,
* the Lunacy Commissioners,
* the workhouses and pauper lunatics.

Mellett's review of each of these was limited by the concept of the therapeutic state. Thus, the chapter on the institutional context discussed, not the range of institutions

but rather the debate about compulsory provision of services. The chapter on the dimensions of lunacy rehearsed some statistics from the reports of the Lunacy Commissioners between 1859 and 1889, but omitted any mention of the expenditure on lunatics. The chapter discussing the medical context centred on the debate over the causes of lunacy, particularly the role of alcoholic drink.

Mellett's chapter on the images of lunatics, taken from songs and plays of the time, was perhaps the most original of the perspectives adopted. While not discussed any further here, it provided an account of how many popular images and phrases relating to lunacy and madness were reflected in popular culture in the mid-1800s.

Mellett's most useful chapters deal with the Lunacy Commissioners (his Chapter 6) and with the Workhouses and pauper lunatics (his Chapter 7), providing some insights on the role of the Lunacy Commissioners and the constraints they faced in attempting to carry out their tasks, generally without the powers to achieve anything without close cooperation from a range of other agencies. The account of the problems the Lunacy Commissioners had with gaining access to the Workhouses is particularly useful. Mellett explored the background to the 1867 Dangerous Lunatics Act which made detention of lunatics in workhouses legal for the first time and also led to the erection of separate new institutions for the mentally deficient and the chronically mentally ill, via the Metropolitan Asylum Board.

Mellett (1981)[2] also provided greater details of the organisation of the Lunacy Commissioners, including the individuals involved, and their relations with the medical establishment and patients' pressure groups.

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[1] Mellett alone among the studies under review provided data on the public expenditure on pauper lunatics, specifically a table in his Appendix 1 showing expenditure of Local Authorities on lunacy between 1840 and 1890. He passed no comments on this table, which was drawn from Mitchell and Deane (1968). As discussed below (see Chapter 5 and Appendix 1), the Mitchell and Deane series suffers from severe defects. Mellett's decision to relegate the table to an Appendix and to avoid commenting on it may have been wise!

[2] *Bureaucracy and mental illness - the Commissioners in Lunacy 1845-90* (Mellett, D., *Medical History,* 25, 1981, p. 221-250)

Social Control and Community Care

Scull (1977)[1] earlier has applied his social control perspective to the policies of community care which have marked the decline of the asylum in both the US and the UK in the post World War II period. Scull viewed these policies from the the same general perspective as *Museums of Madness* (1979), namely that state-based social control mechanisms became functional during the nineteenth century as the emerging market led to a breakdown of more locally based solutions to caring, and as the state established a more stable tax base from which to finance such solutions.

Scull compared prisons and lunatic asylums arguing that a similar philosophy of 'decarceration' had taken hold in each. The conventional views, he suggested, explained the popularity of community care as arising from pharmacological developments (Jones) and the critique of the total institution (the anti-psychiatrists). The pharmacological revolution around chlorpromazine was discounted by Scull on the basis that in some asylums the run-down in numbers of patients resident had already begun in 1949, considerably before these drugs were made available in 1954. The pharmacological hypothesis as put forward by Jones (1972) and Taylor (1989) was identified above as one of the hypotheses to be tested in later chapters.

The other piece of conventional wisdom that Scull attempted to demolish concerned the influence of the critique of the total institution. Such critiques, he suggested were commonplace in the nineteenth century but failed to capture the imagination of the policy makers. Other reasons more specific to the twentieth century were required, he suggested.

What Scull offered, then, was a slightly modified version of his earlier marxist-functionalist model, updated to include references to the "fiscal crisis of the

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[1] *Decarceration - Community Treatment and the Deviant: A Radical View,* A.T.Scull, 1977.

state" (O'Connor 1973., Gough, 1979). Drawing on neo-marxist economic analyses of the time, Scull suggested:

> 'To summarise my thesis briefly at the outset, I shall argue that with the coming of the welfare state, segregative modes of social control became in relative terms, far more costly and difficult to justify.....Simultaneously, the increasing socialisation of the production costs by the state, something which has been taking place at an increasing pace during and since the Second World War, and of which modern welfare measures are merely one very important example, produced a growing fiscal crisis (O'Connor, 1973), as state expenditure continually threatened to outrun available revenue'. (Scull, 1979, p.135. emphasis added).

Factors invoked by Scull to explain the rising relative costs included: the relative price effect, unionisation of the asylums, 8 hour day / 40 hour week, and US legal cases which set minimum standards there, as well as the promise of saving money by not having to build or renovate asylums. Also important to Scull's explanation was the emergence of a welfare state which provided cash payments to incapacitated persons in the community. The abhorrence of outdoor relief under the Poor Law would, he suggested, have rendered such payments impossible in the nineteenth century.

The hypothesis that the 'fiscal crisis of the state', and in particular rising relative unit costs, constitutes a fourth hypothesis to be tested.

Scull acknowledged to some extent the force of the criticisms made of the first edition of his book *Decarceration - Community Treatment and the Deviant: A Radical View,* by accepting in the second edition (Scull, 1984) that the run-down of the asylums had pre-dated the discovery of the fiscal crisis. However, he still maintained that the forces which led to the fiscal crisis were operating from the early 1950s. This, in turn, highlights difficulties with the fiscal crisis argument, which are similar to those raised against Scull above in relation to his account of the history of the asylums. A fiscal crisis, if it existed, must have had some empirical foundation. Acknowledging that several critics had pointed to the fact that

public spending on mental illness services had continued to rise rather than fall as might be expected in his account, Scull suggested that the relevant counter-factual data was missing. Given the increase in spending, the missing counter-factual for Scull's argument to be true would have to be a level of spending well above that which prevailed.

The hypotheses of a 'fiscal crisis of the state' and rising relative costs were thus given considerable importance by Scull. As suggested below, it is possible to test the hypothesis that rising unit costs operated in England & Wales in the period immediately preceding the run-down of the asylums and the advent of community care.

Critics of the social control school

Professor Kathleen Jones has been the most persistent critic of Scull's social control theories, leading what has been referred to as the Scull / Jones debate. Jones focused on what she termed Scull's dilemma:

> 'if it is wrong to get patients out of mental hospital and wrong to keep them in, what are we to do with them?' (Jones, 1982, p.221).

Jones suggested that while Scull had posed a far-from-new dilemma in modern terms, he offered little to resolve it. Jones characterised the differences between herself and Scull in terms of three sets of contrasts: between history and sociology, between the UK and US approaches and between the experiences of the liberal 1950s versus the strident 1970s (or in the terms discussed in Chapter 1 - two different paradigms). However, as argued above, the approach of generating and testing hypotheses offers a means of subjecting at least some of both Jones' and Scull's claims to empirical interrogation.

Busfield (1986) has also criticised Scull, specifically for his functionalism, namely his belief that the psychiatric services existed to fulfil social control functions which could be inferred retrospectively.

Economic Aspects

Although there were major shifts in the ways that services for the mentally disordered were funded from 1845 to 1948, very little attention has been paid by either the progressive or the social control schools to the implications of these shifts. However, the epidemiological school, in the person of Hare (1983 - see below) has recently drawn attention to the possible importance of the capitation grant introduced for pauper lunatics in 1874. There was, however, a lively debate at the time in public finance about that particular policy. This section reviews the literature on that debate which is also set in a comparative context in Chapter 4.

Methods of Funding

Over the course of the history of provision for the mentally disordered, public funding of services has shifted from being almost entirely locally financed to being the responsibility of central government. From 1853, expenditure on pauper lunatics was financed by the Boards of Guardians out of the Poor Rate, a property tax (Butler, 1985). The fact that the Boards of Guardians tended to be property owners thus constituted a disincentive on expansion of lunacy expenditure. This disincentive was eased to some extent by the introduction of central government financing for the first time in 1874 when a grant-in-aid provided capitation payments amounting to four shillings (£0.20) per week or 50% of the cost of maintenance of pauper lunatics in a range of institutions, principally the County and Borough asylums, but also including Registered Hospitals and Licensed Houses. Workhouses were specifically excluded from the capitation scheme in England & Wales. Capitation subsidies continued at various levels to 1930 when they were replaced by block grants to Local Authorities. From 1948, the mental health services became the responsibility of central government.

These grants-in-aid from central government had been provided in relief of local charges for lunatics and police by Disraeli's incoming Conservative government of 1874, prompted by popular discontent over taxation (Smith,1967). Parish rates, it has been suggested, more than doubled between 1840 and 1868 (Dunbadin, 1977,

quoted in Butler, 1985, p.49). A proposal for assistance by means of central funding had been passed in the House of Commons in 1872 and was taken up by the incoming Government (Watson-Grice,1910, p.56). The grants-in-aid were aimed at reducing the burden of rates on property and at the same time income tax was reduced by a penny in the pound.

The setting of the central government grant at Four Shillings per pauper lunatic per week was designed to equalise the cost of maintenance of pauper lunatics in workhouses and in County and Borough Asylums, according to Watson-Grice (1910). By attempting to equalise the costs of either type of provision, it was apparently hoped to facilitate the transfer of lunatics from workhouses to asylums. However, Smith (1967) has suggested that the measure was not part of a coherent policy but rather an *ad hoc* response to the problem of local taxation grievances, which also failed to achieve the objective of transferring lunatics. The Treasury was concerned over the open-ended commitment such a grant involved and after some argument it was agreed that the grant should be pitched at either 50% of the cost of maintenance in the County Asylums or at Four Shillings per week, whichever was the lesser amount.

With the 1888 Local Government Act, the extent of finance under the hitherto open-ended capitation grant was limited. Total capitation payments were limited in England & Wales[1] to the proceeds of the Local Taxation Account (Probyn,1875). As the Local Taxation Account was made up of receipts of various local taxes, expenditure was thus limited to those proceeds. The central government contribution, which had hitherto been determined by the number of pauper lunatics, was henceforth limited to the magnitude of the Local Taxation Account. The capitation grant, so limited, continued in this form to 1930, when it was replaced by a block grant to the Local Authorities who assumed responsibility for the lunatic asylums.

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[1] Capitation payments, which had been introduced at the same time in both Scotland and Ireland, were limited in different ways and, in Ireland, at a later time.

Sidney Webb (1920) has provided one of the most comprehensive discussions of the grants-in-aid and the perverse incentives involved. Webb favoured various reforms of the lunacy grant-in-aid, including the ending of distinctions between the types of persons eligible for the grant (particularly mentally defectives, all of whom were eligible), the payment of the grant irrespective of relative's contributions, and the fixing of the grant so as to encourage improvements in standards.

Maudsley (1877) was in no doubt about the effects of the capitation grant:

> 'The Government has, in effect, said to Parish officials - 'We will pay you a premium of 4s per head on every pauper whom you can by hook or by crook make out to be a lunatic and send into the asylum'. And, just as in olden times, a reward of so much for each wolf's head led to the rapid extinction of wolves in England, we may expect that this premium on lunacy will tend to diminish materially, and, perhaps to render gradually extinct the race of sane paupers in England. Not only are unfit cases sent to the asylums, but chronic and harmless patients, who might very properly be provided for in workhouses, are detained in asylums because Boards of Guardians will not take them back once they have got rid of them. Why should they when they will lose the 4s a head and still have to take care of them? The Act was an ill-conceived measure which no true statesman would have proposed for it gave local authorities power over spending money granted by the State without the State having any control over the manner in which it was spent. It was a bribe to the constituencies, and its operation, as might have been expected from its origin has been disastrous. The admissions of pauper patients will probably continue to increase in consequence of its operation' (Maudsley, 1877, p.51).

Hodgkinson (1966[1] & 1967[2]) and more recently Cochrane[3] (1985) have provided accounts of the effects of the grant on the mentally deficient supporting the view that the capitation grants affected the number of lunatics.

Ruth Hodgkinson noted three phases of progress in the treatment of the insane:

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[1] *The origins of the National Health Service: the medical services of the new poor law 1834-1871*, R.G. Hodgkinson, Wellcome, 1967.

[2] *Provision for pauper lunatics, 1834-1871*, R.G. Hodgkinson, *Medical History*, 10 (1966).

[3] *Humane, economical, and medically wise': the LCC as administrators of Victorian policy*, Cochrane, D. in the *The anatomy of madness* ed. Bynum,W., Porter, R.. Shepherd. M. Tavistock, London, 1985.

a) segregation of lunatics from the rest of workhouse inmates,

b) separation of the dangerous lunatics from those who were harmless, and

c) more humane treatment.

Much of the early work of the Lunacy Commissioners was concerned with the first of these issues, she suggested, with almost continual disputes between the Lunacy Commissioners and the Poor Law Board (which replaced the Poor Law Commission in 1847). In 1837 lunatics were split roughly 40/40/20 between workhouses, county asylums and private hospitals, but by 1869 the proportion of lunatics in workhouses had fallen to around 25%. Hodgkinson suggested that the further differentiation between the dangerous and harmless lunatics only came about in 1875. The move towards more humane treatment was a gradual process, fuelled by recurring scandals during the 1850s and 1860s. The 1867 Poor Law Amendment Act allowed destitute lunatics to be moved from the workhouse to the asylum, registered hospital - or to home if certified sane. The Metropolitan Poor Act of 1867, under which the Metropolitan Asylum Board was established, facilitated the transfer of imbeciles and chronic insane from the London workhouses:

> 'One result of the act was not contemplated. Because the cost of lunatics not retained in workhouses was to be paid out of the new Common Poor Fund, Guardians transferred every lunatic for whom they could get a Medical Officer to certify, without thought of the expense or the propriety.' (Hodgkinson, 1966 p. 151-2).

The work of the Metropolitan Asylum Board, whose work has been described by Powell (1930), was established in 1867 to administer relief to the capital's non-able-bodied paupers with the aim of freeing the workhouse to service the "less eligible" able-bodied. Its formal remit in lunacy administration, which was limited to chronic cases, led it to build several large institutions for "idiots and imbeciles", as well as for those with infectious diseases and harmless lunatics at Leavesden and Caterham, later adding Darenth Park Training Colony in Kent, Belmont in Sutton and a further large asylum for senile dementia cases in Tooting Bec in south London.

All these asylums were legally designated as workhouses, and appeared as such in the statistics produced by the Lunacy Commissioners.

Cochrane (1985), who charted the history of the metropolitan lunatic asylums between 1888, when the London County Council was formed, and 1909, has suggested that capitation contributed to the high levels of lunacy provision in London:

> "Perhaps the most striking feature over the period was the inflated rate of registered lunacy in London compared elsewhere.." (Cochrane, 1985, p.247).

London's lunatics per population ratio was 23% higher than the national average in 1888, an excess which tripled over the next twenty years. This dramatic excess was due, Cochrane suggested, to the financial incentives for local unions to divest themselves of their most troublesome charges. The 1867 Metropolitan Poor Act led to a common poor rate levied across London, designed to finance not only the Metropolitan Asylum Board but also to contribute to the cost of maintaining rate-aided lunatics in county asylums, registered hospitals and licensed houses.

> This was to act as a powerful incentive for local unions to move lunatics from the workhouse where their maintenance costs were met entirely from the parish rates for which the guardians were directly accountable to the ratepayers. In 1875, these converging inducements were reinforced when the Poor Law Board[1] began offering a weekly grant of four shillings to all unions in England and Wales, towards the extra cost of maintaining a pauper lunatic in a county asylum. Considering the predictable effect that this 'wholly mischievous' subvention would have, it seems to have slipped through with minimum ceremony' (Cochrane,1985, p.251-2).

Cochrane went on to outline the rapid expansion of lunatic asylum provision in London, which led to doubling of the number of pauper lunatics in twenty years and the erection of eleven asylums, mainly on the Horton estate in Epsom.

Cochrane stressed that he was not arguing that the number of certified insane increased directly as a result of financial incentives:

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[1] Cochrane implied that the introduction of the capitation payments in 1874 was at the whim of the Poor Law Board, which was far from the case, given the description of its introduction in Parliament after an election campaign, discussed above.

> "Rather the inducements established fertile conditions for the contemporary, widening definitions of insanity formulated by asylum doctors." (Cochrane, 1985, p. 252).

Given these caveats, however, it is clear that Cochrane believed that the financial incentives provided by the Metropolitan Poor Act and the 1874 grant-in-aid led to increases in the level on certified lunacy, if by indirect means. However, since Cochrane's account is limited to the London County Council over the period 1888-1909, the degree to which such effects were common to the rest of the country, or applied during a longer time period remain unclear.

The studies discussed above relating to the effects of the capitation payments all assume that these payments increased the level of certified or treated lunacy. This debate, however, nowhere attempted to establish empirically whether and to what degree the capitation grant affected the level of lunacy. Webb asserted, along with Maudsley (1877) that the grant had increased the number of persons classed as lunatics but no evidence was offered to support this hypothesis. Although some are qualified, and confined to London, (such as Cochrane) the hypothesis that capitation increased the level of lunacy deserves to be postulated more formally and subjected to empirical evaluation - thus the FIFTH hypothesis :

*** the introduction of the capitation grant for pauper lunatics in 1875 led to greater numbers of pauper lunatics being detained in the publicly provided lunatic asylums**

The 1939-44 War and Mental Health Services

The effects of the 1939-44 War on the level of both activity and expenditure on the mental health services have been examined by Culyer and Jacobs (1972)[1]. The authors, who acknowledged helpful comments from Professor Kathleen Jones[2], produced a time series showing residents, admissions to and discharges from mental hospitals (County and Borough mental hospitals only) over the period 1920 to 1960, as well as numbers of mentally ill and mentally defective inpatients for the same period. While noting the lack of strict comparability of the various series at different times, that did not constitute a barrier to their analysis of overall trends. These data were employed in examining the effects of the 1939-44 War on the mental health services, in particular the postponement effect that War appeared to have had on service use and expenditure.

Culyer and Jacobs used the fall in public spending on mental illness and mental handicap as evidence that Wagner's Law (Wagner,1883 in Musgrave & Peacock,1958; Heald,1983) lacked universal applicability. Wagner's "Law" suggested that public expenditure had a tendency to rise but not to fall, or in economic terms, that an expanding role for public expenditure was an inevitable feature of economic development (or, more specifically, that the income elasticity of public expenditure was strongly positive).

Culyer and Jacobs concluded that Wagner's Law lacked universal applicability due to the lack of evidence for its operation in relation to public spending on lunacy during the period 1939-1944 in England and Wales. Culyer and Jacobs however made no attempt to test Wagner's Law for any non-wartime period, despite the possibility that war might have disrupted patterns that might otherwise have prevailed. Wagner's Law provides a sixth hypothesis which deserves to be re-examined, particularly in

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[1] *The War and Public Expenditure on Mental Health Services in England and Wales - The Postponement Effect*, Culyer, A.J., Jacobs, D. *Social Science & Medicine*, 6,35-56,1972.

[2] Jones' assistance in an article showing long term trends in service use, is significant given her caveats about the use of such data in her earlier study (Jones, 1972), which are discussed in Appendix 1.

the light of the uncertain relationship between public spending on mental hospitals and the number of inpatients since the turning point in the mid-1950s. Culyer & Jacob's position on Wagner's Law is here restated as a SIXTH hypothesis to be tested, specifically that:

*** Wagner's Law does not apply to the history of public expenditure on psychiatric services.**

Mental Hospital Nurses

Stanton's (1983) study of the development of mental hospital nurses provided some data of economic interest, notably on the number of nurses employed and their wage levels relative to other groups. In a review of the development of mental hospital nursing between 1909 and 1975, Stanton identified two trends of interest to the present study:

First, that the patient/nurse ratio had fallen dramatically; from 9.0 in 1909 to between 6 and 7 in the period 1923 to 1956. By 1959 the ratio had fallen to 4.8, and continued to fall thereafter, reaching 4.0 in 1961, 3.7 in 1968 and 1.8 in 1975. This dramatic shift was due to the drop in the number of inpatients but also to a rise in the number of nurses.

Second, Stanton's work showed that the average earnings of mental hospital nurses' had improved in recent decades. Although wages for mental health nurses were somewhat below those for manual workers in the economy up to 1935, they improved to equality during World War II and kept pace with wages of manual workers up to 1960. Since 1960 their relative position improved so that by 1975 an index of mental hospital nurses pay (with 1960 = 100) stood at 396 compared to manual earnings at 345 and the Retail Price Index at 259 (Stanton, 1983, Tables A.3.1 to A3.8. p.346 to 356).

These data enable empirical testing of the role of relative price effect in unit costs as advocated by Scull. While this is done in Chapter 8 it can be noted here that the

timing of the rise in the number of nurses and their pay are both located somewhat later than Scull's account would require. Scull's invocation of the rising relative costs as an explanation for the run-down in asylum places in the mid-1950s would require mental hospital nurses' pay, the major component in unit costs, to have been rising sharply around that time, whereas Stanton's data suggests an increase after 1960.

Section II

Scotland

While a number of works on the history of Scotland (Checkland, 1980; Paterson, 1976) refer briefly to the development of services for the mentally disordered, only one full length study of the subject has been carried out; that of Rice (1981)[1]. Rice's study, which provided a useful account of the early history of state provision in Scotland, is limited, however, by two factors. The first resulted from his attempt to locate the development of lunacy provision in the wider socio-economic context of Scotland of the time, so that his account is less focused than it might otherwise be.

Rice's second limitation resulted from his interest in evaluating Scull's urbanisation / capitalism thesis against the Scottish experience. Thus Rice focused on the pattern of provision by area to see whether the urban/rural divide or the pre/post industrial patterns dominate. His results, he suggested, strongly favoured urbanisation rather than industrialisation as having been closely associated with the onset of institutional provision for lunacy.

Rice, however, provided a useful account of the treatment of lunacy before 1857 in Scotland and of how the 1857 Lunacy (Scotland) Act came to enter the statute books. Scotland had not been included in the 1845 Lunacy Act which covered England and Wales. Three previous attempts to legislate for Scotland had failed before a Royal Commission was established in 1855, whose report led to the 1857 Act.

Prior to 1857, the provision for lunatics was largely by voluntary agencies, notably the philanthropic Royal hospitals. Seven Royal Infirmaries had been established by

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[1] *Madness and Industrial Society; A Study of the Origins and Growth of the Organisation of Insanity in Nineteenth Century Scotland, 1830-70* Rice, F.J. 1981,(unpublished University of Strathclyde PhD thesis).

1835 (Checkland, 1981), each providing for lunatics. In addition, poorhouses, private asylums and prisons also catered for lunatics.

The Poor Law had also been reformed later in Scotland than in England. The Scottish equivalent of the 1834 Poor Law Act in England & Wales did not appear until 1845, and resulted from the effects of the Dissolution of the Church of Scotland in 1843 on the system of parochial relief (Paterson, 1976).

Scottish law differed from English law in relation to lunatics as in so many other matters. A tradition of appointing guardians went back to the early fourteenth century, and by the time of the Royal Commission's report, Rice suggested that there was lack of clarity over exactly what the legal position was with regard to lunacy. However, concern with the administration of the property of lunatics was paramount, as with English law.

The 1855 Royal Commission originated with pressure from an American reformer, Ms Dorothea Dix, who had been instrumental in lunatic asylum and prison reform in North America. Visiting Edinburgh in 1855, she was shocked at the conditions in which inmates of the lunatic asylums and poorhouses were treated. When she encountered opposition to her attempts to institute reform, she took her case to London, where she rapidly won support from Lord Shaftesbury, Chairman of the Lunacy Commission (Battiscombe, 1974, p.244). Although Rice suggests that not all the credit can be attributed to Ms Dix on the grounds that the issue must have been 'marketable' at that particular time, her role nonetheless seems to have been considerable.

The 1857 Lunacy (Scotland) Act was broadly similar to the English Lunacy Act of 1845 in that it made the erection of asylums for pauper lunatics mandatory on the Local Authorities.

The Scottish system also incorporated a number or distinctive features: patients could not be confined without the order of the sheriff, supported by two medical certificates; all categories of patient were subject to the same legal regime; and there was no restriction on voluntary admission, as in England & Wales, to those under care within the previous five years. Although there was no restrictions on private houses run for profit, these occupied a very minor position in the Scottish system, with only around 15% of private patients (Unsworth, 1987, p.86).

The new Scottish Board of Lunacy faced many of the same problems as their counterparts south of the border, particularly in relation to the confinement of lunatics in poorhouses. Despite castigating such confinement, lunatics remained in poorhouses up to 1948 (and indeed later). Although the 1857 Act did not permit such detention, amendments in 1862 and 1863 made such confinement legal, subject to stringent safeguards.

One distinguishing feature of the Scottish experience demands special attention: boarding-out. From 1857 the lunacy authorities in Scotland funded the care of lunatics in residential accommodation. This practice was developed following a trip to the Belgian village of Gheel by the Scottish Lunacy Commissioners and Poor Law Commissioners in 1860. Lunatics had long been sent to Gheel for domiciliary-type care, and Scotland followed this practice on a kingdom-wide scale. Up to 1900 around 20% of all lunatics were boarded out.

The 1874 capitation grant, which applied equally to Scotland, was used to subsidise boarding out. As with England & Wales, the capitation grant was 'capped' by the 1888 Local Government Act. Unlike England & Wales, however, in Scotland that capping took the form of the payment of an annual sum in respect of pauper lunatics. As this sum was fixed (at £116,000 per annum), its value per pauper lunatic decreased firstly as the number of pauper lunatics continued to increase, and secondly by inflation during the 1914-18 War.

Rice's account ended in 1870, with a cursory review of development up to 1900. The report of the Committee on the Scottish Lunacy and Mental Deficiency Laws (HMSO, 1946) provided a useful discussion of the development of lunacy legislation in Scotland, mainly indicating the extent to which developments followed the English pattern.

No full-scale studies have been located of developments in Scotland in the post-World War II period, with the exception of a small number of articles noting the legal changes (Ratcliff, 1985) and several dealing with trends in admissions (Ratcliff, 1964, Smith & Carstairs, 1964), which are discussed in Chapters 3 and 6

Hypotheses

None of the Scottish studies can be described as generating hypotheses, but given the broad similarity (with differences in timing and emphasis) between England & Wales and Scotland, the same hypotheses derived for England & Wales might be usefully looked at in the comparative context provided by the Scottish experience.

Section III

Ireland

Two main studies[1], along with one article[2] deal with the history of mental illness provision in Ireland. Various epidemiological studies, which arose largely out of interest with Ireland's apparently high levels of both incidence and prevalence of mental illness are discussed in Chapter 3.

Finnane (1981) dealt with the provision for lunatics in the period 1817-1914. His account (which originated as a PhD thesis from the Australian National University) provides the only detailed history of the period, and is comparable in quality to the accounts of Jones, Unsworth and Scull for England and Wales. Since Finnane's work forms the basis of the legal and financial context in Chapter 4, the relevant legal details are left to that Chapter. Instead, the focus here is on Finnane's overall approach.

Finnane's approach may be characterised as broadly along the social control model:

> 'Insanity remained an enigma at the end of the nineteenth century. And in Ireland as much as elsewhere the asylums' history reflected the realities of social power - whether manifested in the priorities and preoccupations of national and local politics, in professionalism, in family life - rather than the attainment of some special knowledge of the constituent elements of sanity and insanity' (Finnane, 1981, p.17).

Finnane quoted Scull approvingly in his discussion of the changing role of the medical profession:

> 'Scull has shown how successfully the physicians fought to regain the ground they had lost: on both a central legislative level and on the local level, the physicians succeeded by the 1830s in establishing control of asylum management, and even in substantially influencing the inspection system.

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[1] *Insanity and the Insane in Post Famine Ireland*, M Finnane, Croom Helm , London, 1981, and *Fools and Mad: A History of the Insane in Ireland*, J. Robins, IPA, Dublin, 1985.

[2] *The beginning of state care for the mentally ill in Ireland*, Williamson A. *Economic and Social Review*, 1970, 1, 2, p.281-290.

> In Ireland the story was essentially the same though the crucial developments took place at a later stage' (Finnane, 1981, p.40).

Finnane's discussion is particularly valuable in two aspects: the unique legal position in Ireland up to 1867, and the importance of methods of funding, including the capitation grant which was introduced in 1874. The legal position in Ireland was unique in that the majority of committals were as 'dangerous lunatics'. This had been the position in England to 1837 and at the same time as the law was eased in England & Wales, that law was introduced in Ireland. This remained the case until 1867, and even after the law was changed, compulsory detention as 'dangerous' remained the norm in Ireland until much later than in Britain (Finnane, 1981, p.100).

Finnane, alone among contemporary writers, discussed the capitation grant introduced in 1874 in detail (Finnane,1981,p. 62-3) facilitated by the annual publication by the Irish Inspectors of Lunacy of relevant data, a feature in common with the Scottish General Board of Lunacy but lacking with the Lunacy Commissioners for England & Wales. Finnane showed that the capitation scheme of 1874 remained in place longer in Ireland than in Britain, with open-ended capitation payments eventually curbed in Ireland with the 1898 Local Government Act which limited expenditure to the proceeds of the Irish Local Taxation Account.

The weaknesses in Finnane's account lay partly with his curtailed discussion of these topics. Although he provided data on activity trends and the level of the capitation grant, he made no assessment of the latter's influence on the former.

'Fools and Mad'

Robins (1985) provided an account of lunacy, mental illness and mental handicap in Ireland from pre-history to the 1980s. While his discussion of the pre-historical aspects is of some interest, it has little relevance of the present project. The main

value of Robins' account lies with the developments of policy in the Republic of Ireland from 1920, and in particular his account of the emergence of the mentally handicapped as a separate group only in the 1960s.

Although Robins' account is largely anecdotal, given his experience as a Deputy Secretary of the Department of Health, his account of more recent developments may well be authoritative and is referred to in the more detailed discussions in later Chapters.

Williamson (1970) discussed the period 1825-35 in relation to the development of psychiatric service provision in Ireland. However, given Finnane's later and fuller account, Williamson's account provides little additional information.

As with the studies of the development of services for the mentally disordered in Scotland, the Irish studies do not lend themselves to re-statement in the form of hypotheses. However, given the differences between patterns of development between both England & Wales and Scotland on one hand and Ireland on the other, the examination of the various hypotheses for England & Wales against the Scottish and Irish experience provides a means of testing their robustness.

Section IV

Conclusions and Hypotheses

Although some aspects of the history of psychiatric provision have been relatively well researched, major gaps remain.

First, despite the vigour of the debate between the progressive, epidemiological and the social control schools, very little attention has been paid to the quantitative aspects of psychiatric provision, whether to do with activity (how many patients were detained, with what level of inflows and outflows) or finance (how much was spent on them and by who). As shown above, there was considerable discussion, particularly of funding matters, in the early part of this century which has not been reflected in more recent studies. This lack of attention to the quantitative (and especially the economic) issues is all the more surprising given the neo-marxist allegiances of several of the main historians, notably Scull (1977, 1979 & 1989) but also Butler (1985), Mellett (1982) and to a lesser extent Finnane (1981). The failure to explore the implications of methods of funding, notably capitation, on levels of treated lunacy, is also striking.

Second, there have been virtually no comparative studies, although as discussed above, the three countries (four from 1920) existed within the same broad jurisdiction, together with fairly well defined differences in the legal and funding arrangements. It has been suggested that any hypotheses concerning the development of services for the mentally disordered in one country can be tested for robustness by considering the degree to which they applied to the other countries under examination.

Hypotheses

Six hypotheses have been suggested by the above review as follows:

*** that a pharmacological revolution in the early 1950s led to major changes, notably the run-down in the number of psychiatric inpatients.**

This hypothesis, which has been advocated by Jones (1972), Busfield (1986) and Taylor (1989), has been hotly contended by Scull (1977 & 1989), but without recourse to any examination of data, for example, on admission rates or on prescribing patterns.

*** that the lunatic asylums were part of a trend towards greater institutional provision required by the break-up of traditional families and by the labour market.**

While Scull (1977) and to some degree Unsworth (1986) have tended to take such a hypothesis as obvious, Abel-Smith & Pinker (1960) have warned of the possibility of substitutions between institutional types over time. Since Scull has stressed that in his view the lunatic asylums were dumping grounds for the 'awkward and inconvenient', one might look at the relative provision of potentially substitutable institutions in each country.

*** that the emergent public lunatic asylums were relatively cheap ways of warehousing awkward persons.**

This hypothesis, which is most closely associated with Scull (1979) but also with Hodgkinson (1967) might be examined by comparing unit costs in the alternative institutions, principally the workhouses.

*** that the capitation payments introduced in 1874 led to increases in the numbers of pauper lunatics in the public asylums.**

This hypothesis is associated with Maudsley (1877), Webb (1920) and Watson Grice (1910), but also with Hodgkinson (1966;1967), Cochrane (1985) and more recently Hare (1983). This hypothesis might be most readily tested by looking at trends in

inpatient residents and in admission rates in each country and by comparing trends across countries.

*** that the run-down of the asylums and the shift towards community oriented policies were propelled, at least in part, by rising unit costs due to the relative price effect. unionisation and shorter working weeks.**

This hypothesis, which has been advocated by Scull (1977 & 1984), might be explored using data on the timing of increases in unit costs by country and in the components of such increases.

*** that Wagner's Law (or Hypothesis) did not apply to the mental illness sector as evidenced by the wartime years of 1939-44.**

Culyer and Jacobs (1972) have suggested that Wagner's Law was falsified in relation to public spending on mental health services in the period 1930-1960. An examination of trends in public expenditure and activity levels outside this period could help elucidate the wider applicability of Wagner's Law both to periods outside major wars and to different countries.

CHAPTER 3.

THE EPIDEMIOLOGY OF MENTAL ILLNESS[1]

Introduction

This chapter follows the format of Chapter 2, with successive sections discussing each country, preceded by a more general section on the epidemiology of psychiatric illness, including the changing terminologies which have been employed. A summary is provided of the various studies which have attempted to evaluate the effectiveness and cost effectiveness of the more community-orientated approaches to care and treatment which have been developed as inpatient facilities have declined. As with Chapter 2, the literature is surveyed for hypotheses which might be evaluated using quantitative data for the countries of the UK and Ireland over the period 1850-1985.

Section 1

Epidemiological Methodology

The epidemiology of most illnesses, including psychiatric disorders, remains relatively underdeveloped. Mental illness comprises a variety of conditions. Since unambiguous case definition is a prerequisite for epidemiology (Kendell, 1975), the difficulties of such definitions have posed considerable problems for psychiatry; these have only begun to be resolved in the past decade with some progress towards standardised assessments and classification systems (Kreitman, 1985). As discussed above, legal attempts to define mental disorder proved no more successful (Unsworth, 1987).

Donnelly (1983), Porter (1987), Sharma (1970) and Berrios (1987) have discussed the methods used to classify persons as mentally disordered in the eighteenth and early nineteenth centuries. A distinction was made in the reports of the Lunacy Commissioners between the 'forms' and the 'causes' of lunacy (see also Donnelly, 1983).

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[1] Part of this chapter, specifically pages 82 to 91, appeared in Raftery (1991).

The 'forms' of lunacy are close to what in today's parlance are diagnoses, while the 'causes' are what might today be called pre-disposing factors, such as the factors which led to the crisis (life events such as disappointment in love, drunkenness).

The 'forms' of madness listed by the Metropolitan Commissioners of Lunacy in 1844 and those used by the Lunacy Commissioners in 1920 are compared in Table 3.1. Clearly nosological progress was incremental, with four of the main 'forms' unchanged: mania, melancholia, epilepsy and congenital insanity. Dementia was expanded to three kinds: Primary, Organic and Ordinary, and Senile Dementia was a new 'form', along with Confusional and Delusional Insanity. Two 'forms' were dropped (monomania, moral insanity) and two (congenital idiocy and imbecility) were merged.

The 'causes' of madness appear to have comprised an open-ended list rather than a fixed set of categories, with the proffered 'causes' of patients or relatives being recorded.

Two points are worth noting. First, the two dimensional classification provided by 'forms' and 'causes' marked a more sophisticated awareness of the nosology of psychiatric disease than the one dimensional diagnostic system introduced by the adoption of the International Classification of Disease in 1948. The development of the alternative DSM[1] system in the USA in the 1980s can be seen a move towards reinstating a two dimensional classification, albeit different from the 'causes' and 'forms' discussed here.

Secondly, very little attention has been paid to the trends in the number of patients sub-classified in the various systems. Although the authorities occasionally published data on the composition of inpatients by form and cause of disease, much less attention was paid to such classification of admissions. For example, first admissions were not distinguished in England & Wales until 1898.

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[1] DSM stands for Diagnostic and Statistical Manual of Mental Disorders, American Psychiatric Association, Washington (third edition) 1980.

Table 3.1
Forms of Lunacy: 1844 and 1920:

'FORMS' OF LUNACY	
1844	**1920**
LARGELY UNCHANGED 'FORMS'	
melancholia	melancholia
mania	mania
dementia	dementia (Ordinary, Primary, Organic)
general paralysis of the insane	general paralysis of the insane
epilepsy	epilepsy
congenital idiocy } congenital imbecility	congenital insanity
CHANGED 'FORMS'	
monomania	
moral insanity	
delerium tremens	
	senile dementia
	confusional insanity
	delusional insanity

Sources: Donnelly, 1983, p. 68, Lunacy Commissioners Annual Report 1921.

The 'forms' of madness shown in Table 3.1 were to remain in use with minor alterations up to 1948 when the International Classification of Diseases (ICD) was extended to cover morbidity as well as mortality (Busfield 1986). The ICD classification underwent little substantive change[1] between its introduction in 1948 and its ninth revision in 1979. In 1993, the tenth revision will, however, introduce some major changes (Wing,1992).

[1] The main changes were verbal rather than substantive. Manic depression became Affective Disorder, Psychoneurosis became Neurosis, Character, Intelligence and Behaviour Disorder became Personality Disorder. In addition, a number of new diagnoses were added, to do with alcohol and drugs.

Busfield (1986) has compared the ICD classification system with the US's Diagnostic and Statistical Manual of Mental Disorders or DSM (American Psychiatric Association, 1980), drawing particular attention to the distinction between psychoses and neuroses, which she suggested was more explicit in the ICD system than in the DSM.

Psychoses are distinguished from neuroses in the ICD system by reference to the patients' "contact with reality" - an idea which Busfield (1986) suggested, derives from Freud. Psychotic conditions involve a loss of contact with reality while neurotic conditions do not involve such loss. Many psychiatrists believe that the psychoses have organic (physical) causes, unlike the neuroses which are thought to derive from psychological factors.

Psychoses

The epidemiology of the psychoses, particularly schizophrenia, has received most attention, including cross-national studies by WHO (1973 & 1979; Sartorius et al. 1986) which suggested a fairly uniform incidence of schizophrenia on a world-wide basis. Given the argument that psychoses have an organic basis, the establishing of a uniform incidence of schizophrenia can be seen as the most important support for that theory. Further, as discussed below in relation to epidemiology in Ireland, the quest to verify the apparently high incidence rates for schizophrenia there led to a re-interpretation of the routine statistics.

A controversy over the interpretation of the repeatedly demonstrated link between social class and schizophrenia remains unsettled, but recent reviewers (Mechanic,1985; Cochrane,1983) see the disproportionate occurrence of schizophrenia as a consequence of genetic inheritance and social selection. Social selection could operate through either downward social mobility or failure to move upwards as a result of the debilitating consequences of the disorder. Several studies (Goldberg & Morrison,1963; Wiersma et al.,1983) reported that while new cases showed the expected class gradient, the class of their parents represented a typical occupational sample. Clearly, given the commitment to an organic basis for schizophrenia, evidence

of a true as opposed to an apparent social class gradient would be of considerable importance.

The heading 'Psychoses' includes other diagnoses such as Senile Dementia, Affective Disorders and Other Psychoses, which have received much less attention in the literature. These diagnoses are discussed more fully in Chapter 10.

Neuroses

The epidemiology of the neuroses remains less developed, partly because of the ambiguity of definition and the uncertain boundaries of psychiatric disorder. Both a social class and a sexual gradient appears to operate (Mechanic,1985). Research has focused on the specific factors which might account for these differences. Brown & Harris (1978) for example, suggested that the relatively higher prevalence of depression in lower-class women resulted from differential life events and greater vulnerability to such events because of life circumstances.

Other diagnoses under this broad heading include: Neuroses, Personality Disorders, and Depression not elsewhere classified. Remarkably little has been written about the epidemiology of these disorders. The changing pattern of service use by 'form' and diagnosis is discussed in Chapter 9.

Epidemiology and Service Planning

The relationship between epidemiology and service planning has been poor. Klerman (1987), in one of the rare attempts to link the two, suggested four sub-populations of potential interest to service planners:

* an inner core group who are chronically mentally ill, amounting to around 1% of the population (all figures refer to the US),
* an outer core group with diagnosable mental disorder, amounting to perhaps 15% of the population,

* a large fringe group who are each year exposed to the risk factors of stress and distress associated with life events and social adversity, amounting to perhaps 25% of the population, and
* a new group using mental health facilities in the hope of realising their personal potential, estimated at 6-10% of the population.

Although the inner core group have traditionally been the focus of service providers, Klerman argued for greater understanding of the factors which lead members of these other groups into contact with mental health services.

The limitations of psychiatric diagnoses in predicting levels of service utilisation have been exposed by the failure of attempts to apply Diagnostic Related Groups (DRGs) to psychiatry in the US. DRGs attempt to divide patients (cases) into groups that are clinically meaningful and resource homogeneous. Although this approach has been implemented in the US since 1983 for acute hospital cases falling under Medicare, psychiatric hospitals were exempted from this legislation. Arising from this anomaly, a number of studies have explored the implications of DRGs and their alternatives in the mental health services. Mitchel et al (1987) showed that although alternative classifications such as disease staging and clinically related groups performed better than DRGs, they were still poor predictors of resource use. McGuire et al (1987) showed that the implementation of DRG funding would underpay specialised psychiatric facilities and overpay general hospitals without specialised units.

While work in resource management in psychiatry in the UK remains at an early stage of development, it is focusing on classifying the functional inputs of psychiatric services, rather than the diagnoses of patients (Clifford, 1990).

Incidence and Prevalence

Incidence and prevalence, two key terms in epidemiology, require some brief comment, not least because of their complex relationship to the routine data which are analysed in later chapters. Prevalence refers to the number of persons with a particular disease -

the stock of diseased persons. Since some diseases persist while others are cured or recur only intermittently, distinctions must be made regarding the time period within which the stock is measured: such as point prevalence, period prevalence and lifetime prevalence.

Because data on prevalence are difficult to obtain other than by population surveys, service use data are often taken to indicate "treated prevalence". The relationship between population and treated prevalence plausibly varies by disease with a closer correspondence between the two in the more serious conditions, and less clear links in the less serious conditions. As applied to psychiatric illness, most of the sufferers of the more severe diagnoses, such as schizophrenia and the affective disorders, might receive treatment, while those with many of the other less serious diagnoses might not be diagnosed. If treated prevalence refers to the number who are in regular contact with services, then the treated prevalence may reflect a host of factors other than the presence or absence of the disease. Kreitman has taken the extreme position that 'Treated morbidity rates measure the supply of services and not the prevalence of the disease.' (Kreitman, 1985, p.26)

Incidence refers to the flow of new cases, and as with prevalence must be expressed as a rate per period of time. Again, data are more likely to be available on treated rather than true incidence. As with prevalence, the disparity between treated and true incidence is likely to be least for the more serious illnesses, such as psychoses, and greatest for minor illnesses such as the less serious neuroses and personality disorders.

Debates in the nineteenth century over whether or not lunacy was increasing relied mainly on treated prevalence data. Only from 1898 did data begin to be collected on treated incidence, as measured by the first admission rate. The treated prevalence data refers primarily to inpatient numbers in proportion to population in the period up to around 1959 when alternatives to inpatient care became more widely available. From that period on, the number in contact with outpatient and day patient facilities must

be taken into account, data permitting. For incidence, first admissions to inpatient facilities have often been taken as a proxy. Since the mid-1950s, first admission data must be looked at in conjunction with data on other service contacts such as first outpatient attendances.

Dissatisfaction with the routine data on incidence led to the development of individualised case registers in the mid-1960s which in turn helped clarify the level of treated incidence of particular types of mental illness by distinguishing, for example, first and repeat service contacts. The interests of researchers in improving the estimates of treated incidence for schizophrenia have led to caution among epidemiologists about uncritical use of data on service use to establish incidence rates. More detailed case register and uniform diagnostic methods, which have been employed to try to establish the incidence of schizophrenia, have become the preferred epidemiological tools.

Prevalence, Incidence and Economics

From the point of view of an economist, the costs and the effectiveness of service provision constitute the main agenda items. With regard to costs, the true levels of prevalence and incidence of particular conditions may be less important than establishing the stocks and flows of persons in care. Costs depend largely on the stock of patients under care at any one time. Unit costs (per inpatient day or week) provide an indication of the resources involved as well as the costs relative to other types of care. New admissions to a particular hospital plausibly require some special resources, if only to establish records, decide on what therapy is appropriate and monitor behaviour. Admission wards consequently tend to have higher staff ratios than long-stay wards. The extra costs of first admission to a particular hospital may apply regardless of whether the patient has been admitted elsewhere in the past or not, and may apply to a lesser extent to patients readmitted to the same hospital. Thus, costs are likely to be influenced mainly by the stock of inpatients in care, and secondarily by the number of admissions, with a likelihood that admissions that are new to that hospital (if not to any hospital) will cost more.

Relatively little attention was paid to questions of incidence and prevalence in the studies reviewed in Chapter 2, partly because the terminology of epidemiology has remained confined to the medical profession. Almost no attention has been paid by the non-epidemiological critics to the issues of the effectiveness (or cost effectiveness) of different approaches to treatment and care of the mentally ill.

Pharmacotherapy, which constitutes the dominant treatment mode for psychiatric illness, has been shown to be effective for several of the more severe diagnoses (Wing,1992). Psychotic patients are treated by the neuroleptic group of drugs, depressives by anti-depressives, and anxiety by anti-anxiolytics. Except for those patients whose illness poses a threat to themselves or to others, most treatments appear to function independently of location, with for example outpatient or home-orientated treatment being as effective as that provided by inpatient care.

Arguably, the most important turning point in the recent history of mental illness services has been the run-down of the number of residents in mental hospitals since around 1955 and the associated turn to community-orientated policies whereby the mentally ill are maintained outside the hospital. Given the importance of this change in perspective towards community-orientated psychiatry, the following paragraphs briefly review notions of the community and the various studies which have attempted to evaluate the effectiveness of 'community care'.

The effectiveness of community oriented psychiatry

Although the concept "community" has come to be widely used, it is seldom defined. An old term, it has been seen as lacking any negative connotations, (Williams, 1976) but encompassing instead a realm of vaguely positive sentiments. Community relates in complex ways to the concept of fraternity which, with liberty and equality, has been a key historical term in the evolution of modern liberal-democratic society, but whose contemporary application is soaked with nostalgia and utopianism (Ignatieff, 1984). Although several commentators ('Short

Committee', House of Commons, 1985; Wilmott, 1986) have acknowledged the desirability of adopting some alternative term, they have ruefully accepted the impossibility of change. 'Community care' has proved to be a most seductive piece of alliteration, the origins of which remain open to some doubt. The phrase appears to have been first used by the Wood Committee Report on Mental Deficiency (HMSO, 1929).The ambiguities inherent in the concept of community have, however, become apparent as attempts have made to fashion a policy of 'community care'. Bulmer (1987) has defined four lacunae in relation to community care in Britain:

- the lack of any consistent family policy,
- the failure to develop any policy to support women acting as informal carers,
- the failure to think through the implications for informal care of the deinstitutionalisation of the mentally ill and mentally handicapped,
- the lack of serious attention to the interweaving of formal and informal care.

These shortcomings all apply to community-orientated psychiatry, which also involves assumptions about the nature of mental illness, its course and treatment, the proper scope for psychiatry, the efficacy of social work (Hawks,1975), as well as the amount of services available.

A useful distinction in policy terms separates care "in" and "by" the community (Bayley, 1973). Receiving care by some member of the community, whether relative, friend or neighbour, differs greatly from obtaining care from a professional carer, whether in the context of the community or of an institution.

The scope for care being provided by members of the community depends on many factors, including:

* the availability of carers (traditionally women not in paid employment),
* the provisions for income maintenance for both the cared and the carers, and
* the types of treatment favoured.

All of these sets of variables have changed considerably during the past decades. The effects of changes in family structure, fertility, and the employment of married women have been extensively analysed (Ermisch, 1985), showing that altered rates of births and of women's participation in the labour force result from deep-seated structural factors. The OECD (1986) has shown that the trends to smaller families, life-long involvement of women in the labour force, and the consequently reduced scope for informal caring, all apply internationally. Although the modern welfare state has evolved income-maintenance schemes which guarantee at least a minimum income to the sick, including the mentally ill, state support for carers remains one of the less developed aspects of policy.

Community psychiatry tends to involve treatment and care primarily 'in' rather than 'by' the community. Treatment is necessarily by psychiatrists or other members of community psychiatric teams. Most care of those leaving long-stay hospitals is provided mainly by professional staff. A policy of treating new referrals in the community rather than in institutions may enable more care to be provided by that individual's personal network. Care provided by the community, however, whether by family, friends, neighbours, or voluntary organisations, involves considerable burdens with carers generally receiving little support, advice or information from official agencies (Fadden et al. 1987).

Community-orientated psychiatric treatment can be characterised by the provision of the usual range of psychiatric interventions (diagnosis and treatment, whether pharmacopotherapy or psychotherapy) in the patient's home environment. While this may be as effective as hospital-centred treatment (see below), and at no greater cost, a number of other questions are raised, including those relating to the privacy and autonomy of the client. For instance, Bulmer (1987) suggested that privacy, defined as the control over the way information about oneself is used, may be imperilled by community care. Treatment for psychiatric illness provided at home may be more difficult to conceal from family or neighbours, and may therefore stigmatise in

similar ways to institutional care. The remainder of this section reviews studies of community-orientated treatment and of deinstitutionalisation.

Studies of Community-oriented Treatment

Reviews of the literature of the outcomes from different modes of treatments and care (Braun, 1981: Olfson 1990), suggested that although many early studies had been open to serious methodological objections, later studies, based largely on the approach of Test & Stein (1980), were more robust methodologically. The various studies, summarised in Table 3.2. are evaluated against the criteria of effectiveness, efficiency and equity (Raftery,1991).

Most of the treatment studies summarised in Table 3.2 covered young patients, used both randomised allocation and before-and-after methods, and collected service utilisation data. The numbers of patients included were often small, though, and many studies were confined to schizophrenics. The report by Test & Stein (1980) has received least criticism and has come to be seen as a prototype, which has been widely replicated and extended (Olfson, 1990) in the US. Hoult (1984) tested the same approach in Australia, and Muijen et al. (1992) and Burns (submitted for publication) used similar approaches in the UK.

Overall, the results of this extensive testing have supported the alternative treatment regimes:

> 'The most consistent finding - that assertive community treatment reduces hospital utilisation - has been replicated in several evaluations of assertive community treatment programs and tends to be most robust when study subjects are selected for recent high levels of service utilisation' (Olfson, 1990, p. 640).

Table 3.2
Outcome Studies Of Alternative Treatments Modes For New Patients: A Summary.

	Country	Number	Follow-up (months)	Exclusions	Type of Study	Outcomes: Pro Exp. or Control?	Costs: Pro Exp. or Control?
Grad (1968)	UK	1,408	none	non-schiz.	Other	Control	Unclear
Pasamanick (1967)	US	152	6-30	not stated	RCT	Exp.	Controls readmitted more
Langsley (1969)	US	300	1	Al/drugs	RCT	Exp.	No Diff.
Goodacre (1975)	Canada	212	12	non-schiz.	RCT	Exp.	No Diff.
Polak (1976)	US	85	?	not stated	RCT	Exp.	Unclear
Mosher (1975)	US	57	12	non-schiz.	Other	Exp.	Unclear
Test & Stein (1980)	US	162	14	Al/Drugs/ Br.	RCT	Exp.	Exp.cost more
Fenton (1982)	Canada	65	24	Al/Drugs/ suicide	RCT	Exp.	Unclear
Hoult (1984)	Australia	121	12	non-schiz.	RCT	Exp.	Exp.
Mulder (1985)	US	88	30-66	involuntary	RCT	Exp. (lost in 5 yrs)	Exp.
Jerrel(1989)	US	35	48	MH,drugs	RCT	Exp.	Exp.
Bond (1988)	US	88	6	Pevious Contacts	RCT	Control	Exp.
Borland (1989)	US	72	60	Organic diag.	RCT	Exp.	No diff.
Wright (1989)	US	196	48	non-schiz.	Before/ After	Exp.	Exp.
Muijen (1992)	UK	189	3	Addiction/Br	RCT	Exp.	Exp .
Burns (1992)	UK	172	18	Previous Contact	RCT	No Diff.	Exp.

Sources: adapted from Fenton(1982) and Olfson 1990) with Muijen and Burns added

Notes to Table 3.2:

Sch. = Schizophrenia, Br. = Severe Organic Brain Syndrome, No Diff. = No statistically significant difference, Al. = Alcoholism, Previous Contact = contact with service in last year,Br. = Severe Organic Brain Syndrome,Exp. = Experimental Community orientated group, Suicide = High Suicide Risk. Control = Control Group, usually standard services, RCT = Randomised Control Trial.

Despite the shortcomings of some of these studies, particularly the small numbers involved and the groups excluded, all agreed about the relative value of alternatives to hospitalisation:

* Effectiveness: in none of the studies did outcome measures favour hospitalisation, indicating that the effectiveness of community treatments was at least equal to that of hospital-based care. No comparison has been made between different types of community-orientated treatments, however (O'Donnell, 1990).

* Efficiency: the relative efficiency of community orientated treatment remained unclear. The Test & Stein study (Weisbrod et al. 1980) showed that both benefits and costs were higher in the community-orientated programme, but as a common calculus to compare costs and benefits was lacking, relative efficiency could not be estimated. However, Hoult (1984) suggested that community orientated treatment for schizophrenics produced better outcomes at less cost. The recent English studies (Muijen et al, 1992, Burns et al. submitted for publication), have suggested that at least equal outcomes could be achieved at less cost in community orientated regimes which minimised inpatient admissions.

* Equity: the equity aspects of the different types of care have received little consideration, except in so far as the selection of control and trial groups adequately accounted for social differences. The relatively small numbers involved in virtually all the studies would inhibit one from drawing conclusions about equity.

More generally, these studies tended to take both 'hospital' and 'psychiatric patients' as unitary entities, whereas a more sophisticated approach would recognise the diversity of types included in both terms, as well as the possibility that some categories of hospital care might be better for some groups of patients. Further, by setting hospital and community-orientated treatments as opposites, some studies precluded the possibility that combined hospital and community treatment may be the most appropriate in certain circumstances.

Studies of Deinstitutionalisation

The main studies of alternatives to long-term hospitalisation, summarised in Table 3.3, also covered relatively few patients, compared with the numbers of patients who have been 'deinstitutionalised'. Only two of the earlier US studies reported were judged adequate on the methodological criteria noted above; those of Marx (1973) and Weinman et al. (1978), who also stressed the lack of longer-term follow-up. The more recent English studies (Knapp et al. 1989; Knapp & Beecham, 1989; Knapp et al,1990) have been more rigourous methodologically and have demonstrated that resettlement of long-term psychiatric inpatients in the community can be achieved with reasonable standards, no change in patient outcomes and no extra costs.

Table 3.3

Summary of Studies of Deinstitutionalisation

	Country	Number	Follow up	Study type	Exclusions	Outcomes: Exp.or Control Favoured?	Costs: Exp.or Control Favoured?
Brown (1966)	UK	339	5 yrs	Other	Homicidal/ Suicidal	No Diff.	No Diff.
Wing (1960)	UK	30	1 yrs	RCT	Severely Distrubed	No Diff.	Not included
Marx (1973)	US	61	5 months	RCT	Chronic	Exp.	Exp.-less service use
Linn (1977)	US	625	24 months	RCT	Sev. Disabled	No Diff.	unclear
Weinman (1978)	US	516	4 months	RCT	?	Exp. (perhaps)	Exp.-fewer readmissions
Knapp et al, (1989)	UK	420	9 months	Control	None	Exp.	Exp. cost more
TAPS (Knapp, 1991)	UK	145	1-2 yrs	Control	None	Exp.	Exp. cost less

Sources: Braun 1981, Knapp 1990, 1991.

Notes: Hom/Suic. = Homicidal/Suicidal, Sev.Dist. = Too Severely Disturbed to include, Chronic = Too Chronic to include, Sev. Disabled = Too Severely Disabled to include,. Exp. = Experimental Group

The conclusions of the studies of deinstitutionalisation can be summarised as follows:

* Effectiveness seemed to be unaffected by discharge,
* Efficiency was equal, with similar outcomes without increased costs.
* Equity issues were hardly ever examined.

Avison (1987) has suggested that little theoretical or methodological progress has been made on identifying factors conducive to the adjustment of discharged patients on their return to the community. Mosher (1983) has argued that despite the clear (to him) superiority of community-orientated services, as claimed to be shown by the above studies, only slow progress has been possible due to the reluctance of service providers to change. Against this, Tantam (1985) has suggested that many studies have been insufficiently clear on the representativeness of the groups studied to warrant generalisation of their findings, and that they have failed to demonstrate that seriously disturbed patients can be managed as well in the community as in hospital. The small numbers involved in most studies and the lack of clarity about the groups excluded lends weight to this argument. However, the results of the more recent English studies (Knapp et al, 1989 & 1990) suggest that Tantam's (1985) conclusions are too negative. Deinstitutionalisation does appear to work well at no extra cost, and although the evidence favours community-orientated models of acute services, specification of the precise models for particular groups of patients requires further work.

The failure to consider equity issues in virtually all studies is, however, disturbing. Such an omission may be more serious in the case of deinstitutionalisation because of the evidence that many of those being discharged belong to the less advantaged social classes, regardless of the classes in which they originated. Even if some patients ought not to have become long-stay in the first place, once they have become so, any decisions to discharge them often without adequate monitoring, let alone community support, could only be judged undesirable and likely to be inequitable. The degree to which long-stay inpatients were discharged is examined in Chapter 9.Succeeding sections review the position of each country regarding what is known about the epidemiology of mental illness.

Section II

England & Wales

Data on the number of patients in the various institutions catering for the mentally ill have been available from the mid-1850s with occasional estimates for previous years. A major problem relates to the lack of precision of the term 'lunatic' or 'mentally disordered person', not least because of the inclusion of 'idiots and imbeciles'. Gradually, however, these latter groups were separated out in the routine statistics, which are detailed in the relevant chapters and appendices.

Data on admissions were also collected from the 1850s but attempts to identify first admissions date only from the 1890s when the question whether insanity was increasing or not was the source of lively debate. After 1900, Hare (1983) suggests that the debate lost its dynamic as the numbers treated ceased to increase at the previous rates. Whatever the reasons, little attention seems to have been paid to the routine data in the period 1900 to 1950.

The run-down of inpatient numbers from 1955 led to a revival of interest in these data. Data on inmates of the mental hospitals improved from a medical and epidemiological point of view, when censuses of the English hospitals' inmates were carried out in 1953, 1963, and 1971 (HMSO, various years), along with annual updates based on inflows and outflows published in the Mental Health Enquiry from 1964 to 1986 (MHE, HMSO, various years).

Several studies have attempted to explore the number of beds required and the speed with which numbers of inpatients might be reduced. Tooth & Brooke (1961) produced the earliest official estimates which, despite being heavily criticised, proved fairly accurate.

Data on admissions have posed more difficult problems than those to do with the stock of patients. As reviewed in relation to England & Wales in Chapters 5 and Appendix 1,

the quality of data on admissions deteriorated between 1930 and 1969.[1] Data on total admissions were published by the Board of Control between 1930 and 1959, with estimates of the proportions who were first admissions. From 1952 to 1960 a different source, the General Registry Office (GRO, various years) provided data on the activities of a slightly different set of hospitals than those covered in the statistics of the Board of Control. When the various sources were unified in 1963, the first admission data were of dubious quality between 1961 and 1969, as acknowledged by the Mental Health Enquiry in 1970 (MHE, HMSO 1970). While the details of these changes are discussed in Appendix 1, the central point to be made is that these changes may have contributed to the distrust that psychiatric epidemiologists have felt about the use of service use data.

Partly as a response to such concerns, case registers were developed in the UK from the 1960s. The principle of these registers was to ensure that each contact with a psychiatric service by all the individuals living within a defined population was duly recorded and collated. Such registers provided not only treated prevalence and incidence data but also by linking records, the evolution of a cohort could be charted so as to indicate the disease's natural history and effects of various interventions. Seven such registers had been developed by the early 1980s (Wing, 1992). By the late 1980s all seven registers had been discontinued (Bennett & Freeman, 1991, p.xxi). However, District Health Authorities will in future be required to keep registers of all severely ill patients who are discharged from mental hospitals (Department of Health, 1990).

The available data on service use are reviewed below in the relevant chapters. Only one study, that of Hare (1983) for England, has attempted to apply the concepts of incidence and prevalence in a long historical context, and as such deserves some attention.

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[1] It is suggested in later chapters that this deterioration was due partly to the unprecedented rise in the number of admissions, both total and first, in these years. The routine data collection systems were unable to cope with the demands placed upon them, leading to changes and, in some cases, acknowledgements of the deficiencies of some of the published data.

Historical Trends in Incidence and Prevalence

Hare (1983) has strongly argued, contrary to the then-reigning orthodoxy of both the Lunacy Commissioners and of the social control theorists, notably Scull, that insanity did increase in nineteenth century Britain. A major debate towards the end of the nineteenth century in psychiatric circles concerned whether or not the apparent increase in mental illness was true or false. This debate, which was carried on mainly in the Journal of Mental Science, is summarised by Hare. The orthodox view disregarded the rise in both the numbers of lunatics detained in asylums and the increased admission rate by suggesting that the increases were due to factors other than an increase in lunacy. Hare terms these explanations as "nosocomialist", a term which:

> 'has been usefully used in the special sense of embracing all those factors, other that the disease itself, which determine whether a person with the disease comes to be included in a register of hospital cases'. (Hare, 1983, p.439.)

Hare used the historical data of the Lunacy Commissioners to compile estimates of both (treated) prevalence and incidence of mental illness up to 1900 (but not thereafter). Hare's explanations for the increased prevalence and incidence of mental illness rested on increased numbers in the asylums and a 50% rise in the first (extrapolated)[1] admission rate between 1850 and 1900.

The nosocomialist arguments, which denied that the true prevalence had increased, were based on the following possibilities, Hare suggested:

> first, that more lunatics were being recognised and diagnosed in the population,
>
> second, that patients accumulated in the asylums due to low recovery rates and to the relatively lower death rate of inmates, and
> third, that the lack of an increase in the numbers of private patients showed that insanity overall was not increasing.

Hare used the statistics published by the Lunacy Commissioners to show that each of these arguments was weak, and that the evidence pointed to increased prevalence. The argument that more lunatics were being recognised was vitiated by the ever-increasing

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[1] Hare extrapolated first admissions on total admissions using the proportion between the two in the early years of the twentieth century.

estimates of the true level of prevalence in the population. Hare dismissed the argument that lunatics accumulated in care on the grounds that the recovery and mortality data pointed in various directions at different times. Finally, Hare noted that the numbers of private patients could not be taken as an index of the true level of insanity, both because insanity could be a pauperising disease and also because the pattern of private provision reflected the play of market forces.

Similarly with treated incidence, Hare showed that the data on first admissions, available from 1898, and the data on total admissions (which run in close parallel with the former) showed a consistent pattern of long-term increase. The year 1900, he notes, was something of a watershed for lunacy statistics in that the admission rate ceased to rise and the recovery rate began to rise, a combination which, he suggested, led to a diminution of interest in the debate over the level of insanity from that date.

So far, Hare's account is useful and hardly controversial, although it has been contested by Scull (1984) as discussed in Chapter 2. Hare, however, concluded his article by examining the possible causes of the increase in insanity. His review of contemporary accounts led him to reject the possibility that the rise in admission rates was due to less severe cases being admitted. Although the classification of cases was less than satisfactory from contemporary points of view, Hare argued that the increase was probably due to a rise in schizophrenia, relying on Torrey's (1980, 1987) suggestion that an epidemiological hypothesis would account for variations in schizophrenia not only in time but also by place. Hare argued that the increase in first admissions in England & Wales supported this epidemiological hypothesis for the increase. Arguing that contemporary accounts did not provide evidence of any disease similar to schizophrenia until the nineteenth century, and rejecting Bleuler's "pessimistic hypothesis" that schizophrenia was a genetic inherited disorder, Hare considered environmental explanations. After rejecting diet as a causal factor, he found himself forced back on an infective (viral) mechanism.

Hare suggested that a review of historical trends in the US and several European countries including Ireland, supported Torrey's hypothesis of an epidemic of schizophrenia:

> 'We then have the hypothesis of a slow epidemic of schizophrenia which in Europe but perhaps also in the United States,began some 200 years ago and which can be attributed to the changing effect of some specific causal factor of a physical nature' (Hare, 1983,p. 451).

Hare went on to recognise that his conclusion was speculative:

> "I am aware that the ideas I have put to you may seem speculative. What is clear, I think, is that in Britain during the second half of the nineteenth century the incidence of insanity, as measured by the asylum admission rate, showed a remarkable increase. The question then arises, how far this increase is to be explained in sociological terms, as the increasing admission of milder cases, and how far in medical terms as an epidemic of a mental disorder. In this lecture I have wished only to suggest to you that a medical explanation of the asylum era is worth considering, as perhaps containing an element of truth." (Hare, 1983,p. 451)

An Epidemiological Hypothesis?

An epidemiological hypothesis has thus been formulated by Hare and others, specifically that:

> *** the pattern of first admissions to psychiatric institutions between 1850 and 1900 supports the hypothesis of an epidemic, probably of schizophrenia.**

An analysis of trends in first admission rates over the period 1850 to 1986 should inform our understanding of the plausibility of a hypothesis over a longer time period than that considered by Hare. Comparative data by country should do likewise in relation to variations by place.

Recent Trends

Relatively few epidemiological studies have been of the scope of Hare's, with most focusing on shorter periods. Der et al (1990) reviewed trends in first admission rates for various types of mental illness, showing that while first admission rates for

schizophrenia had been stable between 1952 and 1960, they had begun to fall from the mid-1960s right through to 1986. First admission rates for neuroses and personality disorders had also fallen post 1960 but those for a range of other diseases had increased, notably for alcoholism and related disorders. Stable rates had applied to dementia, alcoholic psychoses, drug abuse and "all other conditions". This work is extended to examine trends in first admission rates by diagnosis in Chapter 9.

Section III

Epidemiology of Psychiatric Illness in Scotland

As in the rest of the UK, regular censuses of inpatients became the norm from the mid-1950s and these are used below to chart the trends in activity levels. Partly because, unlike Ireland, Scotland's measures of treated prevalence and incidence of mental illness were not largely different from those in England & Wales, there has been less interest in the epidemiology of mental illness in Scotland.

Baldwin & Hall (1971) and Carstairs et al. (1984) extended the Tooth & Brooke (1961) projections for psychiatric bed requirements to Scotland. The report *Focus on Mental Health* (HMSO, 1984, Appendix 1) took up this work, showing that the total number of beds had fallen by 18% between 1965 and 1983, a smaller decline than in England & Wales. At the same time the admission rate had increased, due in part to sharp declines in the length of stay. Admissions for all ages peaked in 1976 and had declined thereafter. The elderly constituted an increasing proportion of both residents and admissions. As the proportion of resident patients with a diagnosis of schizophrenia has fallen, the proportion with a diagnosis of alcoholism and senile psychosis had both increased - both as regards residents and admissions.

Focus on Mental Health (HMSO, 1984) also estimated future bed requirements for 5 groups:

- under 65 short-stay
- under 65 long-stay,
- over 65 short stay
- over 65 long-stay, and
- senile dementia.

While declines were projected for both short-stay and long-stay residents, the increase in senile dementia was sufficient to lead to a small increase in the number of

beds projected by 1991 from 3.04 per 1,000 in 1979 to 3.23 in 1991. These trends were similar to those of Carstairs et al. (1984).

Studies of first admission rates for various types of mental illness, notably schizophrenia, have been carried out in Scotland (summarised in Eagles, 1991) which indicated similar falls in first admissions rates as in England & Wales.

Section IV

Epidemiology of Psychiatric Illness in Ireland

Epidemiological interest in mental illness in Ireland was prompted by concern there and abroad that Ireland appeared to have among the highest levels in the world, as measured by the number of inmates relative to population and by the first admission rate.

Murphy (1968, 1975) was one of the first to point to the relatively high levels of mental illness in Ireland. Along with Lund in Sweden, Croatia, and the Tamil part of South India, Ireland seemed to have much higher levels of both prevalence and incidence of schizophrenia than one might expect to find, after adjustment for age and sex. Murphy uncritically took the service use data on treated prevalence and incidence as indicating relatively high true levels. He moved on to suggest that repressed religion and mother fixation might explain the high levels of schizophrenia.

Fuller Torrey (1980), an American psychiatrist, suggested that further examination of the reasons for the apparently high level of mental illness might cast light on the underlying epidemiology of mental illness itself. Torrey who later worked as a psychiatrist in Ireland for a time to study the way that the service operated, compared Ireland and Croatia in the northwest of Yugoslavia, both of which appeared to have high rates of schizophrenia. Torrey, again using treated incidence and prevalence data showed that the southern and western parts of Ireland had a schizophrenia prevalence rate of around 4%:

"This rate is almost certainly the highest in the world" (Torrey 1980 p.135).

The prevalence rate for schizophrenia was highest among the lowest socio-economic groups in Ireland. Irish emigrants to the United States and Canada also appeared to have high rates. Torrey concluded that the epidemiology of schizophrenia strongly

supported an association between the disease and civilisation, with the most likely causes biological.

> 'Viruses in particular should be suspect as possible agents, although they probably interact with genetic disposition and/or familial transmission in complex ways in the causation of the disease. Dietary and environmental contaminants must also be considered.' (Torrey, 1980 p.187).

Side by side with these medical excursions came more fanciful explorations by anthropologists, mainly from the USA, who took the high levels of mental illness and schizophrenia as given and proceeded to construct accounts of how life was lived there. These included the following books:

Saints, Scholars and Schizophrenics by Nancy Sheper-Hughes, [1]
Inis Beag: Isle of Ireland by John Messenger.[2]
Island of the Grey Cow, by Deborah Tall[3]
Innishkillane by Hugh Brody[4]

The degree to which these authors took the data on mental illness unquestioningly has been criticised by Professor Eileen Kane, (1986) an anthropologist who discussed them in the context of stereotypes and Irish identity. Sheper-Hughes attempted to examine why the Irish are:

> "in general vulnerable to mental illness particularly schizophrenia and why the rates of schizophrenia are "spiralling". (Sheper-Hughes, 1979, p70).

Kane showed that neither of these propositions was true as far as the best estimates of incidence, based on case registers, were concerned.

Both the Medico-Social Research Board (MSRB)[5] and Walsh[6] (1970) who compiled the service use data and suggested that Irish first admission rates appeared to be about twice as high as those in England and Wales in 1964, after standardisation for age and sex, also drew attention to likely deficiencies in the data.

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[1] *Saints, Scholars and Schizophrenics,* Nancy Sheper-Hughes, Berkeley, University of Berkeley, 1982.
[2] *Inis Beag: Isle of Ireland* , John Messenger. New York, Rheinhart & Winston, 1969.
[3] *Island of the Grey Cow*, Deborah Tall, London, Pan, 1990.
[4] *Innishkillane*, Hugh Brody, Penguin, London, 1974.
[5] O'Hare,A. & Walsh,D. *Activities of Irish Psychiatric Hospitals and Units,* annually 1965 to 1984, MSRB, Dublin.
[6] Walsh, D. Walsh, B. *Mental Illness in the Repubic of Ireland - First Admissions,* Journal of Irish Medical Association, 63, 400, 365-370, 1970.

Concern with the relatively high incidence levels led the MSRB to the setting up of case registers in three Irish counties, which provided data that was reliable, being subject to tight checks and standardised assessment techniques. The results for 1974 showed a high prevalence of mental illness: 14.4 per 1,000 for the three counties compared to the lower levels of 7.7 for Camberwell in London and 5.4 in Salford. The same sources showed, however, a relatively lower overall treated incidence (first admission) rate: 2.2 per 1,000 in Ireland compared with 3.4 in Camberwell and 2.1 in Salford. (Ni Nuallain, O'Hare and Walsh, 1984). Further analysis over time showed no evidence that the incidence rate was rising, let alone "spiralling". The treated incidence rates for schizophrenia were shown to be relatively stable at around 15 per 100,000, close to the WHO's internationally acceptable rates (Sartorius et al. 1986).

As in the UK, the start of the run-down of the mental hospitals which began in the mid-1950s led to concern with the clinical and social states of inpatients. Starting in 1963 regular censuses were taken of inmates of Irish mental hospitals (by the Medico-Social Research Board in 1963, 1970, and 1981), which showed relatively high inpatient to population ratios.

The reasons for the relatively high levels of treated prevalence but relatively normal incidence have been put down to over-supply of beds which in turn have been seen as a historical residue (Keatinge, 1987). Keatinge's comparison of first and total admissions rates in two broadly matched rural areas showed no overall significant difference in treated incidence but statistically significant differences in treated prevalence.

The variations in treated prevalence were due, she suggested, to differences in the available bed stocks as well as to social factors such as family networks. "It may be that the number of hospital beds alone accounts for the differences in the rates of readmission" (Keatinge 1987, p.192).

Later studies (Dean et al. 1981[1]) showed relatively high rates of admission for schizophrenia among Irish emigrants to the United Kingdom. Cochrane et al (1983) argued in relation to the findings of Dean et al, that the high admission rates of Irish-born in England & Wales were due to the high rates in their country of origin.

Conclusions

This chapter has reviewed the epidemiological literature relating to mental illness, first in general terms, with a review of the various studies of the costs and the effectiveness on alternatives to traditional inpatient-orientated care. A country-by-country review has indicated some interesting attempts at what might be called historical epidemiology, notably by Hare for England & Wales between 1850 and 1900. No study appears to have examined the data over a longer time period or looked at the year on year variations in treated prevalence and incidence. Ireland has been an outlier in terms of relatively high levels of service use, but closer examination of first admission rates has indicated that Ireland may not, as was previously thought, suffer from among the highest rates of schizophrenia in the world.

It has been suggested that a comparative analysis of first admission rates over the period 1850 to 1986 by country would shed light on Hare's epidemiological hypothesis, namely an infectious epidemic of schizophrenia. In any case, in an economic analysis, variations in the number of inmates as well as inflows and outflows would have to be taken into account to separate out the effects of numbers of inmates on total costs.

Succeeding chapters review the data on activity and costs for each country. Before proceeding to that, however, Chapter 4 sets the context, legal, financial and policy against which the empirical analysis of the later chapters is carried out.

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[1] *First admissions of native born and immigrants to psychiatric hospitals in South East England, 1976*, Dean G,Walsh D,Downing H,Shelley E, *British Journal of Psychiatry*, 1981, 139:506-512.

CHAPTER 4

PSYCHIATRIC PROVISION IN ENGLAND & WALES, SCOTLAND AND IRELAND: A COMPARATIVE PERSPECTIVE

Introduction

This Chapter sets the context within which provision for lunacy developed in the three countries, as a background to the more detailed analysis of trends in activity and expenditure in later chapters. Arising from the literature review in Chapters 2 and 3, three lacunae can be identified in relation to the comparative empirical description of the historical development of psychiatric services in the three countries:

- firstly, to do with the law governing lunacy, particularly in Scotland and Ireland which have received little attention,
- secondly, to do with methods of funding in all three countries, and
- thirdly, to remedy the lack of a comparative perspective regarding both the law and funding.

The gaps in knowledge on these topics means that the potential influences of the legal and financing structures on the overall levels of treated prevalence and incidence cannot be discussed in a meaningful way. This chapter sets out to fill these gaps. Section 1 discusses the comparative legal developments relating to lunacy in each country, and Section 2 outlines the ways that provision for lunatics was funded in each country.

Section 1

Legal Developments

A useful overview is provided by considering the various acts which established the legal framework within which care could be provided and which in turn largely determined the methods by which expenditure was funded. As noted above in

Chapter 2, although the legal changes pertaining to psychiatric treatment in England & Wales have been the subject of a number of studies, little attention has been paid to legal developments in Scotland or Ireland. An overview of the different pace of legislation in relation to lunacy in each country is provided in Table 4.1 which shows the major Acts for each country.

The pace of legislative development was very different in each country. Ireland developed legislation for dealing with lunatics first, with a permissive Act in 1817 being followed by a further Act in 1818 which gave the Lord Lieutenant the power to order the erection of asylums at public expense. The use of these compulsory powers gave Ireland an early start in the era of publicly financed psychiatric services.

Although legislation pertaining to lunacy had existed in England & Wales from the 1744 Madhouse Act, it was not until 1808 that statutory provision was for made for public provision. The 1808 County Asylums Act introduced permissive legislation but the power to make the erection of public asylums compulsory did not follow until the Lunacy Act of 1845. Thereafter, however, England & Wales led the way with major legislation in 1890, 1913, 1930, 1959 and 1983. These legislative Acts gradually led to a relaxing of the custodial nature of care, separated out the mentally handicapped, and strengthened the legal safeguards of those who were detained against their will.

TABLE 4.1
MAJOR MENTAL HEALTH LEGISLATION IN ENGLAND & WALES, SCOTLAND, IRELAND (LATER REPUBLIC OF IRELAND) AND N. IRELAND)

year	England & Wales	Scotland	Ireland (later Rep. of Ireland)	N.Ireland
1601	Poor Law Act			
1744			Lunacy Act (workhouse legislation)	
1774	Madhouse Act			
1800	Committal of Dangerous Lunatics			
1808	County Asylums Act			
1817			Lunacy Act	
1828	Madhouses Act			
1834	Poor Law Act		Poor Law Act	
1838	Dangerous Lunatics Act		Dangerous Lunatics Act	
1845	Lunacy Acts	Poor Law (Sc.) Act		
1857	Lunacy Acts (1853)	Lunacy (Sc.) Act		
1867	Dangerous Lunatics Act: Metropolitan Poor Act		Dangerous Lunatics Act	
1874	Grant-in-Aid	Grant-in-Aid	Grant-in-Aid	
1890	Lunacy Act			
1913	Mental Deficiency Act	Lunacy & Mental Deficiency Act		
1929	Local Govt. Act	Local Govt. Act		Local Govt. Act
1930	Mental Treatment Act		Mental Treatment Act	Mental Treatment Act
1946	NHS Act	NHS Act		NHS Act
1947			Health Act	
1959	Mental Health Act	M. Health Act (1960)		M. Health Act (1960)
1983	Mental Health Act	M. Health Act (1960)	M. Health Act (1981)	M. Health Act (1984)

Notes: M. Health = Mental Health.

Scotland, partly because it already had voluntary lunatic asylums - the seven Royal Asylums - did not have specific legislation until the 1857 Lunacy (Scotland) Act which was brought about at least in part by a public campaign against the ways the lunatics were catered for in Scotland (Rice, 1981; Battiscombe, 1974; Checkland, 1980). After the innovations of the 1857 Lunacy (Scotland) Act, which England & Wales to some extent copied, Scotland's lunacy legislation developed broadly in line with that of England & Wales.

Ireland, despite its early lead in lunacy legislation, failed to update its legislation. Neither the 1890 Lunacy Act nor the 1913 Mental Deficiency Act applied to Ireland. The reasons for these omissions are considered in more detail below.

N. Ireland inherited Ireland's lunacy legislation but moved closer to the rest of the UK by enacting in 1926, 1932, 1948 and 1961 legislative changes which parallelled those in England & Wales and Scotland as shown in Table 4.1.

The Free State (later Republic of Ireland) also inherited the previous legislation but showed little interest in updating it so that the 1867 Dangerous Lunatics Act continued to provide the legislative framework until amended by the 1945 Mental Treatment Act. Although a further Mental Health Act, along the lines of the 1959 English Mental Health Act, was passed by the Oireachtas (Irish Parliament) in 1981, it has not been implemented for reasons which are discussed below.

Comparison of Legal Processes in Each Country

A summary comparison of the legal processes for the reception of patients is shown in Table 4.2. Since admission to a psychiatric hospital up to 1930 in England & Wales involved certification as a lunatic, with consequent loss of civil rights, the number of independent opinions required for committal was important. Opinions might take the form of certificates by medical doctors or by magistrates or by clergymen and Poor Law officials, such as Relieving Officers. The form that the committal process took thus provides a marker not only of patients' rights but also of

the powers of the different professional groups. Pauper lunatics made up the vast majority of committals in each country, but private patients tended to have more rigourous safeguards, notably in the number of medical certificates that were required. The legal rights of patients developed more rapidly in Scotland and in England & Wales compared to Ireland.

In England & Wales, different legal requirements applied to the admission of public and private patients from the Madhouse Act of 1774 when for the first time one medical certificate became mandatory for the committal of a patient to a private asylum. Two medical certificates came to be required for private admissions from 1819 (Unsworth, 1987, p.56), when one medical certificate came to be required for pauper lunatics. In addition, one magisterial order (by a Justice of the Peace) was required for pauper admissions from 1819 (Unsworth, 1987, p.55), and two from 1828 (Jones,1972, p.109). It was not until 1890, however, that a magisterial order was required for private patients (Unsworth,1987 p.56; Jones, 1972, p.177). Dangerous lunatics could be committed by a justice of the peace or by a combination of a clergyman and a Poor Law Relieving Officer (Porter 1987, p.177; Butler, 1986, p.24). Up to 1838 committal of dangerous lunatics was initially to Gaol, but after that date, to an asylum.

In Ireland, dangerous lunatics could be confined by any two justices of the peace without any medical certification up to 1867, when certification by a Dispensary doctor became mandatory. Detention of pauper lunatics required one medical certificate from 1818. Two medical certificates were required for private patients from 1842 (Finnane,1981, p.91). The position governing lunacy in Ireland was thus similar to that pertaining in England & Wales, at least formally. However, more detailed examination reveals the existence of a more custodial regime. In particular, the most common form of committal was as a 'dangerous lunatic', which required no medical evidence until 1867 and then from only a single dispensary doctor (Finnane, 1981, p.97).

Scotland's 1857 Lunacy Act, as amended in 1862 and 1866,was in advance of the other countries by introducing the requirement of two medical certificates for both

pauper and private committals, and one certificate for dangerous lunatics. In addition, a Sheriff's order was required for all committals. The 1857 Lunacy Act permitted voluntary admission, a possibility that was not formally copied until 1930 in England & Wales when the Mental Treatment Act was introduced.

Several general points are discussed further below:

- the formal similarity of committal processes in each of the three countries, with Scotland showing more concern with medical certification and with less distinction between types of patient,
- the greater reliance on committal as 'Dangerous Lunatics' in Ireland,
- the greater ease with which one could qualify as a pauper lunatic in Ireland,
- the slower legal recognition of legal rights of patients in Ireland,
- differences in the way care for the mentally handicapped developed, with Ireland and N. Ireland lagging developments in Scotland and England & Wales.

TABLE 4.2
COMPARISON OF LEGAL PROCESSES IN EACH COUNTRY

year	England & Wales	Scotland	Ireland (Rep. Of Irl. after 1920)	N.Ireland
1744	Paupers- 2 JPs			
1774	Private-1 Med. Cert.			
1800	Dangerous-JP or clergy+Relieving Officer - to Gaol		Dangerous - 2 JPs - to gaol	
1819	Pauper - 1 Med. Cert +1 JP Private - 2 Med. Certs.		Pauper - 1 Med. Cert.	
1828	Paupers - 1 Med.Cert.+ 2 JPs			
1838	Dangerous - 1 JP or Clergy+ Rel. Officer - to asylum		Dangerous - to gaol	
1842			Private - 2 Med Certs.	
1857		Paupers & Private -2Med. Certs. + Sheriff Dang.erous 1 Med. Cert.+Sheriff Voluntary- allowed		
1867			Dangerous-to asylum	
1890	Private - 2 Med Certs. + 1 JP Pauper - 1 Med Cert.+ 2 JPs			
1930	Vol. & Temp. admissions allowed			Vol.& Temp. admissions allowed
1945			All - 2 Med Certs.(incl. Admitting Doctor) Vol.& Temp. admissions allowed	
1948	End pauper/private distinction	End pauper/private distinction		End pauper/private distinction
1959	Informal admissions allowed	informal admissions allowed		Informal admissions allowed
1981			2 Med. Certs.(excluding Admitting Doctor) (not implemented)	
1983	Automatic reviews Tighter definitions Durations of Sections reduced			

NOTES TO TABLE 4.2

- Ireland refers to the 32 Counties up to 1920, and thereafter for brevity to the Free State, later the Republic of Ireland.
- JP = Justice of the Peace, a magisterial order. .
- Med. Cert. = Medical Certificate of Lunacy
-Vol. = Voluntary
-Temp. = Temporary.

Scotland

Although, as discussed in Chapter 2, Scotland experienced lunacy legislation later than England & Wales or Ireland, the 1857 Lunacy (Scotland) Act put Scotland in the forefront of legal and other developments relating to the care and treatment of lunatics. Three developments are worthy of note: the role of medical practitioners, that of 'boarding-out', and voluntary admissions.

Scotland led in the degree to which it gave medical practitioners a role in the certification of lunatics. The 1857 Lunacy (Scotland) Act made all committals, both public and private, to asylums dependent on certification by two medical practitioners. In England & Wales, committal of private patients from 1819 required two medical certificates, but that of paupers required only one certificate. For dangerous lunatics, one medical certificate was required in Scotland from 1857, a position which England & Wales did not follow until 1890.

In addition, the order of a Sheriff (or of the Board of Lunacy) was required for all commitments. In England & Wales, although magistrates' orders were obligatory for the committal of pauper and dangerous lunatics from the early 1800s, no such order was required for private patients until 1890. Thereafter the signature of one medical practitioner plus that of a Justice of the Peace sufficed in England & Wales.

Scotland can thus be characterised as having led developments in safeguarding patients' rights by placing greater emphasis on both medical and judicial certification compared to England & Wales. England & Wales tended overall to follow Scotland's example, so that the differences between the countries narrowed over time.

Boarding-out was also promoted under the 1857 legislation. Public funds were used to place harmless lunatics with families (as noted in Chapter 2), following the example of Gheel in Belgium, which the Scottish Lunacy Commissioners visited in the late 1850s. The Scottish practice of boarding-out patients continued through into

the twentieth century and the magnitude of this 'trade' is discussed in Chapter 7 below.

The Lunacy (Scotland) Act of 1857 retained the machinery of the Poor Law for the local administrative powers and duties, but set up representative bodies known as the District Boards of Lunacy whose duties involved providing and maintaining institutional accommodation for lunatics. These boards were charged with the additional duty of providing for mental defectives under the 1913 Lunacy and Mental Deficiency (Scotland) Act, which also changed their title to District Boards of Control (*Report of the Committee on Scottish Lunacy and Mental Deficiency Laws*, HMSO, 1946). District Boards of Control were discontinued by the provisions of the Local Government (Scotland) Act 1929, their powers being transferred to the County Councils and to Town Councils.

Voluntary admission to the range of psychiatric institutions was permitted in law in Scotland under the 1862 and 1866 Lunacy (Scotland) Amendment Acts (*Report of the Committee on Scottish Lunacy and Mental Deficiency Laws*, HMSO, 1946). Despite this possibility very few patients availed of this possibility - less than 1% up to 1916, growing to 5% in 1930. However, this meant that there was no need for a Scottish version of the English\Welsh Mental Treatment Act of 1930.

The innovations of the 1857 Lunacy (Scotland) Act provided a lead to England & Wales whose 1890 Lunacy and 1930 Mental Treatment Acts can be seen as incorporating aspects of the earlier Scottish legislation. Scotland's lunacy legislation remained largely unchanged from the 1857 Act up to the the 1913 Lunacy & Mental Deficiency Act, followed by the 1948 Health Act, after which it followed the pattern of England & Wales, with parallel versions of the 1959 and 1983 Acts in 1962 and 1984 respectively. Thus Scotland did not have versions of the 1890 Lunacy Act or the 1939 Mental Treatment Acts. Ireland, too, followed a different path from that of England & Wales, particularly in relation to Dangerous Lunatics.

'Dangerous Lunatics' - England & Wales and Ireland

One of the recurring themes in the history of the law relating to lunacy concerned the defining of the difference between lunatics who were 'dangerous' and those who were not. To be committed as a 'dangerous lunatic' in any part of the UK was to lose all one's legal rights (Unsworth, 1987).

Ireland developed a much greater reliance on committal as dangerous lunatics than occurred in either England & Wales or Scotland. Up to 1838 'dangerous lunatics' could be committed directly to lunatic asylums but between 1838 and 1867, committal in Ireland was directly to gaol rather than to lunatic asylums, although transfers to asylum at a later date was common. This policy resulted from the murder of a prominent businessman in Dublin by a lunatic in 1838. The Irish practice of sending criminal lunatics to gaol persisted despite criticisms right up to the end of the nineteenth century and influenced practice in the 1900s, even though despite the 1867 Dangerous Lunatics Act enabled patients to be sent directly to asylums.

In England & Wales up to 1838, committal was directly to gaol, due in part to the lack of asylums. The law was reversed in 1838 to allow pauper lunatics to be sent directly to lunatic asylums.

Despite the changes introduced in Ireland by the 1867 Dangerous Lunatics Act, which allowed (but did not require) pauper lunatics to be sent directly to asylums, a greater proportion of lunatics than before was committed as 'dangerous'. Finnane (1981, p.100) shows that while in the 1850s and 1860s committal as a dangerous lunatic accounted just under half of all admissions, by 1890 almost three quarters of all admissions were so classified, making this mode of entry the norm. Judicial commitment was an order of indefinite detention with no mandatory review of either condition or status. Finnane (1981, p.102) suggests that the persistence of this practice in Ireland owed much to the separation of the Poor Law from the lunacy laws and also to the repeated failures of attempts to change the law. Further, judicial commitment avoided the necessity (which applied to other forms of admission) for the responsible person to take back the patient when required to do so

by the asylum board (Finnane, 1981, p.93). Lunacy law was changed in favour of patients' rights in England and Wales by the 1890 Lunacy Act, but this Act did not apply to Ireland.

The pattern whereby criminal lunatics were committed in Ireland was thus the reverse of that in England & Wales up to at least 1867, and in reality for long after that date. The fact that England & Wales and Ireland had such different legal processes of commitment indicates the degree to which each had different administrative, funding and cultural systems; a point to which attention will be drawn again below.

Voluntary Admissions and the Mental Treatment Act

The law governing lunacy was changed in England & Wales by the 1930 Mental Treatment Act which introduced the concepts of 'voluntary' and 'temporary' patients alongside those who were certified. This move towards a less custodial regime was taken further by both the 1959 and the 1983 Mental Health Acts, with the former abolishing certification and the latter providing for stronger patients rights. In consequence, the proportion of patients who were detained involuntarily fell to under 20% by 1960 (and under 10% in the years up to 1986). Since voluntary admissions were already permitted in Scotland, no equivalent Scottish legislation was necessary. The Mental Treatment Act of 1945 'voluntary' and 'temporary' admissions to the Republic of Ireland.

Pauper Lunatics

A further point of interest concerns the relative ease in Ireland with which one could qualify for care as a pauper lunatic. In England & Wales and in Scotland, paupers were defined under the same Poor Law for purposes of poor relief and lunacy. Eligibility for receiving care in Ireland differed between the Poor Law and the administration of lunatics. Poor Law eligibility was tightly defined along the English model which aimed at providing only indoor relief in workhouses. The so-called 'Gregory clause' in Ireland meant that anyone who held more than one quarter of an acre of land would have to part with it to receive poor relief. As discussed by the Irish Inspectors of Lunacy (1899), the lunacy laws, in contrast

with the Poor Law, did not define the "lunatic poor"; eligibility was achieved by possession of a certificate signed by a clergyman or magistrate. Since the taxation to fund pauper lunatics (discussed further below) was not levied mainly on property owners, the disincentives to eligibility were attenuated.

Given the popularity of committal as a 'dangerous lunatic' and the ease with which one could qualify as a pauper lunatic, it is hardly surprising that the number of lunatics who were privately funded was relatively small in Ireland.

Patients' Rights

As noted above, the 1890 Lunacy Act, which strengthened patients' rights in England & Wales, did not apply to Ireland. That Act was characterised by Jones as 'legalistic' but Unsworth has praised it for limiting medical powers. The reasons for the non-application of the Act to Ireland have received little attention. Finnane (1981, p. 102-4), suggests that three factors inhibited reform:

- the dominance of the national question around 1890,
- resistance to reforms which might increase the burden of local taxation, and
- administrative inertia.

Repeated attempts to change the law failed despite 'the weight of expert opinion against the existing law' (Finnane, 1981, p.103). The 1890s were a time of nationalist fervour, with widespread agitation over land reform. Lord O'Hagan, a one-time Irish Attorney General, introduced amending legislation several times in Parliament but to no avail. Even though many people appeared to have to be labelled 'dangerous lunatic' to be admitted to the public lunatic asylums, the procedures continued to be used.

The tax issue was associated with the nationalist fervour in that there was general opposition both to British taxes and to any attempts to reform the Poor Law along the British model. Similar concerns may have delayed the amending of the 1874 capitation funding until 1898, a decade after it was amended in England & Wales and in Scotland.

Administrative inertia, according to Finnane, was associated with the degree to which the administration of the asylums became stagnant after the 1860s. Dr. John Nugent, who became the second Inspector of Lunacy in 1857, remained almost 40 years in office. Dr. George Hatchell, whose period in office was similar to Nugent, spent much of 1880s too unwell to work (Finnane 1980, p.67). Their successors, Dr. O'Farrell and Dr. Courtenay, who were appointed in 1890, remained in office for a further 20 years.

Patients' Rights in the Irish Free State

The tardiness of legal reform persisted under the new 26 County regime. The Irish Free State (later Republic of Ireland) introduced a version of the 1930 Mental Treatment Act in 1945 under the same title. That Act, along with the 1867 Dangerous Lunatics Act, remained in 1992 the primary legislation under which patients are committed. The 1945 Mental Treatment Act (Ireland) Act repealed previous lunacy laws except those relating to criminal lunatics and wards of court. The Act gave a medical role for the first time in the committal of dangerous lunatics (Robins, 1986, p.196-7). Up to then most patients were committed by two peace commissioners (formerly justices of the peace). Under the new arrangements, based entirely on certification by two medical practitioners (one of whom could be the admitting doctor), a person could be admitted to a mental hospital either as a voluntary or detained patient. Detained patients fell into two categories: 'Temporary' patients and 'Persons of Unsound Mind' (PUMs). Temporary patients were those who in the medical view required up to six months treatment and who were considered unsuitable to be voluntary patients. Persons of Unsound Mind could be detained indefinitely. (Robins, 1986, p.196; Part xiv of 1945 Mental Treatment Act).

The 1945 Act imposed for the first time a legal obligation on the hospital authorities to discharge recovered patients. Various other patient safeguards were provided for, including the appointment of visiting committees, the right of patients or friends to appeal to the Minister for the discharge of a patient, and the right of any person to

apply to the minister to have the patient examined by independent medical practitioners (but at the applicant's expense).

Although Robins (1986) describes these developments as marking major progress, they largely copied the 1930 Mental Treatment Act and the 1890 Lunacy Act of England & Wales. It is worth noting that the 1945 Act required two medical certificates, one of which could be that of the admitting officer in the mental hospital. The 1945 Act remained the major legislation under which the mental hospitals operated up to 1992, as no legislation was implemented in the interim. Although a Mental Health Act was passed by the Oireachtas (Irish Parliament) in 1981, it was not implemented, mainly because of medical opposition to the requirement to have two independent medical practitioners (that is excluding the admitting doctor) sign the forms for compulsory detention. The Irish 1981 Mental Health Act would have introduced safeguards broadly similar to those introduced by the 1959 Mental Health Act in the UK. Ireland continued to lag developments of patients' rights by at least one generation. The degree to which the more custodial legal regime in Ireland affected the numbers detained in mental hospital is a question which is discussed further below.

Mental Handicap

The treatment and care of the mentally deficient (later the mentally handicapped) were fundamentally changed in England & Wales and in Scotland by the 1913 Mental Deficiency Act. Separate provision had to be made for this group from 1913 and new institutions were established from 1917. While the old Metropolitan Asylum Board's hospitals for the mentally deficient had initially provided many of the places, 'colonies' of mentally deficient were also developed (Jones, 1972, p.187). However, as with the 1890 Lunacy Act, this legislation did not apply to Ireland. Finnane (1981, p.103) suggests that despite widespread concern by expert opinion about the way that the mentally deficient were treated, attempts to change the law were frustrated by fears that such a move would raise overall asylum admissions, and push up expenditure as a consequence.

Finnane also suggested that the Catholic Church opposed measures to segregate the mentally deficient. Such opposition plausibly derived from the relationship between the eugenics movement and the legislation of 1913, discussed in Chapter 2. Parliamentary opposition to the 1913 Mental Deficiency Act accused its proponents of "not being Christian" (Jones, 1972, p.202).

N. Ireland

N. Ireland was similar to the Free State in inheriting in 1920 the all-Ireland legislation described above. N. Ireland, however, moved closer to the British model with the implementation of the 1932 Mental Treatment Act, which followed the 1930 English & Welsh Act of the same title. N. Ireland's mental health services became part of the NHS from 1948 and subsequent legislation followed the British model. The 1960 Mental Health (N. Ireland) Act followed the English & Welsh 1959 Mental Health Act and a 1984 version of the 1983 Mental Health Act was also implemented in N. Ireland.

Section 2

The Funding Of Lunacy And Mental Health Services

This section considers the ways in which psychiatric services were funded in the various countries. The analysis of public spending on psychiatric services can be conveniently broken into three periods corresponding to the financing arrangements:

- the first period, 1841-74, during which services were financed mainly by local taxation,
- the second period, 1874-1948, when joint Local/Central responsibility applied,
- the third period, 1948 to 1991, when central Government took full responsibility after the foundation of the NHS in the UK in 1948.

Eligibility for free, state-provided psychiatric services thus varied from being locally determined for paupers through to universal eligibility under the NHS.

A further important distinction concerns mental illness and mental handicap: the latter were not cared for separately in England & Wales and in Scotland until after the 1913 Mental Deficiency Act and until much later in the Republic of Ireland and in N. Ireland. The remainder of this section discusses each of the above three periods by country.

England & Wales

First Period: 1845-1874

Responsibility for providing for pauper lunatics rested with Local Authorities from the 1845 Lunacy Act which obliged County authorities to erect Lunatic Asylums. Pauper Lunatics were maintained out of two taxes: the Poor Rate and the County Rate. Of these two taxes, the Poor Rate covered the vast majority of pauper lunatics who could be traced back to the parish (later, the union) responsible for payment. Only a small proportion of pauper lunatics who were unsettled (that is untraceable) had their maintenance charged to the County Rate.

Poor Rate Spending on Pauper Lunatics

Since pauper lunatics were financed by their parishes in England & Wales, (Butler, 1985, p.45) the Poor Law authorities published data on their expenditure on their maintenance from 1857 to 1929[1]. These authorities had reason to provide accurate data on the maintenance of pauper lunatics because expenditure on inmates from other Parishes (later Unions), could be cross-charged. To use a contemporary phrase, public money followed pauper lunatic patients in Victorian Britain. Eligibility was determined locally by the Poor Law Returning Officer, and any expenditure incurred was reflected in local property taxes.

Lunatic Asylums in England & Wales kept two accounts:

a) the Maintenance Account, against which were charged the costs of physically maintaining an inmate, and

b) the Building and Repair Account, to which were charged the costs of building and maintaining the buildings.

The Maintenance Account, which showed the average cost of maintaining an inmate, was used to regulate and justify the charges to the relevant union.

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[1] The 1845 legislation was amended by three amending acts in 1853: the Lunacy Regulation Act (16 and 17 Vict., c.70), the Lunatics Care and Treatment Amendment Act (16 and 17 Vict., c.97) and the Lunatic Asylum Amendment Act (16 and 17 Vict., c.97). The Poor Law authorities provided data from 1857 on their expenditure on pauper lunatics.

When charges to (usually distant) unions were somewhat higher than maintenance costs, the excess accrued to the Building and Maintenance Account.

County Rate Series

The County rate covered

* those insane not chargeable to unions, who in turn were chargeable to the county rate,
* the costs of erecting and maintaining the County and Borough Asylums.

The County Rate was thus a mixture of capital and current expenditure.

Since the bulk of paupers were charged to the Poor Rate, only a small proportion who were not so chargeable because of being unsettled were charged to the County and Borough Rate (5.2% in 1857, falling to 1.5% by 1900, according to the Lunacy Commissioners (Annual Report of the Lunacy Commissioners, 1901)).

The bulk of expenditure financed by the County Rate was on the erection and maintenance of buildings. These costs were met by arranging mortgages, which could be for no more than 14 years. The costs of maintaining these buildings, which would today be considered current expenditure, were paid to the asylums via the separate Building and Repair account.

Because of the practice of raising large sums for what, in today's parlance, would be considered capital, by means of mortgages on the County Rate, the loan charges which serviced these debts were of particular importance in the public finances up to 1948. After that time, sums for capital purposes were provided out a capital account and were not repayable.

The Private Sector

The private sector in the period 1847 to 1874 remained roughly the same size as it had been pre-1847. Since there was a massive expansion of the public sector, the share of the private sector fell sharply: from 16% in 1860 to 9% by 1880. Nonetheless, around 3,000 certified lunatics continued to be cared for in private hospitals and in Licensed Houses.

Second Period: 1874 to 1948

The funding of expenditure on pauper lunatics out of local taxation, combined with the close connection between the Poor Law Guardians and property owners, provided a financial disincentive to expansion of the mental hospitals. This disincentive may have been eased to some extent by the introduction of central government financing for the first time in 1874 when a capitation grant was made available amounting to four shillings per week or 50% of the cost of maintenance, with the exchequer paying whichever was the lesser amount. As discussed elsewhere, the logic of introducing this novel source of funding does not appear to have been carefully considered (Smith, 1967). The Treasury expressed concern over regaining control of what was initially an open-ended commitment to the funding of pauper lunatics.

The grant-in-aid was restricted by the 1889 Local Government Act, which restricted the total amount of public funds that could be absorbed by capitation payments. A new Local Taxation Account was established, into which the proceeds of certain local taxes flowed, and from which grants-in-aid were paid, covering pauper lunatics as well as various other services. Thus the expenditure was limited to local taxation proceeds. If these proceeds were inadequate *in toto* , the amount payable per pauper lunatic was to be reduced proportionately. Although this eventuality did not arise in England & Wales, it did so in Ireland, where a similar system was instituted.

This method of continuing capitation generated its own incentives and illogicalities, which led to discussion at the time. Sidney Webb (1920), in particular, fulminated at the perverseness of the incentives involved. Not only was there a financial incentive to ensure that lunatics in care qualified as pauper lunatics, he suggested, but there was an additional incentive to have pauper lunatic pay the maximum contribution compatible with retaining qualification status for the capitation grant. The latter was retained as long as contributions from his or her relatives did not exceed four shillings per week. The magnitude of these contributions from relatives will be examined in Chapter 6 below.

The 1929 Local Government Act transferred responsibility for the public lunatic asylums to the Local Authorities, ending the role of the Poor Law (Williams, 1981). Financial subvention from central government continued in the form of a block grant to Local Authorities which covered a variety of services besides the lunatic asylums. Pauper lunatics were renamed 'Rate-Aided Lunatics' to avoid the stigma associated with the term 'pauper' and with the Poor Law generally.

The Private Sector

The private sector expanded in the period 1874-1948, with the total number in care rising to around 5,000 by 1900 and to around 10,000 by 1930, at which level it remained to 1948 (Board of Control, Annual Reports, 1938 and 1948).

Third Period: 1948 to 1991

From 1948 to 1991, spending on mental health services was funded almost entirely out of central taxation. Once the decision to include the mental hospitals in the NHS had been made (see Webster, 1988, p.166), funding responsibility shifted from the Local Authorities to the central exchequer. Incorporation into the NHS had a number of effects on the mental health services, as follows.

First, by putting the mental and general hospitals under single management, the administrative barriers to providing a comprehensive service (inpatients, outpatients, day patients, GP care) were attenuated. Nonetheless, some new difficulties were created, notably the separation from the personal social services which remained under the Local Authorities. The latter administrative barrier attracted considerable attention in the 1980s (Raftery, 1991).

A second effect of incorporating the mental hospitals in the NHS was felt mainly by the private sector, which reduced in size. Several factors may have encouraged this retrenchment. Any remaining stigma of the old Poor Law service was removed.

Mental illness *qua* illness was now validated by being part of the National Health Service. The holding of outpatient clinics in District General Hospitals' specialist psychiatric units fostered the integration of psychiatry into medicine. Whatever the reasons, private hospitals, which drew their patients from the more prosperous groups, saw their share of total places decline. New patients who might previously have gone to private hospitals presumably found the new public facilities more attractive. The number of privately financed psychiatric resident inpatients fell back from around 10,000 in the 1930s to under 3,000 in the period 1948-59 (Board of Control, 1959), and to around 2,000 by 1977 (Laing, 1989).

A third effect of incorporation into the NHS concerned the boost it gave to the emerging professional status of the staff of the mental hospitals. As psychiatry became more integrated as a medical specialty, so did mental hospital nurses with general nursing. Stanton (1983) has documented the gradual involvement of the mental hospital nurses into general nursing through their participation in joint pay negotiations and the subsequent improvements in their salaries.

Fourthly, inclusion in the NHS plausibly led to greater concern over the quality of care provided in the mental hospitals. Inevitably, comparisons were drawn between the mental and the general hospitals, prompted in part by a succession of scandals over the quality of care in long-term hospitals (Martin, 1984). As the number of patients in the former began to decline from the mid-1950s, the number of mental hospital nurses grew. Rather than maintain the previous patient-nurse ratios, the opportunity was taken to improve them. Such reduced ratios were compatible with shorter working weeks, and with greater or lesser staff patient contact. Supervision of wards at night became more usual, for example. Very little is known about the details of mental hospital nursing practices.

Scotland - the funding context

The pattern of funding of lunatic asylums in Scotland, as might be expected from their different historical development, was somewhat different from that south of the border, although there was considerable convergence from the late 1800s.

First Period: 1857-1874

The Poor Law developed later in Scotland compared to England & Wales. The Scottish Poor Law Act of 1845 created a Board of Supervision and Parochial Boards. Each parish, however, remained responsible for its own poor and not only was the concept of settlement retained, but the period of continuous residence required increased from three to five years (Paterson,1976, p.174). The Parochial Board could raise funds by imposing a Poor Rate or by continuing to rely on voluntary contributions. Gradually, compulsory rating became the norm. In 1845 25% of parishes imposed ratings while by 1894, no less than 95% did so (Paterson, 1976,p.178). 'Adequate' help had to be provided for paupers but as the Act did not define this term, the previous criteria of destitution and disability remained in operation.

The broad system of taxation was however similar in both Scotland and England & Wales with a County Rate being levied which included the cost of the lunatic asylums, and the cost of maintaining pauper lunatics being raised through the Poor Rate. The Poor Rate was levied at Parish level and was borne equally by tenant and landlord, while the latter bore the brunt of the County Rate (M'Neel Caird, 1879, p.152). The County Rate was overseen by the Commissioners of Supply and the Poor Rate by the Sheriff.

Under the Lunacy (Scotland) Act, 1857 responsibility shifted for looking after the insane from the Sheriff to the General Board of Commissioners in Lunacy, which, along with District Boards of Lunacy, were to make provision for the pauper lunatics in each district. Districts were, in effect, groups of parishes controlled by the Poor Law Board who were required to meet the maintenance costs of pauper lunatics.

The 1857 Act enabled provision to be made by contracting with an existing asylum within the district, but under the Lunacy Scotland Act 1862, Districts were permitted to make contracts with any public, private, District or Parochial asylum within or beyond the limits of the district. Of the 21 Districts which were established, six contracted with the Royal Asylums, and 11 had built their own

asylums by 1870. The number of District Asylums rose to 12 in 1883/4, 14 by 1890, 15 by 1897/8, 17 by 1900/1 and 21 by 1910 (Annual Report of the Board of Control, Scotland, 1911).

The Royal Asylums were part of the various voluntary hospitals which had developed with philanthropic funding between 1780 and 1850 (Checkland, 1981). These hospitals accepted both private and pauper lunatic patients, and when the 1857 Act came into being, several opted to become purely private. The privately financed sector in Scotland, which was relatively smaller than its English & Welsh equivalent, shrunk after the 1857 Act, but nonetheless contained around 600 persons right thorough the period 1857-1939 (Annual Report of the Board of Control, Scotland, 1938).

The duties of the General Board of Lunacy included overseeing the activities of the District Boards and ensuring that they took action to meet the needs of their district. As regards funding, the Parochial Boards were charged under the 1857 Act with:

> 'dealing with and paying for the maintenance of an insane person whose relatives were either unwilling or financially unable to take action' (General Board of Control).

Thus local administrators found themselves responsible to the Board of Supervision for the bulk of the Poor Law, but to the Board of Lunacy for pauper lunatics.

The County Rate funded the construction of the new District Asylums (Annual Report of the Board of Control, 1913). As with England & Wales, funds were raised through mortgages which were serviced by Loan Charges. The annual reports of the Board of Lunacy summarised the accounts of the District Boards of Lunacy from 1883/4, with data on types of expenditure, the gross and net capital expenditure, the debt outstanding and the magnitude of the charge on the County Rate.

Scotland - the second period: 1874-1948

The funding position of Scottish psychiatric hospitals was further complicated from 1874 when central government capitation funding (the Four Shillings Act) was introduced. The Board of Supervision became responsible for the lunacy grant

while the Board of Lunacy retained the duty of establishing the conditions attached to a Parochial Board participation.

The Imperial Grant amounted to a substantial share of Parochial Boards expenditure on pauper lunatics when it was introduced, and this share increased until it was limited by the 1889 Local Government Act, as in England & Wales. Unlike England & Wales, however, the capitation grant was replaced by a fixed payment each year of £116,000. The result of having a fixed payment was that its real value could be eroded by an increase in the numbers to be subsidised and also by inflation.

From 1894, the Board of Supervision was replaced by the more powerful Local Government Board and the Parochial Boards were replaced by elected Parish Councils (Paterson, 1976). Greater uniformity followed as the Local Government Board included among its powers the auditing of Parish councils accounts. The County Rate was discontinued in England & Wales under the 1889 reform of local government and Scotland followed suit.

Responsibility for funding the care of pauper lunatics remained with the Parish Councils under the Poor Law until 1914/5. Under the provisions of the 1913 Mental Deficiency and Lunacy (Scotland) Act, the funding of the maintenance of pauper lunatics was to be shared equally between the Poor Law authorities and the District Boards of Lunacy. This position continued to 1930 when the Local Authorities assumed full responsibility although the District Lunatic Boards continued to be the administering agents.

The 1930 Local Government Act applied equally to Scotland, so that the public asylums were brought under the control of the Local Authorities.

Scotland - the third period: 1948 -1991

Scotland was included in the NHS in 1948 so that the convergence with England & Wales was complete in terms of funding of psychiatric services. Psychiatric services

were henceforth fully funded from central taxation, with effects similar to those discussed above for England & Wales.

The private sector remained relatively small in Scotland and shrunk sharply under the NHS so that by 1960 the only remaining private institution had closed.

Section 3

Ireland

This section first considers Ireland as a whole up to 1920 and briefly discusses developments in both the Republic of Ireland and N. Ireland thereafter.

Ireland - 32 Counties to 1920

First Period: 1818-184

The main differences which must be taken into account in examining funding of lunacy provision in Ireland are as follows:

* the different relationship in Ireland between the Poor Law and the provision for pauper lunatics,
* the different and later separation of mental handicap in Ireland compared to Britain.

Each of these is discussed briefly as background to an examination of the data on public spending on the lunatic asylums.

Fiscal administration of counties by grand juries was a phenomenon which dated back to James 1 and which survived longer in Ireland than elsewhere (Hancock, 1879). The grand jury, which was an assembly of the principal proprietors or agents of peers (peers were excluded because they could only be tried in Parliament), not only conducted judicial assizes but also set the County Rate and handled roads, bridges, gaols, courthouses and infirmaries (Foster, 1989, p.235). With the independence of the judiciary from 1782, (in Ireland as well as in England & Wales) the role of the grand juries was diminished and their employees, clerks of the peace and clerks of the crown, were in positions which were non-removable and paid salaries which had been fixed from 1836 (Hancock, 1879). Unlike Scotland, where the Public Prosecutor replaced many of their functions, the grand juries remained an important aspect of local administration in Ireland until local government was reformed in 1898.

The Poor Law

Besides the continuing importance of the grand juries, the Irish Poor Law differed considerably from that in England. There was no historical tradition of a poor law and no parochial arrangements, due, of course, at least in part, to the continuing controversy over religion affecting parish organisation. A 1772 Poor Law Act provided for an elementary poor law, by empowering Counties to set up workhouses but few did so. Only eleven workhouses were ever constructed under this Act (Hancock, 1879). The 1787 Prisons Act separated lunatics from other prisoners with accommodation to be provided in houses of industry. By 1804 a committee chaired by a Mr. Newport found such accommodation only in Dublin, Cork, Waterford and Limerick. A Government grant in 1810 introduced by the Lord Lieutenant, Lord Richmond, led to a separate asylum for lunatics in the Dublin House of Industry which became the Richmond asylum. An 1816 Parliamentary inquiry under Peel found a need for other asylums to prevent the Dublin asylum 'accumulating unduly' (Finnane, 1981, p.25-26.).

The Poor Law, however, was not introduced according to the English model until the Poor Relief (Ireland) Act of 1838, and then against the advice of the Royal Commission of Inquiry of 1836. The important point is that the lunatic asylums pre-dated the Poor Law in Ireland and subsequently remained separate from it; a position unlike the rest of the UK.

The subsequent development of the Poor Law in Ireland was, it has been suggested by Burke (1986), heavily influenced by the Famine of 1845-7 which led to opposition to the Poor Rates. The Boards of Guardians had to be aided during the Famine through loans, charitable gifts and grants-in-aid (Burke, 1986). Thus, despite the earlier development of the lunatic asylums, a rapprochement between them and the Poor Law was made less likely by the historical evolution of the latter. These difficulties were also worsened by the different taxes used to fund each.

Poor Rate and County Rate

The distinction between the Poor Rate and the County Rate was of particular importance in Ireland where, unlike England & Wales and Scotland, the entire costs of the psychiatric services were funded by the County Rate.

The Poor Rate was assessed on occupiers of land under the value of £4 (about a quarter of the whole) and for the rest was divided between the occupier and the proprietor. The County Rate, on the other hand, was paid by the occupiers (and them alone) of land of any value. A high proportion of land was rented in Ireland, due to the historical factors. Thus, decisions on the erection of lunatic asylums were taken by the Lord Lieutenant and the tax to finance their construction was borne not by the owners of property, but by the mass of tenantry who had no voice in local or national administration. The fact that the maintenance of pauper lunatics was also levied on the County Rate meant that unlike the rest of the United Kingdom, the limits to expansion of lunatic asylums were attenuated in Ireland due to the different tax systems. Decisions in England & Wales to expand the lunacy asylums were constrained by the fact that the higher taxes would be borne by those making the decisions, whereas in Ireland, the consequent taxes were borne by other social groups.

Second Period: 1874-1920

Capitation funding for pauper lunatics applied to Ireland as to the rest of the (then) United Kingdom, in contrast with the more selective approach adopted with legislative change. Given the high proportion of patients who qualified for state support, whether as pauper or as dangerous lunatics, capitation might be expected to have played a relatively larger role compared to the rest of the United Kingdom. Further, capitation applied in Ireland until 1898 when local government was reformed - a decade later than in the rest of the (then) United Kingdom. Thereafter, the amount of capitation payable was limited by the proceeds of the Local Taxation (Ireland) Fund. Ireland thus parallelled England & Wales, and was unlike Scotland where capitation was replaced by a fixed payment to the psychiatric services. As the Local Taxation (Ireland) fund proved incapable funding all the demands made on it,

the amounts paid in capitation were reduced each year after 1900 (Finnane, 1981, p.63).

As noted above, Ireland was not subject to the Mental Deficiency Act of 1913. Those mentally handicapped persons in need of care continued to be admitted to District asylums or workhouses.

Thus, not only were psychiatric services developed earlier in Ireland than in England & Wales or Scotland, but they operated within a stronger central government framework, with committals predominantly as 'dangerous lunatics' and as paupers. Neither the move towards patients' rights under the 1890 Lunacy Act nor the segregation of the mental defectives under the 1913 Mental Deficiency Act applied to Ireland. As discussed below, both the Republic of Ireland and N. Ireland tended to continue the traditions that they inherited.

Ireland : 26 Counties 1920 to 1990

The Free State inherited the legislation which had prevailed previously, that is the framework laid down by the 1867 Dangerous Lunatics Act and the earlier 1821 legislation. No legal changes occurred until the 1945 Mental Treatment Act which basically followed the 1930 Act of the same title in England & Wales by introducing voluntary and temporary admissions for the first time, and requiring medical certification for all admissions to psychiatric hospitals.

Similarly, funding continued as before, on the basis of central government subventions in the form of capitation payments, via the Local Taxation Account. When this account proved unable to meet all the demands placed on it, the amount of capitation was reduced accordingly. Being an independent country from 1920, the Free State was not part of the UK Local Government reforms of 1930, which led to the Local Authorities assuming funding responsibilities for mental illness, with central government assistance through a block grant. Instead, such reforms were

introduced somewhat later in Ireland with the 1947 Health Act, which split funding for health services between central and local government (Barrington, 1987, p.177).

Between 1946 and 1973, health service funding was split between Rates and central finance. The abolition of Rates in 1973 led to a NHS-type of centrally funded system being introduced without any analysis of its effects and implications. Central government became responsible for the bulk of spending, again via block grants to the relevant agencies, the Health Boards.

The non-application of the 1913 Mental Deficiency Act had meant that the mentally deficient were not segregated out as in Britain. Instead those in care remained in the mental hospitals and workhouses, boosting the numbers of inmates. Comparisons of the rates of hospitalisation for mental illness which fail to take account of the mentally handicapped are likely to be misleading.

The abortive 1981 Mental Health Act attempted to introduce legislation along the lines of the 1959 Act of the same title in England & Wales. Although passed by the Oireachtas (Parliament), it has remained inoperative, apparently the subject of ongoing discussions between the Irish Division of the Royal College of Psychiatrists and the Department of Health.

Recent policy developments in Ireland

Although legislation in the Republic of Ireland has lagged that of the UK, mental health policy has converged with the UK, as evidenced by a comparison between the 1984 Irish report, *The Psychiatric Services - Planning the Future (*Department of Health, *1984)* and the earlier UK report *Better Services for the Mentally Ill* (HMSO, 1975).

The similarly between the two reports is striking, with virtually identical objectives and proposed levels of service. Both proposed a shift to a community based service with the acute general hospital filling the short and medium term requirements. Both accepted a need for some long-stay accommodation, which should be provided outside the old lunatic asylums which were to be closed. A local or 'sectorised'

approach was favoured, with a comprehensive array of services to be provided mainly in the community with hospital admission seen as a last resort. Improved primary care played a key role in both reports, including closer coordination between GPs and local psychiatric teams. Special needs (the elderly, drug abusers, children and adolescents) were to be provided for. The housing and employment requirements of non-institutional care received attention with particular importance attached to intermediate housing. The levels of service proposed for Ireland and the UK were identical as measured by bed-population ratios: 0.5 short and medium term beds per 1000 persons to be provided in general hospitals and a further 0.5 beds per 1000 for new long-stay patients in both purpose-built and adapted accommodation. Because of the projected long-term demise of the psychiatric hospitals, new long-stay accommodation was to be provided elsewhere. Thus the target was an overall total of around 1.0 beds per 1000 persons with an additional but declining number based on the rate of decline of the existing psychiatric hospitals.

Finally, the two reports took what can only be termed a casual approach to costing their proposals. Cost issues received only half a page in the UK report and four pages in the Irish report. Again both agreed that no additional running costs should be required so that attention was confined to capital costs of community care, which were considered to be well below those which would be entailed in the renovation or re-provision of the existing hospitals.

Despite the similarity in the two reports and the fact that the Irish report was published nine years after the UK report, the Irish report made no assessment of UK progress in the interim. Neither was account taken of the different starting points in the two countries, particularly the much higher level of psychiatric hospital bed provision in Ireland.

Northern Ireland

N. Ireland inherited the same mental health structure as the southern Free State and like it, was slow to make changes. Funding methods changed little up to the NHS, with a Local Taxation Account providing fixed amounts to subsidise the impact of the costs of mental health services on the Rates.

N. Ireland was subject to the 1929 Local Government Act which put the public lunatic asylums under the Local Authorities. The degree of central government funding to psychiatric services was small, and for a fixed amount. Despite being increased during the 1939-44 War, such funding comprised a smaller proportion of expenditure than in any other of the four countries under consideration.

The size of the private sector was also small in N. Ireland, as might be expected from its shared history with the south. Around 100 certified lunatics were cared for in private institutions up to 1946 after which the single private asylum closed.

With the setting up of the NHS in 1948, funding shifted to being the full responsibility of central government, as elsewhere in the UK. Segregation of the mentally handicapped also had to wait until the 1946 Mental Health Act, which introduced the category 'Special Care' for this group. Under the NHS, special categories were introduced to account for the mentally handicapped and gradually the bulk of the mentally handicapped, who had remained in the mental hospitals, were catered for in separate accommodation.

Conclusions

The most salient differences can be outlined in brief. Not only were psychiatric services developed earlier in Ireland than in England & Wales or Scotland, but they operated within a stronger central government framework, and had committals predominantly as 'dangerous lunatics' and as paupers. Neither the move towards patients' rights under the 1890 Lunacy Act nor the segregation of the mental defectives under the 1913 Mental Deficiency Act applied to Ireland. As discussed below, both the Republic of Ireland and N. Ireland tended to continue the traditions that they inherited.

Ireland developed its system of publicly provided psychiatric services first, around 1818, well before the Poor Law was introduced there, and its subsequent development remained separate from that law. England & Wales developed public lunatic asylums under the 1845 Lunacy Act and in close contact with the Poor Law. Scotland developed its system later, with the 1857 Lunacy Act, and although in close contact with the Poor Law, allowed a more comprehensive role for its Boards of Lunacy.

Ireland, for historical reasons perhaps connected with its colonial status, failed to develop the more liberal measures which favoured patients' rights. Most admissions were as 'dangerous lunatics'. Segregation of the mentally ill from the mentally handicapped also occurred more slowly in Ireland. These differences, which were reflected in the failure to update legislation, meant that subsequent policy initiatives may have had differing effects, notably the capitation grant introduced in 1874.

Ireland enjoyed full capitation for longer and perhaps availed of it to a greater degree. Further, the ways in which the capitation grant was "capped" differed, both in time and method. Capitation continued unfettered in Ireland to 1898 while in England it was limited in 1889. The methods of limiting its size also differed thereafter by country. England & Wales and Ireland continued variable capitation funding of the psychiatric services through Local Taxation Accounts to

1929, while Scotland and N. Ireland had a fixed payment each year regardless of the number of pauper lunatics.

Finally, the separation of Ireland into two separate states in 1920 led to different patterns of provision and spending between the north and the south of Ireland. Capitation continued to apply in the Free State to 1946, albeit in a reduced form. By contrast, capitation was cash limited in N. Ireland and was ended with the 1930 Local Government Act.

From the point of view of the hypotheses drawn from the literature in Chapters 2 and 3, a comparative perspective offers an opportunity to explore the implications of these different patterns of development. Ireland, and later the Free State/Republic of Ireland had legal and funding structures which might be expected to have led to a higher number of patients being admitted to and retained in the psychiatric hospitals.

CHAPTER 5

ENGLAND & WALES: PSYCHIATRIC SERVICES - PATTERNS OF ACTIVITY AND EXPENDITURE.

Introduction

This Chapter deals with the activity and expenditure data for psychiatric provision for England & Wales in the period 1860 to 1986. Activity and spending data must be combined if even limited questions about efficiency are to be considered. Trends in activity data may be of interest for epidemiological purposes, for example, on the treated prevalence and incidence of mental illness.

Changes in the funding of the public and private sectors, particularly capitation payments, are also of interest. Unit cost data enable us to gauge to what degree changes in the overall level of spending were due to changes in the number of inmates or to rising costs. Finally, the full range of costs, including capital costs and loan charges must be included.

The aim of this chapter is to provide a comprehensive as possible an account of the activity and financing of the psychiatric sector in England & Wales. Data are presented graphically with the supporting tables and more detailed discussion in Appendix 1. Chapter 8 employs these data to evaluate the hypotheses discussed in Chapters 2 and 3. Section 1 of this chapter deals with the activity data, Section 2 with the expenditure data, while Section 3 pulls the strands together.

Section 1. Activity Data

Number of Lunatics and Type of Provision

The Reports of the Lunacy Commissioners (HMSO, 1846-1913) and the Board of Control (HMSO, 1913-1959) showed the total number of 'Lunatics'[1]. These data distinguish between paupers, criminals and non-paupers, all classified by legal status, by sex, and by type of institution. Lunatics could be detained in a range of institutions:

a) County and Borough Asylums,

b) Workhouses, including the institutions of the London Metropolitan Asylum Board from 1870 to 1930,

c) Registered Hospitals and Licensed Houses (Metropolitan and Provincial), which catered mainly for private patients,

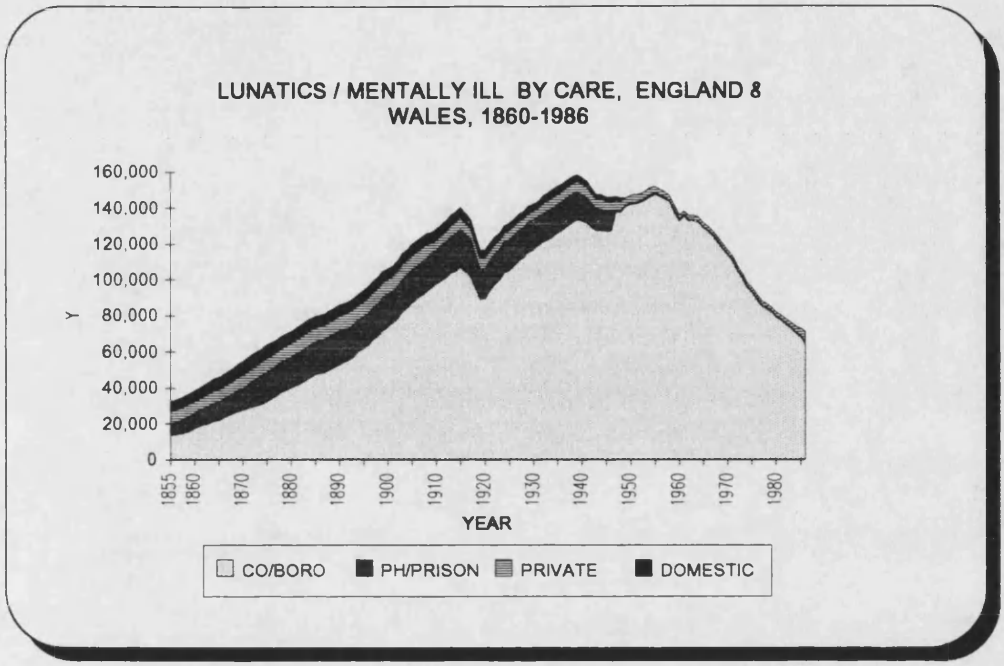
d) Broadmoor for Criminal Lunatics from 1863,

e) Naval and Military Hospitals,

f) 'Privately Minded', comprising those residing with relatives and others.

[1] 'Lunatics' or 'Persons of Unsound Mind' included all those detained under the various Lunacy Laws up to 1960, which classed the psychiatrically ill along with the mentally deficient up to the 1913 Mental Deficiency Act. Under the latter Act, the mentally deficient were separated out. In what follows, the mentally deficient and the mentally ill (also termed insane and psychiatrically ill) are distinguished, where possible. 'Lunatics' is used to refer to the combined group. After 1960, the focus is on the users of the mental health services.

FIGURE 5.1



The full dataset, illustrated in Figure 5.1 (and provided in full in Tables A.1, A.2 and A.3, Appendix 1) provides a much more complete picture than any other study has provided.

Number of Lunatics by type of Provision

The total number of 'Lunatics' / mentally ill in care, as shown in Figure 5.1, rose from 1860 to 1939, before commencing a long-term decline around 1955. Both World Wars were preceded by rises in the number in care, with falls as each war began and a resumption of the increase with peace. Peaks occurred in 1914, 1939, and 1955. After 1955 the number of inpatients began a steady slow decline, which more than halved that total by 1986.

County and Borough Asylums

County and Borough Lunatic Asylums (renamed mental hospitals in the 1920s) provided the bulk but by no means all the places, as shown in Figure 5.1 (and Table A.1, Appendix 1). The number of places in these institutions peaked in 1914, 1939 and 1955 before declining rapidly. Although the 1955 peak was the highest at 150,000, it was inflated by the inclusion of the lunatics formerly detained in Workhouses[1]. The growth in this sector's share of total places is apparent: 25% in 1845, rising to 54% in 1860, 74% by 1900, 80% by 1920, 87% by 1940 and 97% in 1950 as the NHS largely absorbed the other means of provision. These figures indicate that a focus confined to the County and Borough Asylums would provide at best only part of the picture, particularly in the early part of the period.

The number of County and Borough asylums expanded in the period, rising from 24 in 1850 to 41 in 1860, 66 by 1890 and to a peak of 98 in 1930 (Jones, 1972, p.357). The number of inmates expanded more rapidly than the number of asylums, so that the average size of each asylum also grew: from 287 in 1850 to 386 in 1860, 802 in 1890 and 1,220 in 1930.

During both wars, the total number of inmates fell, both for reasons of policy and, in the case of the first war, due to a raised death rate from influenza in 1918. Some County asylums were requisitioned in 1914 and again in 1939 for military use, with inmates either discharged or sent to other asylums.

Although the bulk of asylum inmates were pauper lunatics, a significant minority of private patients were also catered for. These are examined in more detail below.

Under the NHS from 1948, the mental hospitals completed their transition from institutions catering mainly for pauper lunatics to medical institutions which catered for the vast bulk of the population. Mental health services expanded to include a more comprehensive range of services - in addition to the inpatient services around which the psychiatric hospitals had developed, day-patient, outpatient and specialist clinics were developed in the psychiatric and in the District General Hospitals and

[1] The Workhouse premises which contained lunatics were incorporated under the heading 'NHS mental hospitals' in 1948, although the inmates concerned continued to be cared for in the same premises.

the Teaching hospitals. All these NHS inpatient facilities are included under the heading County & Borough asylums in Figure 5.1.

Workhouses

The second most important provider of places for lunatics was the workhouse, whose share of all institutional places fell throughout the period: from 75% in 1845, to 25% in 1860, 25% in 1880, 16% in 1900, 14% in 1920, 9% in 1940. Although the workhouses were incorporated into the NHS in 1948, they remained in use, under new names, with the Board of Control providing data on the declining number of lunatic inmates up to 1959.

One strand in the history of lunacy had to do with the continuous but only partly successful attempt to provide for lunatics in institutions other than the workhouses. The Lunacy Commissioners spent much energy on this issue, but lacked legal control over the workhouses. Since the maintenance charge in workhouses was roughly 50% of those in the County and Borough Lunatic Asylums[1], the Boards of Guardians may have had an incentive to send (or to keep) lunatics to the workhouse rather than to the Lunatic Asylum.

Criminal Lunatics

Initially criminal lunatics were catered for in the full range of institutions and only gradually came to be confined in separate institutions, brought on by the opening of Broadmoor in 1863.

The number of criminal lunatics remained small throughout the period, only exceeding 1,000 in a single year 1908, and never dropping below 600 except for the period pre-1870. Up to 1884 criminal patients were classified under private and pauper, but from that year all criminal patients were chargeable to a Parliamentary Vote and thereafter were technically classed as private by the Lunacy Commissioners. [Criminal Lunatics have been included with Poorhouses in Figure 5.1 for ease of presentation, but are shown separately in Table A.1.].

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[1] The figure of 50% recurs in the authorities' reports in the nineteenth century (see also Watson-Grice, 1920). The exact figures and their incentive effects are discussed in Chapter 8.

Registered Hospitals and Licensed Houses

While the bulk of patients in the County and Borough Asylums, and particularly in the Workhouses were paupers, private patients dominated in the Registered Hospitals and Licensed Houses. These remained largely the same institutions which had provided the bulk of accommodation specifically for lunatics up to 1845. The combined share of Registered Hospitals and Licensed Houses in total places fell from 19% in 1860 to 11% by 1880, 8% by 1900, 5% by 1920, 4% by 1940 and 2% by 1959. Some of the Registered Hospitals joined the NHS in 1948 while a small number remained outside. In the late 1970s, however, the share of this sector began to grow again, as more psychiatric patients, including those who had been 'deinstitutionalised' began to be catered for in small institutions located in the 'community'. By 1986, around 9% of all psychiatric inpatient places were in this sector, split roughly equally between profit and non-profit institutions (Laing, 1991).

Lunatics 'Minded Privately'

The final other type of provision included in Figure 5.1 was 'Lunatics Minded Privately' (whether by relatives or others). This group was composed predominantly of pauper lunatics on outdoor relief. The number who were so cared for was substantial, varying between 5,000 and 7,000 in the period up to 1900 and declining to between 3,000 and 4,000 during the period 1920-40. The size of this group had fallen to just over 2,000 by the late 1940s when data ceased to be collected under this heading. In percentage terms, the share of the 'privately minded' sector fell from 13% in 1870 to 7% by 1890, 6% by 1900, 4% by 1920 and 2% by 1940.

Chancery Lunatics

Chancery lunatics numbered between 100 and 200 in the period 1860 to 1959. So called because of their legal status, they were persons of property who on a petition, usually from a relative, had been judged lunatic by a special Court of Chancery, which then entrusted control over their property as appropriate. Because of the small number involved, this group have been subsumed under 'Lunatics Minded Privately' in Figure5.1 (for the actual data see Table A.1).

Disjunctures and Legislative Changes

Although there were major legislative changes in 1890 and 1930, these had little effect on the pattern of activity of the lunacy provision. Two other breaks are of more significance in the data sets presented in Figure 5.1 (and Table A.1, Appendix 1), namely the separate provision for the mentally deficient under the 1913 Mental Deficiency Act and the effects of the 1959 Mental Health Act.

Mental Defectives/ Mentally Handicapped[1]

Few previous commentators have distinguished between mentally ill and mentally handicapped, despite the inclusion of some of the mentally handicapped in the overall data for lunacy until 1913 in England & Wales. Since there was never an authoritative legal definition of lunacy (Unsworth,1986, p.50) and since the mentally handicapped were not clearly delineated from those who were insane, these data require careful handling. Only occasional statistics are available on the disposition of the mentally deficient before 1920, but relatively few appear to have been cared for in the County and Borough asylums. According to the decennial *Census of Population* (HMSO, various years), which are discussed in Appendix 1, most of the mental defectives in institutional care in England & Wales were located in the workhouses (under which heading the Metropolitan Asylum Board's special asylums for the mentally deficient were classified). In 1871, 70% of the lunatics in workhouses were classed as idiots, and 78% in 1911.

When separate premises began to be provided for the mentally deficient around 1920, these were sometimes attached to the workhouses, especially if a separate wing had been developed, as recommended by the Lunacy Commissioners.

The number of mentally deficient in institutions in England & Wales was considerable (see Table A.1, Appendix 1); rising from 10,000 in 1921 to 27,000 by 1930, 50,000 by 1940, 60,000 by 1950, 62,000 by 1960 before declining slightly to 60,000 by 1970 and falling sharply to 46,700 by 1980.

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[1] The terms mentally deficient and mentally handicapped are used interchangeably, linked where possible to the then current terminology.

1959 Mental Health Act

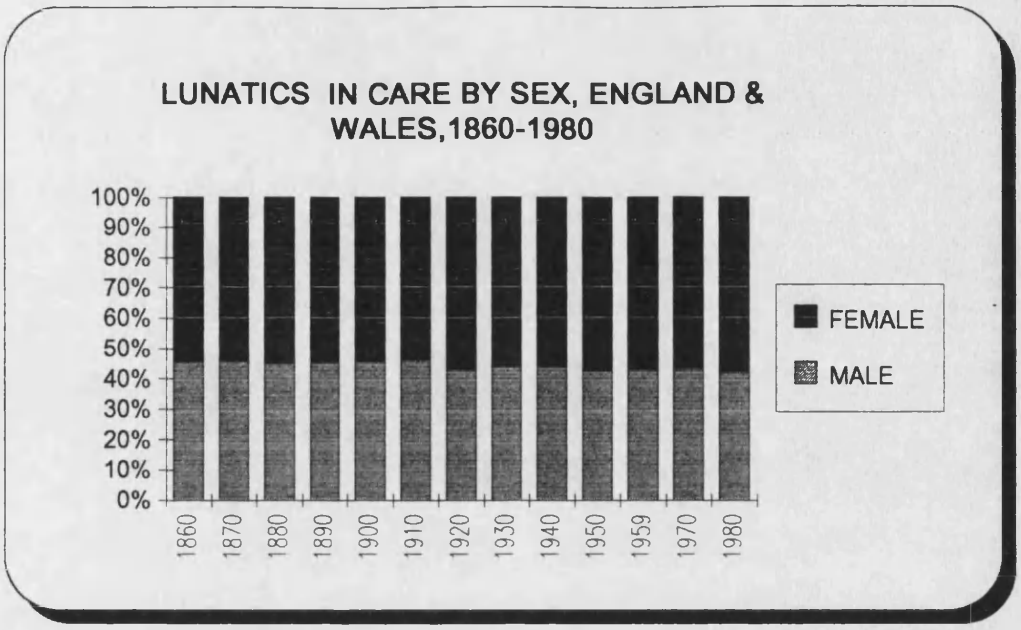
The changes wrought by the 1959 Mental Health Act show up (see Table A.1) in the discontinuation of data on the number in Licensed Houses, and to do with criminal and 'privately minded' lunatics. Since the new legislation ended the legal status of 'certified lunatics', those patients in the licensed houses who were self-financed acquired the same status as any other residents in private facilities.

As discussed in Appendix 1, the lack of official data on the number of mentally ill patients in private facilities between 1960 and 1977 has necessitated interpolation. By 1977, the run-down of the old mental hospitals had led to the setting up of non-NHS units as ex-long-stay patients were re-settled outside the hospital. The division between publicly and privately funded provision, which runs through the entire period, is reviewed below.

Inmates by Sex

Much has been made (Showalter, 1987) of the sexual imbalance in the treatment of lunacy due to there having been more women than men in the County and Borough Asylums in England & Wales. However, this gender differential did not apply to admission rates in the early part of the period (Parry-Jones,1972). The number resident in all institutions catering for lunatics, shown in Figure 5.2 (and Table A.4), indicates that a rough proportion of 55% female, 45% male persisted over the period 1860 to 1959, with some slight growth in the percentage of females to around 57% from 1920.

FIGURE 5.2

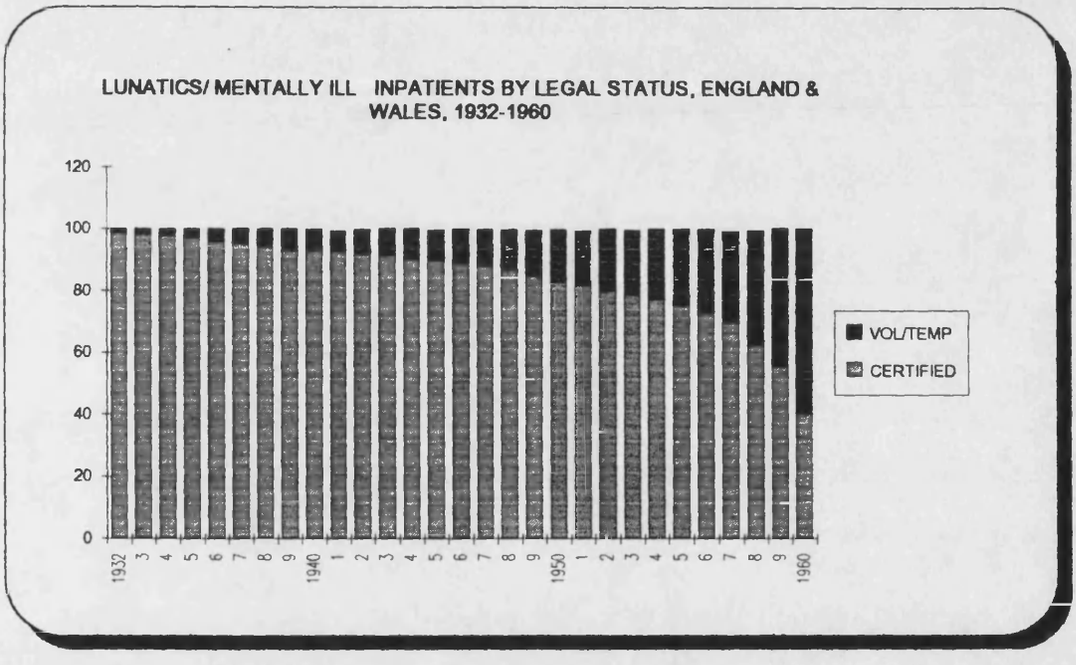


This pattern was dominated by the County and Borough Asylums, given their relative magnitude. The predominantly private Registered Hospitals and Licensed Houses had a slightly greater imbalance in favour of women: rising to a peak of 65% in 1919.

Legal Status

The legal status of patients showed considerable changes, as discussed in Chapter 4. As noted above, up to 1930 those admitted were certified, with subsequent loss of rights. The 1930 Mental Treatment Act introduced two categories: 'Temporary' and 'Voluntary', in addition to 'Certified', initiating a trend which led to informal admission under the 1959 Act. Figure 5.3 shows the changes in legal status between 1932 and 1959, when the proportion who were certified fell steadily from 99% to 40%, with virtually all the growth accounted for by voluntary rather than temporary patients.

FIGURE 5.3



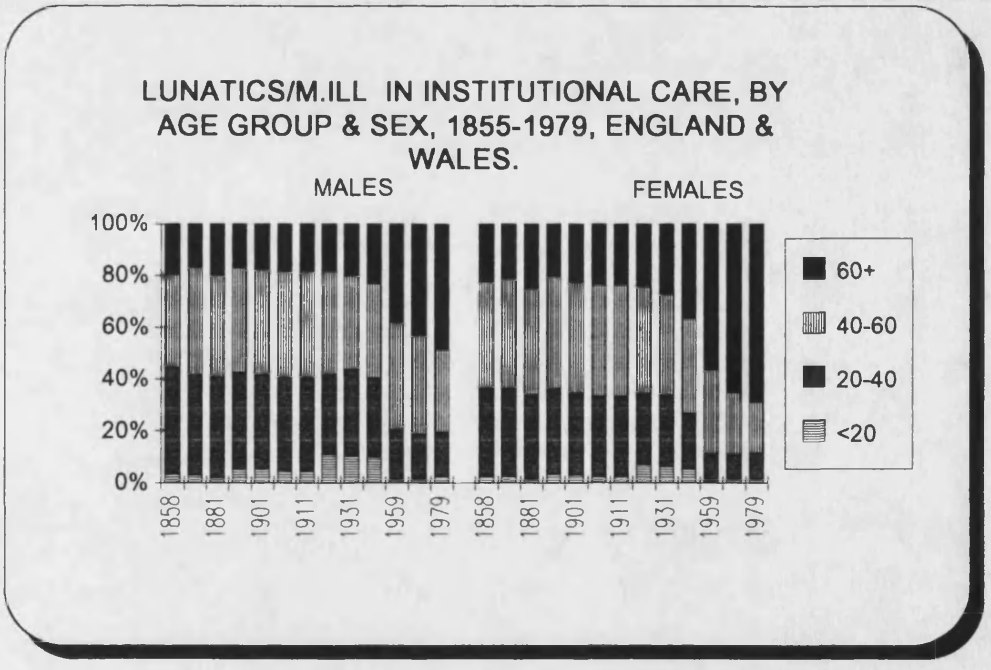
It is also apparent that while the 1930 Mental Treatment Act allowed for voluntary admission, it was not until the late 1950s, and presumably under the influence of the Report of the Royal Commission in (HMSO,1957) which led to the 1959 Mental Health Act, that voluntary admission became the norm. Up to the mid-1950s, as shown in Figure 5.3, the bulk of residents in the psychiatric hospitals, and particularly in the old County and Borough Asylums, were certified.

After the 1959 Mental Health Act, the proportion of mental hospital residents who were detained involuntarily fell and stayed at low levels thereafter. In 1964, 6% of all inmates of NHS psychiatric hospitals and units were detained under various sections of the mental health legislation, and 8% in 1986. (Mental Health Enquiry, HMSO, 1964, 1986).

Ages of Inmates

Despite the amount of detailed data provided by the Lunacy Commissioners, remarkably little attention was paid to the age profile of lunatics. Data were provided on residents in the annual reports for the periods 1854-58, and 1893-1908. However, the decennial Census of Population (HMSO, various years) provides the necessary information, illustrated in Figure 5.4 (and Table A.7).

FIGURE 5.4



These data show a dramatic ageing of the inpatient population which went from comprising mainly those aged 25 to 44 and 45 to 64 to one where the majority were aged over 65. This transition occurred recently - between one quarter and one third of the inmates were aged over 65 years in 1951, but by 1981, over half the males and three quarters of the females were over 65.

Public and Private

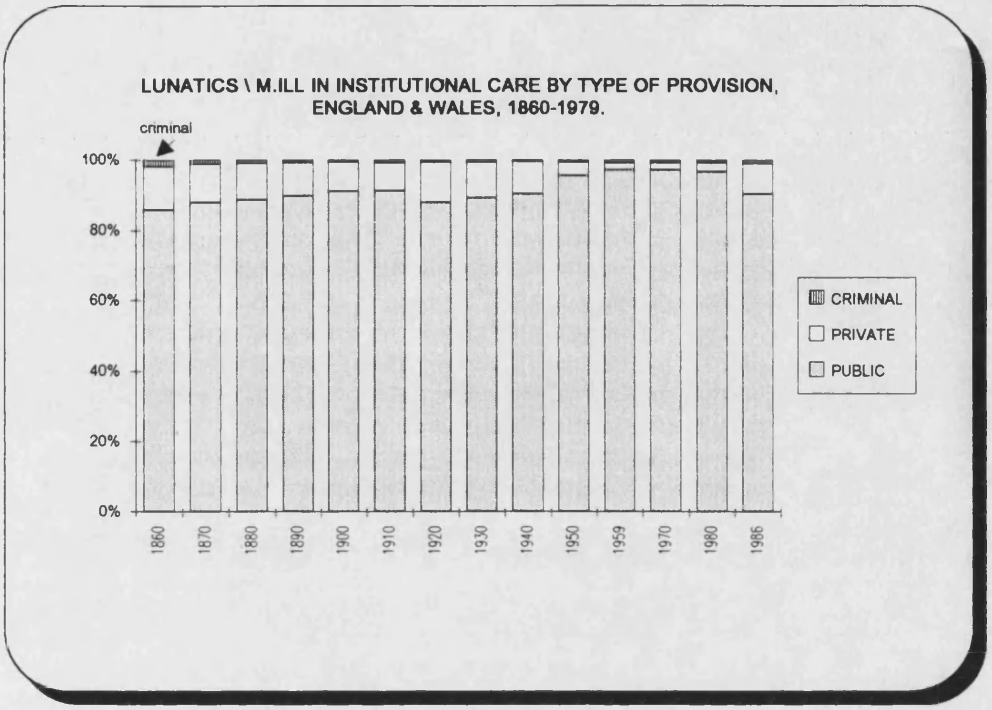
The division between public and private provision for lunatics runs through the entire history, with a swing from one extreme to the other, that is from mainly private provision pre-1845 to almost 100% public provision under the NHS.

In terms of finance, the position was more complex up to 1948 with a growing proportion of inpatients in the County and Borough asylums paying for some or all of their keep (see the discussion of sources of revenue below). As shown in Figure5.5 (and Table A.5), publicly provided places predominated: 86% of all places in 1860, rising to 91% in 1900 and remaining at this level to 1946, but rising to 95% by 1950 and 97% by 1959. The County and Borough asylums' population comprised 90% paupers in 1860, rising to 96% by 1900, before falling to just under 90% in the 1930s and 1940s. The Workhouses contained entirely pauper lunatics. Similarly, the bulk of those minded privately were paupers - 98% in 1860, 93% in 1900. Although privately funded lunatics were mainly catered for in the Registered Hospitals and Licensed Houses, these institutions always contained a minority of paupers: 37% in 1860, falling to 15% by 1900 and to under 10% thereafter.

The interpolated data for the private sector between 1959 and 1977 put its share at around 2%. After remaining at around 2,000 places between 1977 and 1983, the number of private inpatients in non-NHS facilities jumped to over 6,000 in 1986 and to close to 7,500 in 1987. This growth, combined with the decline in the number of NHS beds led to a more dramatic growth in the share of the non-NHS sector: from 2% in 1977, to 3% in 1983 and to 9% in 1986.

This new non-NHS provision was split roughly equally between voluntary (not for profit) and commercial agencies (Laing, 1991). These facilities, particularly those run by voluntary agencies, often housed ex-patients from the psychiatric hospitals, who had been relocated in the community and who were in receipt of social security payments to cover their residential costs up to certain limits.

FIGURE 5.5

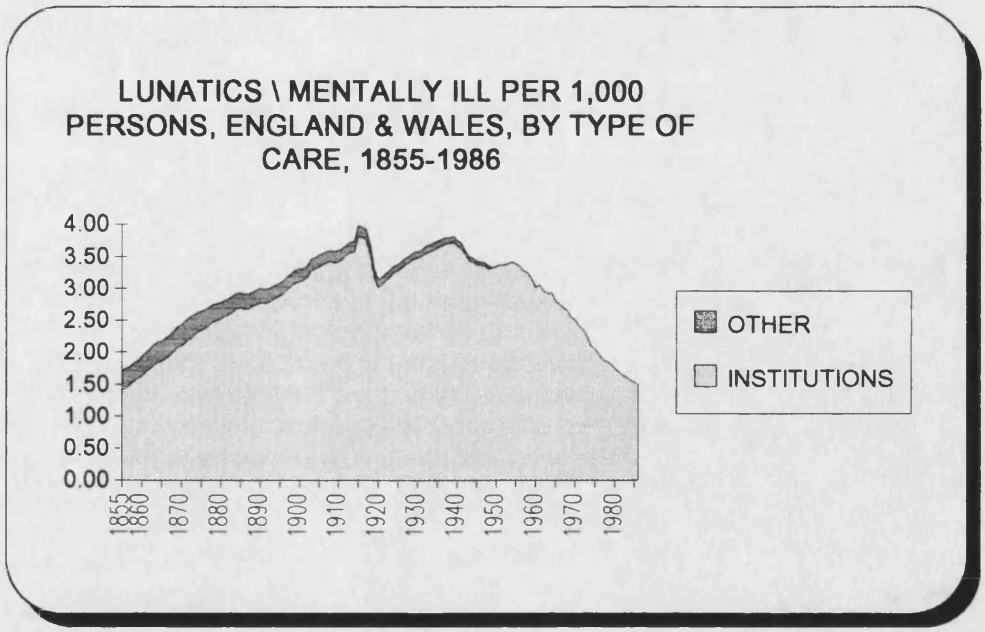

LUNATICS \ M.ILL IN INSTITUTIONAL CARE BY TYPE OF PROVISION, ENGLAND & WALES, 1860-1979.
criminal
100%
80%
60%
40%
20%
0%
1860
1870
1880
1890
1900
1910
1920
1930
1940
1950
1959
1970
1980
1986
CRIMINAL
PRIVATE
PUBLIC

Numbers in Care per 1,000 Population

Data on the numbers of psychiatrically ill must be related to the size of the population, particularly since the population of England & Wales was growing rapidly between 1850 and 1900. The data on the number of persons in care (including 'minded privately') have been converted to ratios per 1,000 persons in Figure 5.6 (and Table A.8). These data confirm not only the peak in treated prevalence in 1955 but also before each of the major wars, in 1914 and 1939. Thus, although the absolute number in care peaked in 1955, the years 1914 and 1939 had higher ratios of inpatients to population[1].

The treated prevalence of lunacy, defined widely to include all those who were registered lunatics (whether in institutional care or 'minded privately') rose from 1.8 per 1000 in 1857 to a peak of 4.0 by 1916 before falling 3.1 by 1920 when it commenced another steady rise to another peak of 3.8 in 1939. With the onset of war in 1939, the ratio fell to 3.3 by 1948 before rising to a post-war peak 3.8 in 1955.

FIGURE 5.6



[1] As shown in Figure 5.6, this conclusion holds when those lunatics who were cared for outside institutions are excluded.

In both wars the number of patients per 1,000 population, fell, but the drop during the 1914-18 war was much larger than that during the 1939-44 war. These declines were due primarily to reductions in the number resident in County and Borough Asylums, with the greater drop in 1914-18 due to the raised mortality rate in 1918 (discussed further below).

Since over 90% of all lunatics were in institutional care, the pattern for that sector closely mirrored that for all lunatics. The proportion of all lunatics who were institutionalised increased from 85% in 1860 to 94% by 1900 and close to 100% by 1959. For the period after the implementation of the Mental Health Act of 1959, which abolished the concept of registering lunatics, examination of total prevalence becomes more difficult as data continued to be collected only on the number of persons in the various types of psychiatric hospital.

The rate of decline in places, as measured by the number of resident inpatients, continued so that the "institutional prevalence" as measured by the number in the NHS mental hospitals (the former County and Borough Asylums) fell from its 1955 peak of 3.8 in 1955 to 3.4 in 1959, 2.9 in 1961, 2.2 by 1970, 1.5 by 1980 and 1.3 by 1986[1].

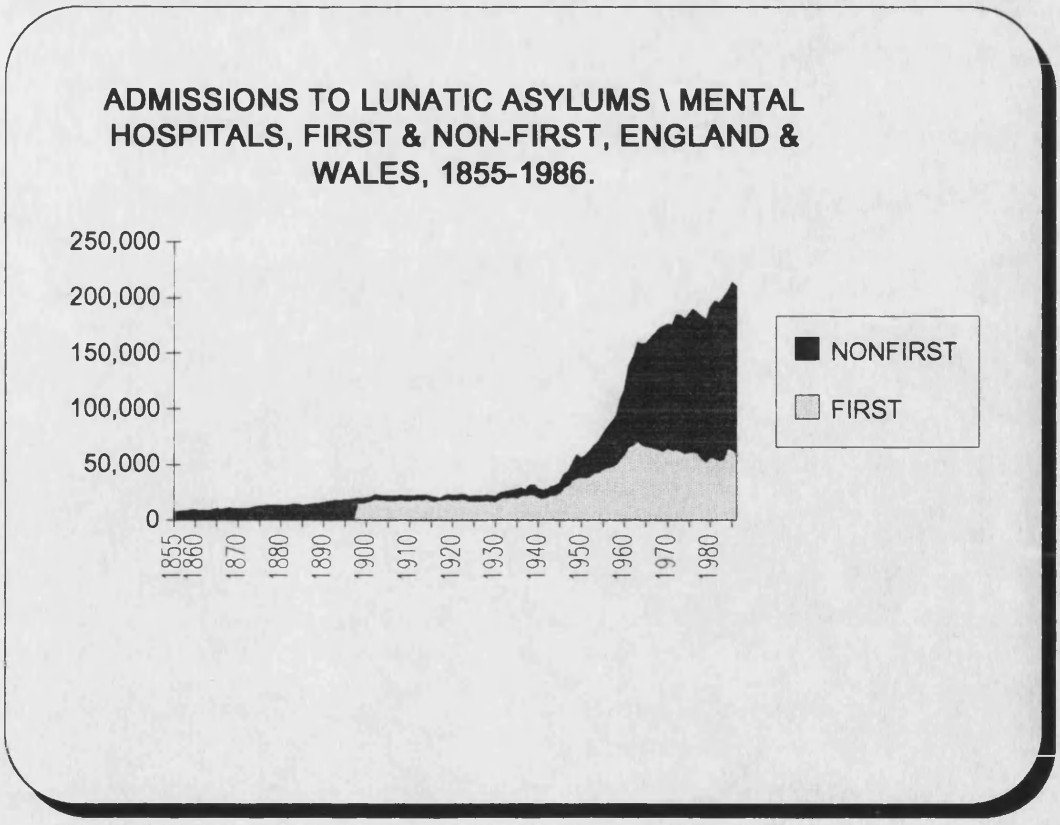
[1] The number of mentally handicapped persons per 1,000 persons in care showed a sharp initial rise from 0.3 per 1000 in 1921 to 1.0 by 1936 and a continuing but slower rate of increase to a peak of 1.45 by 1956. After that date, the ratio declined slowly to 1.4 by 1960. The decline continued so that there were 1.2 institutional places per 1,000 population by 1970 and 0.9 by 1980.

Admissions

The data on total admissions, discussed in Appendix 1, are summarised in Figure 5.7 (and Tables A.10 and A.11). Total admissions show an extraordinary, 25-fold increase over the period, from around 7,000 per annum in 1854 to 180,000 in 1986. The total rose slowly at first - from just over 7,000 in 1855 to around 10,000 per annum in the 1860s and 1870s, and continued rising to 13,000 in the 1880s, before settling at around 20,000 between 1890 and 1930.

Total admissions in the 1930s rose slightly to 31,000 by 1939, falling back only slightly to 27,000 in 1941 and jumping sharply after the war. In 1946 41,000 admissions were recorded, rising to 60,000 in 1950 and 95,400 by 1959. The level of total admissions jumped again after the 1959 Mental Health Act: to 138,000 in 1961 and continued rising to 176,000 by 1970 but levelled off in the 1970s before growing to just over 200,000 by 1980 and 210,000 in 1984.

FIGURE 5.7



First admissions

Although first admissions showed less variation, they rose four-fold between 1898 and 1975[1]. After an initial jump from 15,500 in 1898 to 19,000 in 1902[2], they remained in the range 17,000 to 19,000 to 1930 with a slight rise of between 20,000 and 22,000 during the 1930s. The high number of total admissions in 1946 was accompanied by a jump in first admissions to 29,000. This growth in first admissions continued to around 55,000 in 1960. As discussed in Appendix 1, data deficiencies between 1961 and 1969 necessitate interpolation of first admissions in this period. The resulting estimates, based on the interpolated share of first admissions in total admissions, show a peak in first admissions in 1963 at around 69,000, after which first admissions fell to 63,000 in 1970 and to 57,000 in 1986.

Expressing these data as rates per 100,000, as in Figure 5.8, roughly halves the increase, so that the total admission rate rose by a factor of just under 10, but leaving the pattern of growth unchanged. Total and first admission rates remained close in value up to the 1920s, with a divergence becoming evident in the 1930s and widening in the post-World War II period as re-admission became more common. Total admission rates were some 20% above total rates up to 1930, but the difference widened to around 50% in the 1940s. By 1960 total admission rates were double those for first admissions. The drop in the first admission rate after 1963 further increased the divergence so that by 1980 the total rate was almost four times the first admission rate. This dramatic divergence indicates the extent to which re-admission had become common.

The first admission rate grew less sharply, by a factor of 2.5 over the period 1898 to 1986. The first admission rate showed little change to 1920 (49 per 100,000 in 1898, 50 by 1920), but fell in the 1920s to 42 per 100,000 by 1930 before recovering to 50 by 1940. The rate rose sharply after the War, to 102 in 1955 and 146 in 1961. The (interpolated[3]) first admission rate peaked in 1963 at 157 and fell to 134 in 1970, 114 per 100,000 by 1980 and 122 in 1986.

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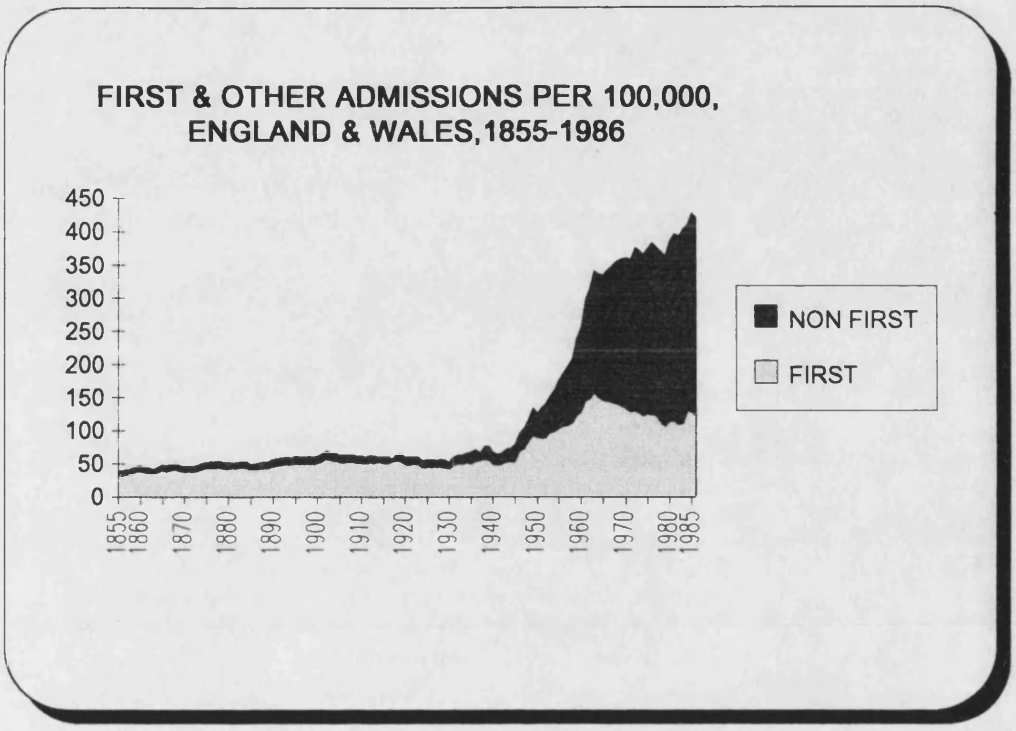
[1] The first admission rate in Figure 5.8 has been extrapolated back to 1860, based on the share of first to total admissions in the period 1898-1908.

[2] Perhaps associated with the development of data collection on first admissions from 1989 - see discussion in Chapter 9.

[3] Interpolation based on the interpolated share of first admissions in total admissions, due to the unreliable recorded data on first admissions in that period, as discussed in Appendix 1.

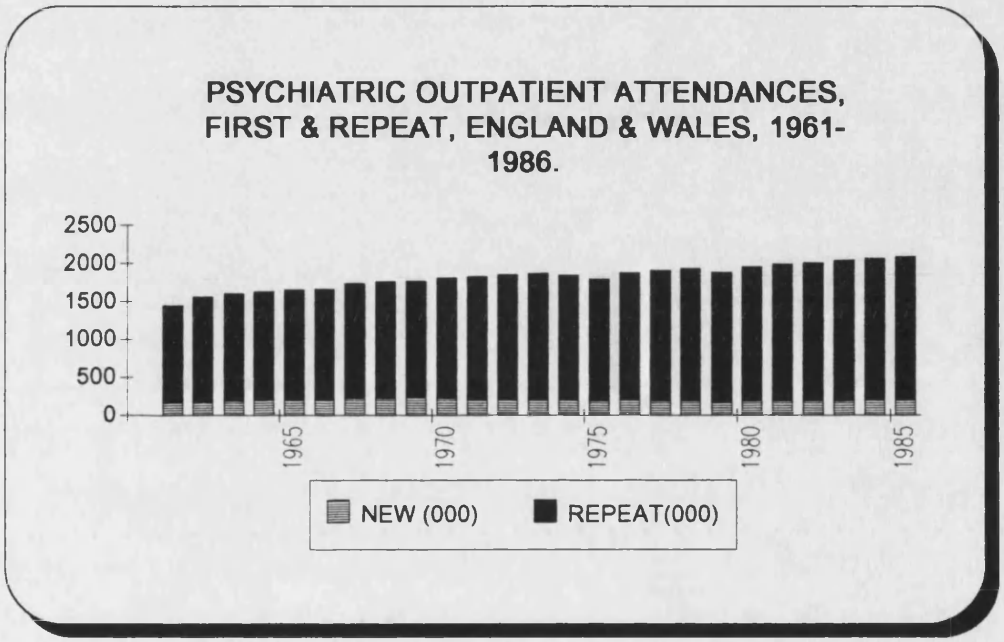
FIGURE 5.8


FIRST & OTHER ADMISSIONS PER 100,000,
ENGLAND & WALES,1855-1986
450
400
350
300
250
200
150
100
50
0
1855
1860
1870
1880
1890
1900
1910
1920
1930
1940
1950
1960
1970
1980
1985
NON FIRST
FIRST

Outpatient Attendances

Outpatient attendances expanded rapidly from 1961, perhaps linked to the high level of discharges. The total number of psychiatric outpatient attendances is shown in Figure 5.9 (and Table A.12) along with first attendances. The overall pattern is clear, with little change evident in first attendances which continued at around 0.2 million attendances per annum but with considerable growth in repeat attendances, from around 1.0 million to 1.6 million between 1961 and 1985.

FIGURE 5.9

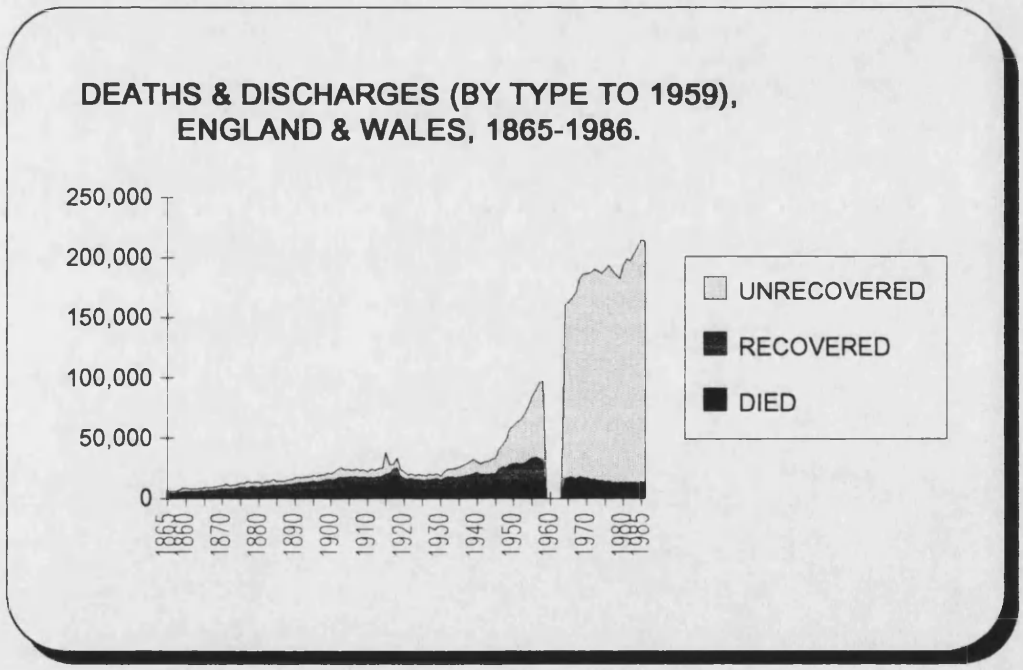


Taking the total of first contacts with the mental health services as comprising both first inpatient admissions (shown in Figure 5.7 above) and first outpatient attendance (shown in Figure 5.9), the proportion of the population who had a first contact showed a slight fall between 1970 and 1980, after which a slight increase is evident. There were roughly four times as many first contacts with outpatient services as with inpatient, and each followed broadly the same pattern. It should be noted, however, that the combined total of these two sets of contact data may overstate the true level of first contacts since some of those who have a first contact with outpatient services go on to become inpatients, whether in the same or subsequent year(s).

Discharges

From the period 1854 to 1959, live patients were divided on discharge into two categories: 'Recovered', "Not Recovered' and the number of deaths was also published. Although the distinction between those deemed recovered and not recovered may be of questionable value[1], the number of deaths provides an insight into the relative healthiness of the inmates of the various institutions. Figure 5.10 (and Tables A.13 & A.14 in Appendix 1) shows the number discharged, divided between 'Recovered', 'Not Recovered' and 'Died' up to 1959 and between deaths and discharges from 1964 (with a gap in the intervening years). In terms of relative magnitudes, dramatic changes occurred, with a rise in total discharges which was almost identical to that for total admissions. From 1945, total discharges rose sharply from around 20,000 per annum to over 200,000 per annum by 1985.

FIGURE 5.10



Note: No data published for 1959-1964.

The proportions deemed to have recovered fell continually from 40% in 1860 to 30% in 1940 and to 18% by 1959. While two thirds of discharges were either

[1] Although questionable in terms of the reliability of these judgements, which do not seem to have been validated for example, by an analysis of readmission rates, the attempt to provide a routine measure of outcome marks an admirable approach, against which later practice rates poorly.

recovered or dead in 1860 to 1940, in 1959 two out of three discharges were not recovered. Discharges rose sharply from 1945, particularly the category of non-recovered. The proportion deemed "Not Recovered" showed little change between 1860 and 1940 but grew sharply to 68% by 1959.

The proportion who were discharged as dead grew from 33% in 1860 to 44% in 1921 and 41% in 1940. Although the actual number of deaths showed little change, the proportion of deaths in deaths and discharges fell sharply to around 14% in 1960 and 5% in 1986.

The increased level of live discharges which accompanied the outbreak of war in 1914 and the rise in the number of deaths due to the influenza epidemic of 1918 are apparent in Figure 5.10. The relative mortality of inmates of the psychiatric institutions is examined below.

Comparative Death Rates.

The degree to which death rates in psychiatric institutions differed from national norms has received little attention, despite the potential value of such an outcome measure (Jenkins, 1990). Since the age profile of inmates differed from that of the general population (fewer young and old up to around 1951, more elderly thereafter), mortality comparisons must be age-standardised.

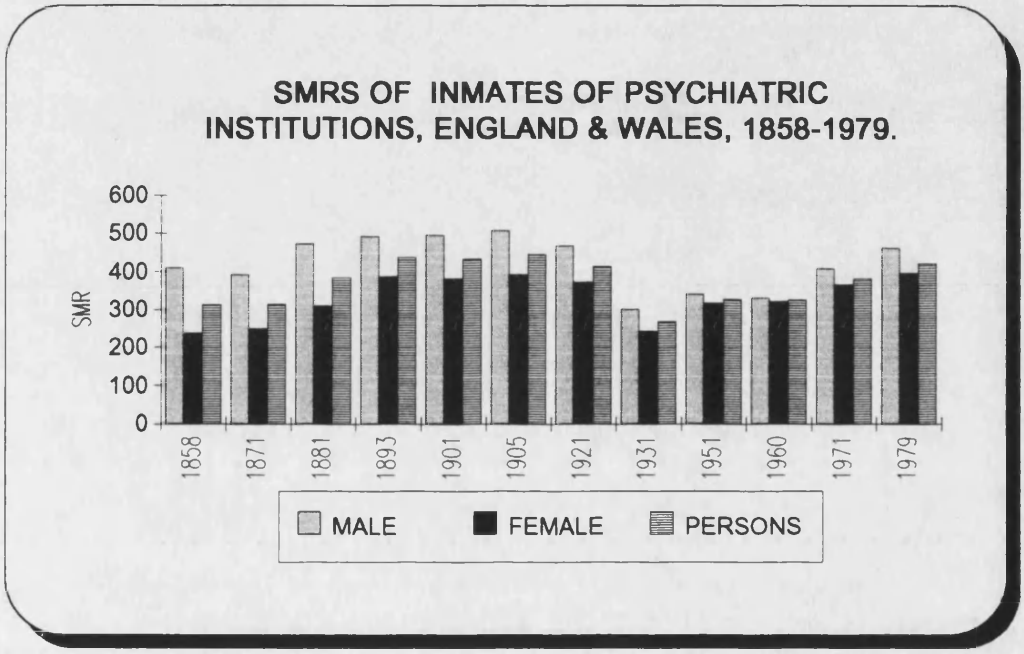
Although deaths were reported each year by the Lunacy Commissioners / Board of Control, lacking the concept of Standardised Mortality Ratios (SMRs), these rates were not adjusted for age. SMRs express the ratio between the number of deaths observed in a given population relative to that number that would be expected on the basis of applying national death rates by age group and sex to that population. Although the stock of inpatients at a point in time is not the ideal denominator upon which to estimate expected deaths, due to the turnover of the short-stay admissions, SMRs so calculated provide a first approximation[1], which is extended below.

---

[1] The inaccuracies due to establishing expected deaths on the basis of the age distribution of the stock of inmates at a point in time will be greater the larger the proportion of inpatients who have been inmates for less than one year. Since over 89% of inmates had durations of stay greater than one year up to 1964 after which the proportion fell (see Chapter 9 below), the estimated SMRs are likely to be more accurate for years before this date. Separate evidence of raised mortality among the long stay population in more recent years is reviewed below.

SMRs for the years for which the age profile of inmates is available are shown in Figure 5.11 (and Table A.15), indicating some three to four times more deaths than one might expect among psychiatric inpatients. The SMRs ranged between 315 and 445. Although they declined sharply between 1921 and 1931, an upward trend raised the 1979 level back to that of 1921 .

FIGURE 5.11



The ratios for each of the years examined[1] have been considerably higher for males than for females, with the disparity increasing the higher the levels. The 95% Confidence Intervals for these SMRs (see Appendix 1 Table A.15) indicates that these raised SMRs, both in relation to the national mean, and between the sexes, are statistically significant, with very low probabilities of being due to chance.

Two additional sets of mortality data are available only from 1971: the first (MHE, 1979) which distinguishes deaths among all residents and those to long-term residents, not only confirm the high SMRs for those resident for more than one year, but also showed a raised mortality for short stay patients (less than one year[2].

[1] The lack of data on the age distribution of inmates by sex prevents calculation of SMRs for the years after 1979. Publication of data on the age profile of inmates by sex ceased in 1979.

[2] A separate SMR of 182 has been estimated for long-stay residents in 1971, indicating that while some of the very high rates observed may have been due to people who died within one year of admission, this

The second set of data, from the OPCS Longitudinal Study, provided data on the vital events of 1% of those enumerated in the 1971 Census of Population. Male residents of psychiatric institutions in 1971 had by 1976 an SMR of 221, and females 243. Those who had been discharged from psychiatric institutions had higher SMRs by 1976: 550 for males and 277 for females (OPCS, 1987, Table 4.7).

Perhaps the most important point about raised high SMRs, which do not appear to have been recognised before, is that severe psychiatric illness seems to be associated with a raised mortality. Jenkins (1990) has pointed to the raised mortality for particular diagnoses, but not to the overall raised mortality of those in care.

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this does not account for all of the raised mortality. Further, since we do not know how many of these patients had been re-admitted in recent decades, we cannot say that such a pattern applied before short stays and re-admissions became common. Such data are not available for the other years.

Section 2.

Expenditure On Psychiatric Services

Four expenditure trends are reviewed in this section:

i) current (non-capital or revenue) costs of provision for the mentally disordered,

ii) unit costs indicating the cost per inpatient week of the treatment and care being provided,

iii) capital costs and loan charges, and

iv) sources of revenue of the publicly provided places.

As with the activity data, the quest must be for complete coverage, both public and private, distinguishing psychiatric illness from mental handicap. As discussed in Appendix 1, the available time series data on expenditure on mental disorder are partial in coverage and sometimes inconsistent in their treatment of different types of expenditure. For these reasons, a certain amount of estimation has been employed[1].

Current Expenditure On Psychiatric Services

The data sources on expenditure on psychiatric services, which are discussed in Appendix 1, are summarised here. Three current (or non-capital) expenditure series are shown in Figure 5.12 (and Tables A.17, A.18 and A.19):

i) annual public expenditure on pauper lunatics in institutions under the Lunacy Commissioners,

ii) estimated expenditure on the workhouse lunatics, and

ii) estimated private spending[2].

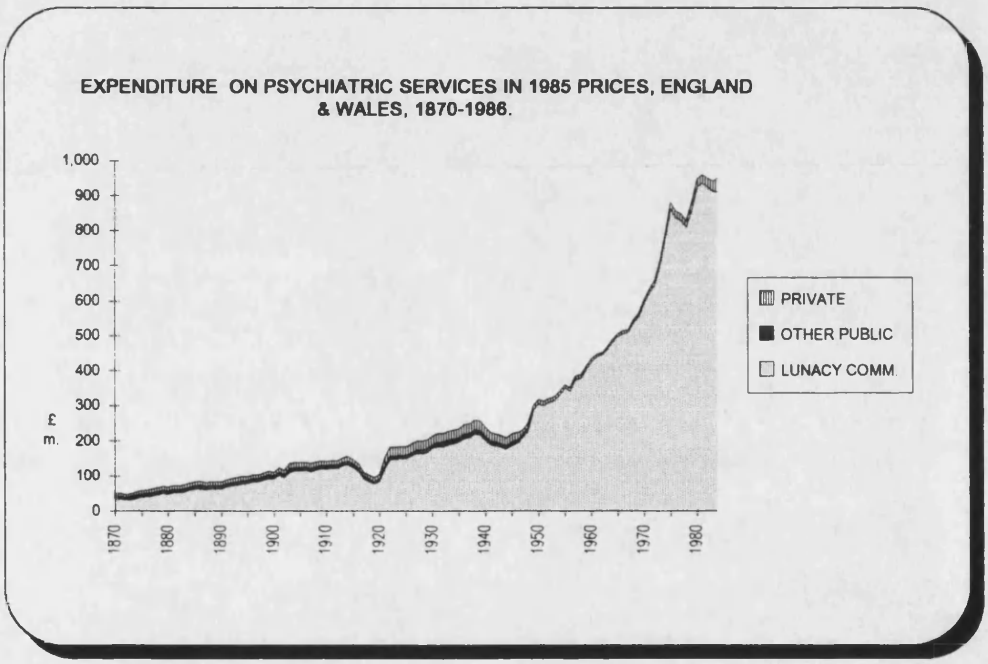
---

[1] The earliest and most accessible expenditure series dates from 1857 but is incomplete due to being restricted to the maintenance costs of the pauper lunatics under the Lunacy Commissioners. Besides being restricted to maintenance costs (comprising direct costs such as provisions and salaries), this series excludes those paupers who were held in Workhouses, and all privately financed patients. Expenditure on the maintenance of these "Workhouse lunatics", who accounted for around 25% of all pauper lunatics from 1850 to 1880, was included in general expenditure on the Workhouses, but not distinguished (Williams, 1981). Workhouse lunatics typically cost the Boards of Guardians only around 50% (see Chapter 9 for a more detailed discussion) of the cost of an asylum place.

[2] While data are available on heading i) which comprised the overwhelming majority of the places provided, the estimated expenditures under ii) and iii) have been based on the numbers of persons in each of these categories. It has been assumed that the cost per person in the workhouses was 50%, and that of privately financed lunatics 100%, of that of pauper lunatics. Such an assumption is justified by the repeated assertions about the cost of workhouse lunatics in the literature and the fact that a growing proportion of privately funded lunatics were cared for in the County and Borough asylums. In any case, the relatively small proportions of patients in headings ii) and iii) means that little difference would be made to total expenditure if higher or lower unit costs were employed.

Figure 5.12 shows the overall pattern of current expenditure on psychiatric services between 1870 and 1986, expressed in constant 1985 prices using the GDP deflator[1] (Feinstein, 1972). Aggregate spending was clearly dominated by that on pauper lunatics in the institutions covered by the Lunacy Commissioners, which accounted for over 90% of total spending throughout all but the earlier part of the period. Aggregate spending followed the trend in inpatient numbers up the advent of the NHS, after which this pattern ceased to apply. Spending continued to rise as the number of inpatients fell after 1955.

FIGURE 5.12



Spending (in 1985 prices) ran at around £60m. per annum from 1870, rising steadily to around £150m. by 1900. Spending continued to rise slowly to a peak of under £200m. by 1914, but then fell sharply to around £100m. during the war. Spending recovered after the war to its pre-war level of around £200m. and resumed its steady increase to reach a peak of around £300m. by 1940. With the 1939 war and a fall in numbers in the mental hospitals, spending again fell - but less sharply than in the earlier war - to £250m. After the war and with the initiation of the NHS, spending initially continued at around the £250m. level but then

[1] The effects of using various price deflators are discussed in Chapter 8.

began to increase rapidly, reaching £500m. by 1960 and continuing to rise despite the drop in inpatient numbers to reach some £700m. by 1970 and over £1,300m. by 1985. As shown in Figure 5.12, non-NHS spending became noticeable again by the mid-1980s, so that by 1985, such (estimated) spending accounted for some 9% of the total.

Composition of Spending

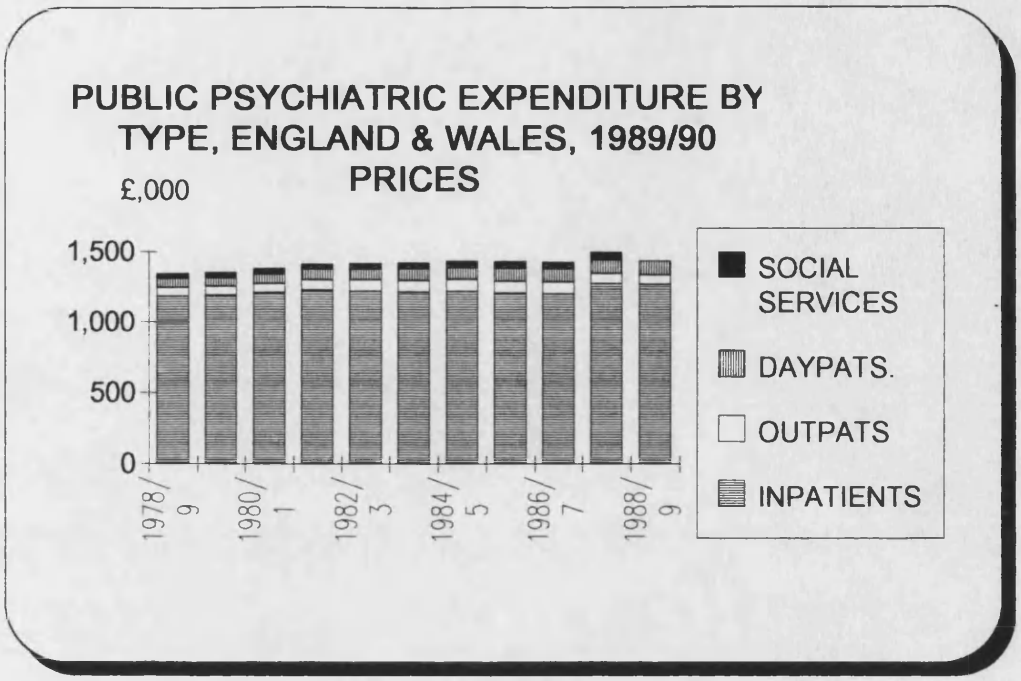
The data in Figure 5.12 referred only to total expenditure on the range of psychiatric inpatient facilities. With the expansion of outpatient and day patient services in recent decades, the levels of spending under these headings has become important. The programme budget expenditure series, published through the House of Commons Social Service Select Committee (HMSO, 1990) provides data on spending by type of psychiatric service, the following five headings:

* inpatient costs to the NHS,
* outpatient costs to the NHS,
* day patient costs to the NHS,
* residential costs to the Local Authorities
* day care services to the Local Authorities.

Data under each of these headings is summarised in Figure 5.13 (and in Table C.20, Appendix 1), which indicates that while total spending in real terms grew by around 12% in the decade 1978 to 1988, the composition of that spending has shown very little change. Inpatient expenditure continued to account for around 85% of total spending, or around £1,300m. with outpatients and day patients each accounting for around £50m. and Local Authority services (residential and day care combined) accounting for another £50m. These latter services showed considerable growth in percentage terms, but from very small bases[1].

[1] Local Authority expenditure includes that on the elderly in care, some of whom suffer from mental illness. The Mental Illness Specific Grant, introduced in 1991, has increased Local Authority spending on mental illness.

FIGURE 5.13



Average Cost per Patient

Aggregate spending is, of course, influenced by the total number of persons being financed. Unit cost data, showing the cost per inmate, allows the relationship between persons and total spending to be examined.

Data on average cost per place has been long provided, partly because a variety of institutions provided services to both the public and private sectors, but also because the supervisory agencies (the Lunacy Commission, the Board of Control, the Ministry of Health, Department of Health) have been concerned with the quality of service as measured by the amounts spent, for example, on food. The same authorities have also used comparisons of the average cost per patient as a guide to the relative efficiency of the various institutions.

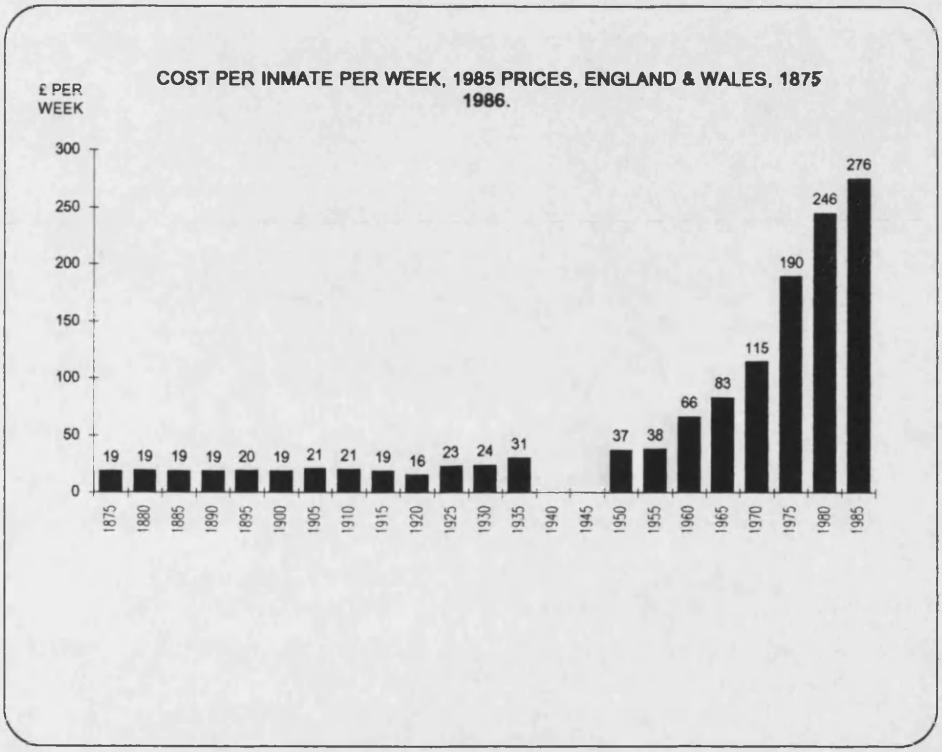
The average cost of maintaining a patient in County Lunatic Asylums[1], as shown in Figure 5.14 (and Tables A.21 and A.22), remained remarkably unchanged from 1875 to 1920. Expressed in constant 1985 prices using GDP deflator, the cost of maintaining a pauper lunatic remained around £20 per week from 1870 through to

[1] Data are also available for the Borough asylums, which according to the reports of the Lunacy Commissioners, kept better accounts. These have been disregarded here both because their levels were close to those of the County asylums and also because the Borough asylums accounted for relatively few patients.

1920. Unit costs began to increase after the 1914-18 war, however, reaching £23 per week in 1925 and £31 in 1935. No data are available for 1940 and 1945.

The weekly cost (somewhat more widely defined) was £37 per week in 1950, and £38 by 1955. However, as inpatient numbers began to fall, unit costs rose rapidly: doubling in each of the succeeding decades. Unit costs rose to £66 per week by 1960, £83 in 1965, £115 in 1970 and £190 by 1975. Further rises continued to take place, to around £246 in 1980 and £276 in 1985.

FIGURE 5.14



Although the factors related to this dramatic rise in unit costs are discussed in Chapter 8, some preliminary comments are in order here. Taking the period 1950 to 1985, unit costs rose by a factor of seven, while inpatient numbers fell to around one third of their 1955 level: *ceteris paribus*, such a drop in patient numbers would have pushed up unit costs by a factor of three. The seven-fold rise suggests that while the failure to adjust spending on inputs in line with patient numbers was responsible for much of the rise in unit costs, it does not explain the entire rise.

Components of Changes in Unit Costs

The composition of unit costs showed considerable change (see Table A.22, Appendix 1), indicating a move from institutions which were provisions-intensive to ones where labour costs dominated. Provisions were the single largest component at 45% of unit cost in 1875 and 48% in 1880 [1]. This proportion fell steadily from then onward, to 32% by 1900, 29% in 1910, 26% in 1920 and 19% in 1930. Concomitantly, the share of wages and salaries increased: from 21% in 1875 to 26% in 1890, 29% by 1900, 31% by 1910, 37% in 1920 and 46% in 1930.

The movements in these two components accounted for almost all the change in unit costs; with no other item accounting for more than 10% , with the exception of "Necessities" which declined slightly from 11% in 1875 and 10% in 1930. Medical inputs, as measured by 'Surgery/Dispensary', never accounted for more than a minute share of spending: 0.7% of unit costs in 1875 and 1.1% by 1930.

Although detailed comparison of unit costs in the period 1950 to 1986 is hindered by changes in the method whereby unit costs were compiled[2], with no less than four changes, the composite heading 'Patient Care Services' and 'Medical and Para-medical Support Services' (which was mainly composed of labour costs) accounted for 37% of the cost per inpatient in 1950/1, increasing to 49% by 1970/1 and 57% by 1980/1 with a further rise to 61% by 1985/6[3].

The overall conclusion regarding unit costs would appear to be that while the proportion of unit costs accounted for by staff costs has been rising since 1870, it was offset by declines in other input costs so that average cost per inpatient remained largely unchanged up to 1930. Between 1950 and 1985, real unit costs rose by a

[1] Detailed accounts were maintained of the costs of inputs purchased for the gardens and farms as well as of the profits made by sale of their produce. Maintenance costs showed little difference between those asylums which being rural were likely to have farms, and those which were urban. Although some subsidisation may occurred through the use of inpatient labour on the farms, it would have shown up mainly in the form of reduced provisions costs. Since the share of provisions in unit costs fell sharply over the period, no major distortion is entailed by omitting the influence of the farms.

[2] See Appendix 1 for discussion of these changes.

[3] This increase was at the expense of 'General Services: Patient Related', whose share in average unit costs fell from 44% in 1950-1 to 18% in 1980-1 and an apparent 9% by 1985-6. The share of 'General Services: Non-Patient Related' fluctuated between 20% and 30% over the period, but the distinction between these two latter headings may be due to definitional changes.

factor of seven or by around 10% per annum. in real terms. These dramatic increases appear to have been due to a continuing increase in direct patient costs, due in turn to the number and the cost of staff increasing as the number of inpatients fell.

Capital Expenditure

Interest in capital spending and its financing has been revived by the introduction of capital charges from 1991. Since the original lunatic asylums were financed by mortgages against the County Rate, a considerable debt was incurred which was serviced annually by loan charges.

Capital spending was also incurred on a regular basis on the maintenance and extension of the lunatic asylums. The introduction of capital charges in the NHS in 1991[1], while different from Loan Charges, may make the period 1948-90 which had no capital or other debt service charges seem an exception to future observers.

The distinction between current and capital spending was not made in the Local Taxation Returns until 1929, although from 1884 expenditure that was financed out of loans were identified (HMSO, 1954).

Three measures relating to capital spending are examined below (and Table A.23):

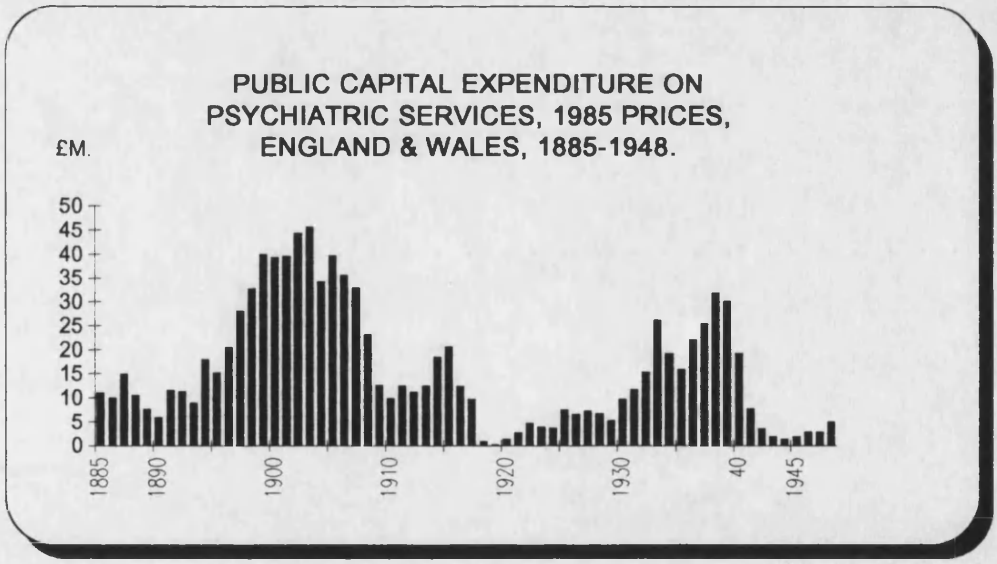
- annual capital expenditure (or expenditure financed by loans),
- debt outstanding, and
- loan charges.

[1] Capital charges differ from loan charges which serviced debt in that the former include a notional 6% return on capital plus depreciation charges (Raftery,1989).

Annual Capital Spending

Overall, expenditures out of loans, which were primarily for capital expenditure, showed considerable variation, even when expressed in constant 1985 prices (using the GDP deflator). As shown in Figure 5.15 (and Table A.23), capital spending in constant prices stayed at a low level from 1884 up to the mid-1890s of under £15m. per annum. The peak in capital spending took place in the period 1895-1905 when some £40m. was being spent annually on expanding the asylums (Jones,1972). Expenditure fell to between £10m. and £15m. per annum up to the war years and to close to zero by the end of the war. In the 1920s, spending recovered modestly, remaining under £5m. p.a. to 1925 and under £10m. p.a. until the 1930s. Another peak occurred in the 1930s with spending rising to between £20m. and £30m. p.a., before again falling to close to zero with the war.

FIGURE 5.15

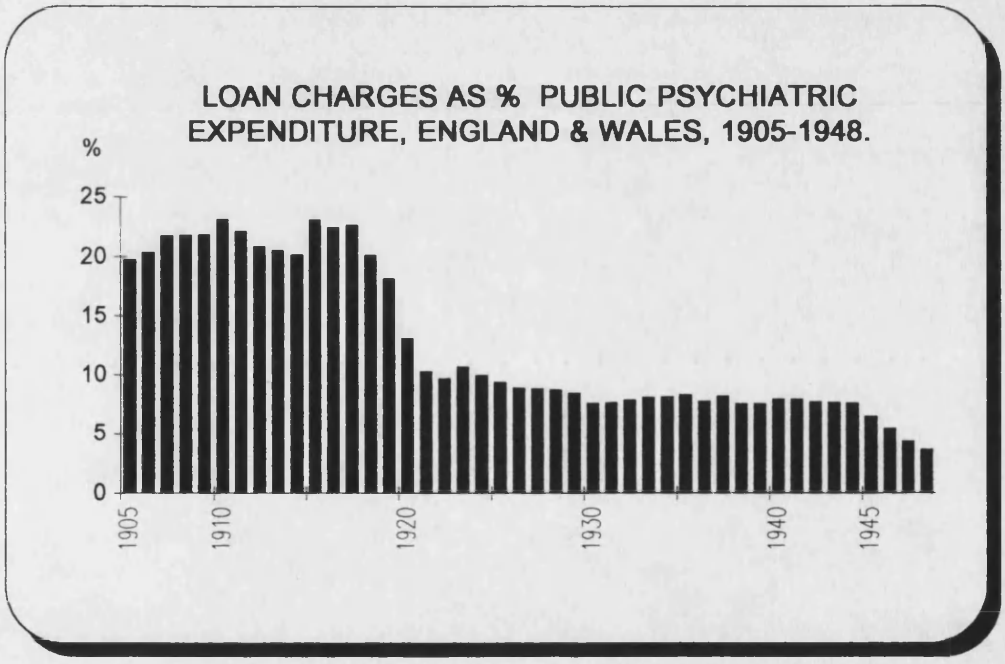


Capital spending probably remained at low levels under the NHS, but no data are available; only data on aggregate capital spending on the entire NHS are available, making identification of capital spending on psychiatric services impossible. It seems reasonable, however, to assume that capital spending on mental health services in recent decades has been small, since the closure of many of the mental hospitals has been projected since 1961. Lack of capital investment, could of course, mean that closure became more and more likely as the costs of postponed renovation and maintenance increased.

Loan Charges

Loan charges serviced the debt of the County and Borough psychiatric hospitals, repaying both interest and capital. As the value of the debt outstanding was reduced, so too were loan charges. Although loan charges can be readily expressed in constant prices, they are more usefully expressed as a proportion of current expenditure, as in Figure 5.16 (and Table A.23). Loan charges accounted for 18% to 24% of current expenditure between 1905 and 1919, after which they fell to around 12%, a figure around which they remained during the period to 1945, after which they again fell slightly before ceasing to apply under the NHS.

FIGURE 5.16

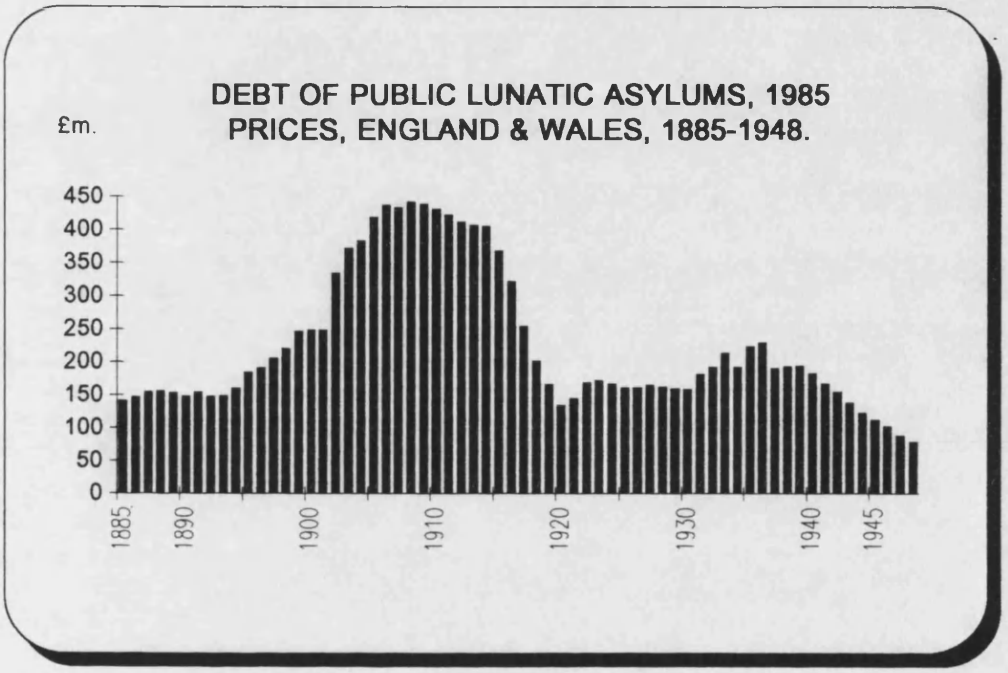


Debt

Since the erection of the lunatic asylums was financed by means of mortgages on the County Rate, data were also provided on the level of debt outstanding up to 1948 when the NHS in effect led to the cancellation of these debts through incorporation into the national debt. The value of debt outstanding in constant 1985 prices in each year from 1884 to 1949 is shown in Figure 5.17 (and Table A.23), indicating that debt rose from a total of around £120m. in 1884 to around £130m. by 1906 after which it rose sharply: to between £400m. and £500m. in the period

1906-14. During the war, the value of the debt fell to under £200m, and showed little change during the 1920s and 1930s, rising slightly to around £250m. The 1939-44 War again reduced the debt level so that by 1948 the level of debt had fallen to under £100m.

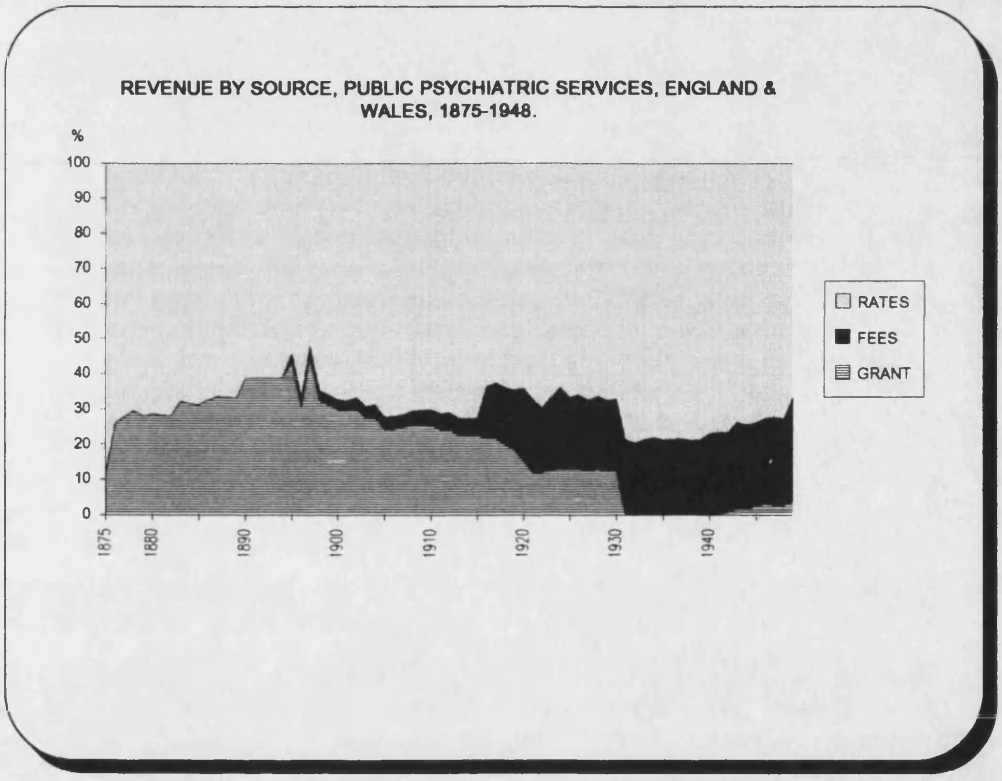
FIGURE 5.17



Sources of Revenue

Over the course of the history of provision for the mentally disordered, public funding of services has shifted from being almost entirely locally financed to being the responsibility of central government. The introduction of central government financing on a capitation basis for the first time in 1874 initiated this development and led to a period of mixed central and local funding up to 1948. Capitation subsidies were identified up to 1930 when they were replaced by block grants to Local Authorities. From 1948, the mental health services became the responsibility of central government.

FIGURE 5.18



The sources of revenue of the County and Borough Lunatic Asylums, as shown in Figure 5.18 (and Table A.24), distinguished between Fees from Relatives, Grants in Aid, and the remainder which was raised from rates.[1]

[1] For the early years, 1875 to 1894, the only available data pertain to total expenditure and Imperial Grants. The lack of data on fees pre-1894 is of little importance, as fees accounted for only 2% of total expenditure in the latter year.

The Imperial Grant initially made up 26% of revenue in 1876, rising to 29% in the period 1880 to 1900 before falling to 24% in 1911 and to 15% by 1920 and 12% by 1930 when it was replaced by a block grant from central to local authorities.

Fees did not amount to large sums in the earlier years: 2% of expenditure in 1894, and 4% by 1910. By 1920, however, fees had grown rapidly, amounting to 21% of current spending, 20% in 1930, 23% in 1940 and 25% by 1948. This expansion in the share of charges does not appear to have been remarked upon. According to Webb's (1920) account, summarised in Chapter 4, Local Authorities were faced with incentives and opportunities to maximise the role of both the imperial grant and fees[1].

[1] As long as fees received for pauper lunatics were less than four shillings, the central government capitation grant continued to be paid, giving Local Authorities the possibility of sharing the cost of such patients with both their relatives and central government, each of whom could contribute up to four shilling per week.

Section 3.

Conclusions

The examination of the available rich dataset highlights a number of topics which have received little attention to date, which are discussed briefly below.

Firstly, the range of institutions catering for those suffering from psychiatric illness was considerable, including a small but substantial private hospital sector as well as the workhouses. Private provision and private financing should be distinguished - as the former declined, the latter expanded. Account must be taken of all of these factors if a comprehensive account is to be built up, whether of activity or of costs.

Secondly, the gradual emergence of the mentally deficient as a separate group must be recognised. In England and Wales (and unlike several other countries, notably Ireland), up to 1920 the small proportion of the mentally deficient who were in institutional care were in separate accommodation, notably the asylums of the Metropolitan Asylum Board, which were classified as workhouses by the Lunacy Commissioners. After 1920, separate provision for this group began to provided on a wide scale,

Thirdly, the trends in admission rates are particularly striking, with a 9-fold increase in the total admission rate and a 3-to- 4-fold rise in the first admission rate over the period 1857 to 1985, with virtually all of the increase occurring after 1945. As admission rates rose, the number of inmates initially rose, but then started to fall after 1955 so that by 1986 the number of inmates had fallen to one third of its previous level. The first admission rate peaked in 1963 after which it declined to 1986.

Fourthly, the relatively high mortality which applied to the inmates of the lunatic asylums, and which continued to apply at least up to 1979 to the inmates of psychiatric hospitals, deserves attention. The estimated SMRs put the number of deaths among inmates as three to four times above that expected on the basis of national mortality rates based on age and sex. By implication, the mortality rate

associated with mental illness has been much higher than has been recognised in psychiatric epidemiology.

Fifthly, the current expenditure data series showed a continual rise, even though the number of inmates had fallen by 1986 to around one third of its 1955 total. This failure of current spending to adjust downwards as the number of inpatients fell since the mid-1950s was due to increases in the number and cost of staff.

Sixthly, the unit cost per inpatient week has risen almost exponentially in recent decades, due to the rise in spending and the fall in inpatient numbers. Although these rises in unit costs may have led to improvements in the quality of care, as measured by crude indicators such as staff/patient ratios, no empirical evidence is available on these matters.

Seventh, capital spending is shown to have been subject to considerable variation up to 1949 and it has been suggested that, under the NHS, capital spending remained low. Debt, which financed the original lunatic asylums, fell both in nominal and real terms, as loan charges appear to have been used to repay debt in the 1920s. Loan charges amounted to as much as 25% of current spending in the early part of the period but fell as the outstanding debt declined.

CHAPTER 6

SCOTLAND: PSYCHIATRIC ACTIVITY AND EXPENDITURE TRENDS

Introduction

This Chapter follows the format of the previous chapter in outlining both activity and expenditure patterns in Scotland. The first section deals with the activity data including the number of persons suffering from psychiatric illness by type of care, as well as the inflows and discharges from care. The second section considers the available data on expenditure, examining current expenditure in constant prices along with unit cost, capital spending and sources of revenue. Appendix 2 contains the relevant tables, which are presented graphically in the following pages.

Section 1: Activity Trends

Pattern of Provision

The later development of the General Board of Lunacy led to it being given somewhat greater powers as well as flexibility, notably the power to allow voluntary admission, and the power to board-out patients, by financing their care in private dwellings, whether by relatives or strangers. Another difference was the inclusion of workhouses under the remit of the Board, an omission which caused much trouble to the English Lunacy Commissioners. Further, when the capitation grant was introduced in 1875, it was payable in respect of both lunatics in Workhouses and also to those boarded-out, a position unlike that south of the border.

After 1858, lunacy legislation in England & Wales tended to have parallels in Scotland, so that Scotland was included in the 1913 Mental Deficiency Acts. Since voluntary admissions had been allowed in Scotland since 1862[1], the 1930 Mental

[1] Although the 1863 Lunacy Amendment (Scotland) Act permitted voluntary admission, it was considered necessary to further clarify the legal position with the 1866 Act of the same title. Very few patients availed of the possibility.

Treatment Act in England & Wales was not necessary in Scotland. Similarly the 1890 Lunacy Act of England & Wales, which dealt mainly with the private hospitals, found no Scottish equivalent.

Mental Deficiency

While data on activity levels and spending on 'Lunacy' (that is, pertaining to the psychiatrically ill and mentally handicapped combined) in Scotland were published from 1858, separate data on mental deficiency, as in England & Wales, only began to be published after the 1914-8 War. Those 'Idiots and Imbeciles' who received care were treated along with the psychiatrically ill up 1920, after which separate institutions were developed. The mentally deficient[1] are separated out in the discussion that follows.

Diversity of Provision

As in England & Wales, there was considerable diversity in the types of provision available. Seven types of asylum existed in Scotland by 1900 (Board of Control, 1938) as follows:

a) Royal Asylums whose capital costs had been met privately prior to the 1857 Lunacy (Scotland.) Act.

b) District Asylums of which there were 21 by 1900, were created under the provisions of the 1857 Act in areas not catered for by the Royal Asylums, and whose capital costs were met out of local taxation.

c) Parochial Asylums which were lunatic wards in Workhouses licensed by the Board to receive pauper patients suffering from all forms of insanity (4 such asylums in 1900).

d) Lunatic Wards of Workhouses, which were wards set aside for lunatics who were incurable and harmless. As with the Parochial Asylums, both capital and running costs were met by the Poor Rate. Such sections existed in 15 Poorhouses in 1900.

e) Training Schools for Imbecile Children were erected by charitable subscription, of which there were 2 in 1900.

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[1] As in previous Chapters,the terms mentally deficient and mentally handicapped are used interchangeably.

f) Department for Criminal or State Patients in the Central Prison at Carstairs, which catered for under 100 patients.

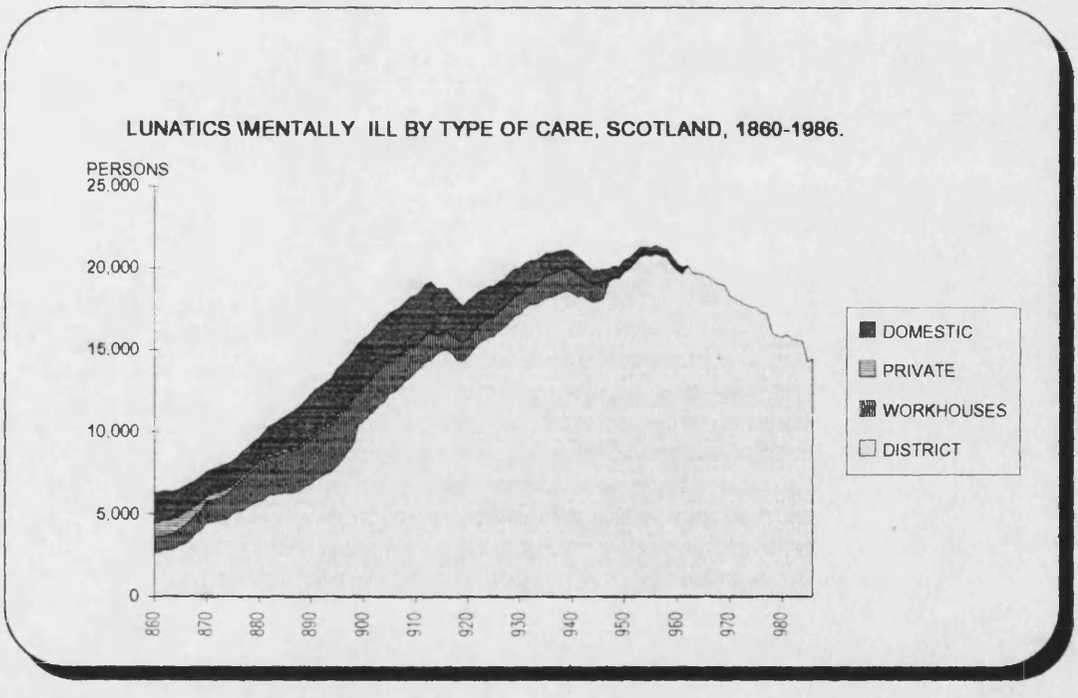
g) Private Asylums, of there were three in 1900.

(General Board of Control,1938).

Total Number Under Care

The total numbers of persons of unsound mind in Scotland by type of institution between 1860 and 1985 are shown in Figure 6.1 (and Tables B.1,B.2 and B.3, Appendix 2). Looking first at the total numbers of lunatics (later mentally ill persons), the pattern was broadly similar to that of England & Wales. The total number of lunatics in care in Scotland tripled from around 6,000 in 1860 to 20,000 by 1900. It fell from a peak of just under 20,000 in 1914 during World War I, and rose to a second peak in 1939 before falling again. The upward trend resumed from 1945, peaking in the mid-1950s at around 22,000, after which the numbers in care fell steadily for the next three decades to reach 14,000 in 1985 or around two thirds the 1955 level.

FIGURE 6.1



The Board of Control for Scotland ceased publication of their annual reports in 1938, only resuming between 1954 and 1962 but without providing data for the

interim period. However, as discussed in Appendix 2, data on the number of 'Persons of Unsound Mind' (certified lunatics) were published in the Statistical Abstract of the UK (HMSO, various years) and these data have been supplemented in Figure 6.1 by interpolated estimates of the (relatively small) number of voluntary inpatients between 1940 and 1950.

District Asylums

The District and Royal asylums became the dominant institutions, with the total number under care rising in parallel with the number of places in these institutions, which accounted for 50% of all places in 1860, rising to 70% by 1900 and some 80% in 1914. In the post-World War I period, despite the slow-down in the total number of lunatics in care, the share of these asylums continued to increase, reaching 90% by 1939.

Under the NHS, the former District & Royal lunatic asylums, renamed mental hospitals, accounted for virtually all the places available, although there was an expansion of specialist units attached to District General and Teaching hospitals.

Workhouses

As in the other countries, the workhouses were the second largest providers of places for the mentally ill, but uniquely in Scotland, their position was challenged by the importance of 'boarding out'. From the 1860s, the workhouses provided places for around 1,000 persons of unsound mind, a number which expanded to around 2,500 during the 1880s only to contract during the early 1900s to just over 1,000, a level at which they remained through to the late 1930s. There were two types of care provided in workhouses: the licensed and unlicensed wards. The licensed wards (also called Parochial Asylums) were lunatic wards licensed by the Board to receive pauper patients suffering from all forms of insanity. Unlicensed lunatic wards of workhouses were those wards set aside for lunatics who were regarded as incurable and harmless.

'Boarding-out'

The number cared for in private dwellings ('domestic' in Figure 6.1), whether by relatives or strangers, varied from 1,500 to 2,000 between 1858 and 1875 (25% and 20% of all lunatics, respectively), and rose to some 2,500 (16%) in the period 1900-14 before declining to 1,500 (7%) by 1930 and to around 1,000 by 1940 (5%). The popularity of this type of care was partly a result of policy. As discussed in Chapter 4, the Scottish Board of Lunacy had been influenced by the example of Gheel and had extended the capitation grant to such patients from 1875. Prior to 1875 this sector was rivalled in size by the private asylums, as shown in Figure 6.1 but the application of the capitation grant to the boarded-out sector may have assisted its growth thereafter. The number boarded-out peaked in the early 1900s and declined in the post-World War I period. The Board of Lunacy, in reviewing the reasons for this decline, suggested that it resulted from the relative fall in the value of the capitation grant which had remained fixed in nominal terms after 1890 (Report of General Board, 1938).

Private Asylums

Privately provided care played a small part in lunacy provision in Scotland, as discussed in Appendix 2. Although around 4% of all care was provided by the private asylums in 1870, this fell to under 1% in 1880 and remained well below that level thereafter. There was only one small private nursing home in the post-NHS period. However, as in England & Wales, privately financed patients were catered for in the District and Royal asylums, as discussed further below.

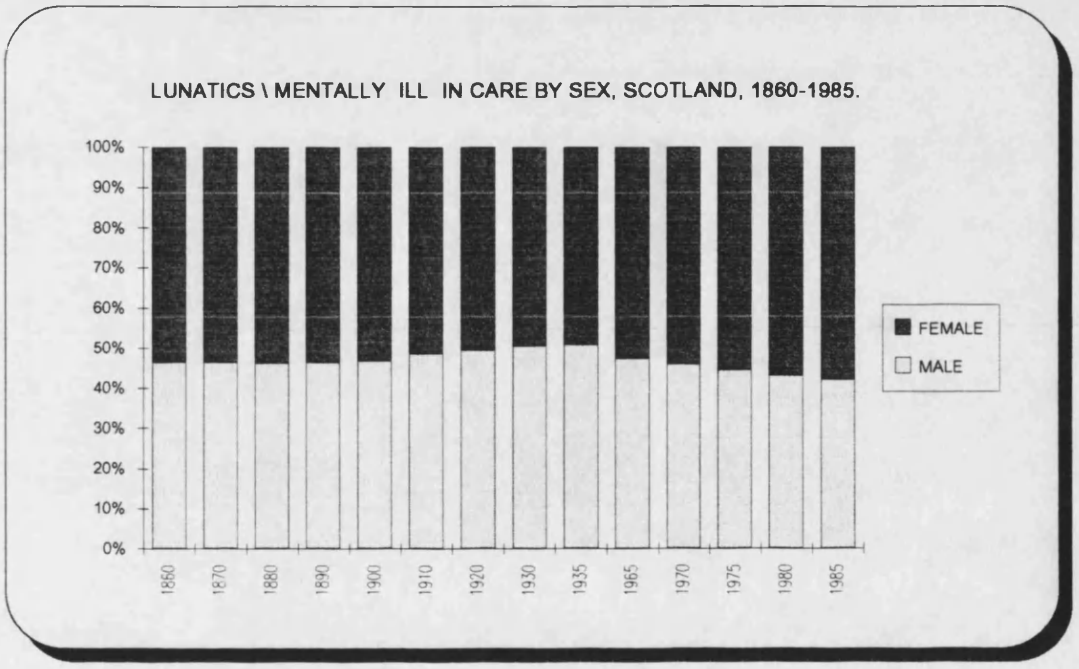
'Lunatics at large'

The vast majority of the insane up to 1960 were certified and institutionalised, as in England & Wales. Occasional references to the numbers of uncertified lunatics were made by the Board of Lunacy, who suggested (General Board of Lunacy, 1869) that there were some 2,000 uncertified lunatics at large. The Census of Population, which provided the main data on this group, showed that 81% of all lunatics were in institutional care in 1861, a proportion that rose to 95% by 1891 and 96% by 1911 (see Appendix 2).

Sex

As in England & Wales, females made up a majority of the lunatics in care. The balance between the sexes, as shown in Figure 6.2 (Table B.3, Appendix 3), indicates that females accounted for 52% of all inmates in 1861, declined between 1920 and 1935 but rose again to reach 54% by 1967 and 57% by 1981.

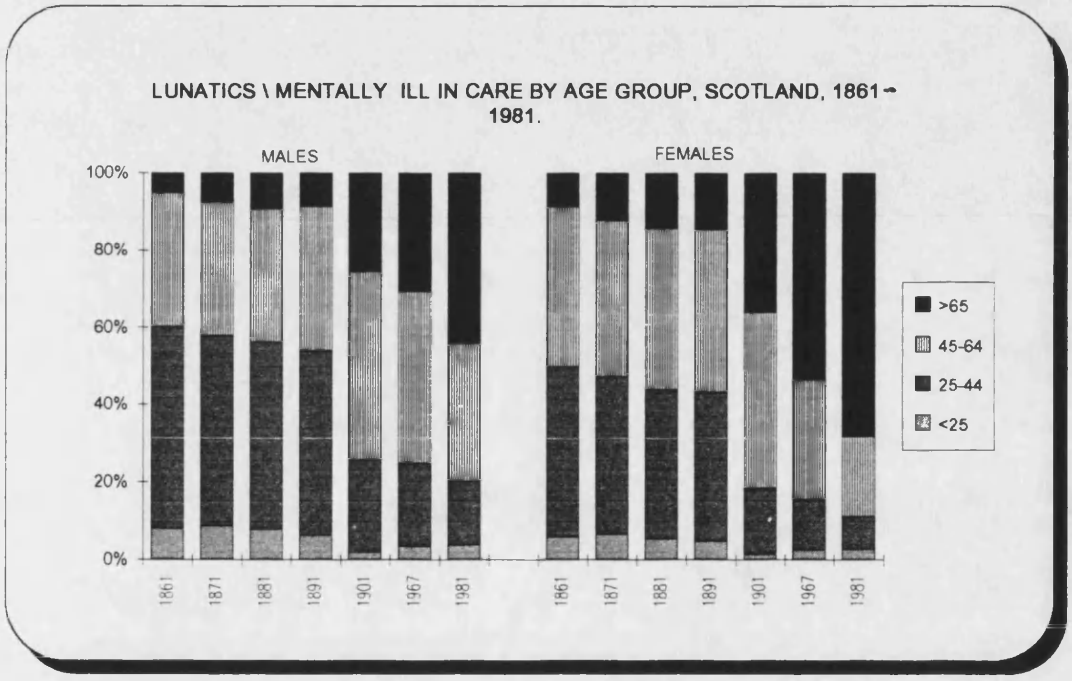
FIGURE 6.2



Age

As with England & Wales, although the Board of Lunacy published few data on the ages of those in care, such data are available from the Census of Population. As shown in Figure 6.3 (and Table B.4), the proportion of inpatients who were aged over 65 grew rapidly, particularly towards the end of the nineteenth century. 5% of males and 9% of females were aged over 65 in 1861, rising to 9% and 15% by 1891, proportions which jumped to 26% and 36% respectively by 1901. In 1967 the proportions were 31% and 54%, rising further to 44% and 68% in 1981.

FIGURE 6.3



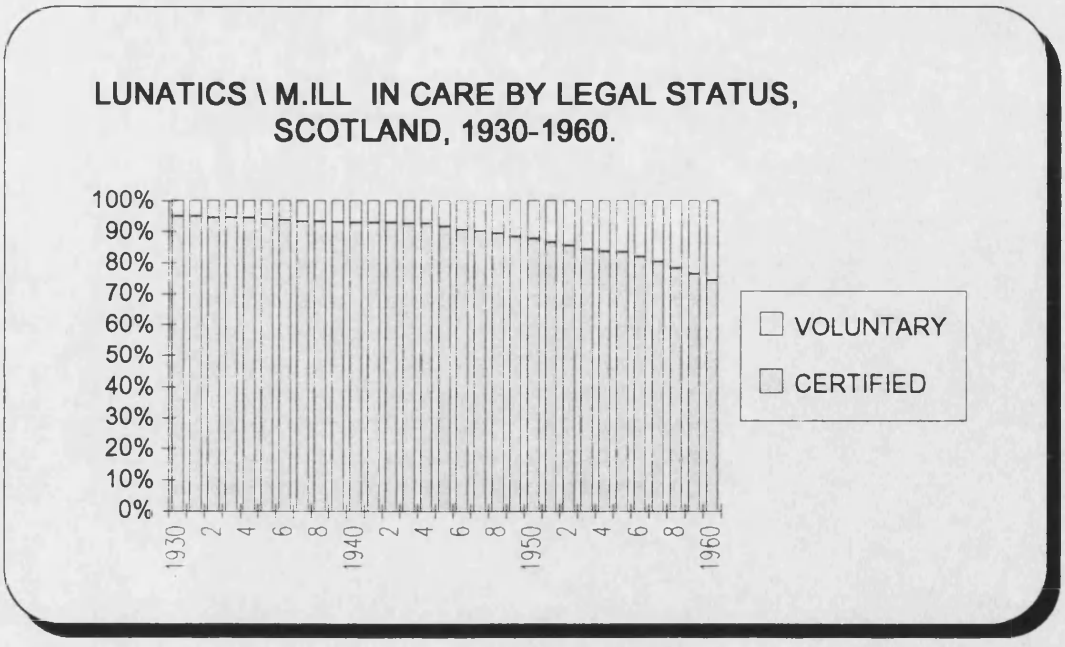
Public Private Mix

Paupers, who were publicly funded, accounted for around 85% of all the lunatics in care throughout the period. Privately financed inpatients tended to be treated in the public asylums, particularly the Royal asylums, which had been private voluntary hospitals prior to 1858. As in England from 1867, private patients were accepted on a fee-paying basis, and the proportions of such fees in total receipts are considered below.

Legal status

The breakdown of patients in care by legal status, as shown in Figure 6.4 (and Table B.5), indicates that despite the facility for voluntary admission, relatively few inpatients were in this category. 1% of inpatients were classified as voluntary in 1916, rising to 5% by 1930, 7% in 1939 and 16% by 1950. As in England & Wales, the rapid growth in share of voluntary patients occurred in the early 1960s -to 21% in 1955, 35% in 1960 and 89% in 1962.

FIGURE 6.4

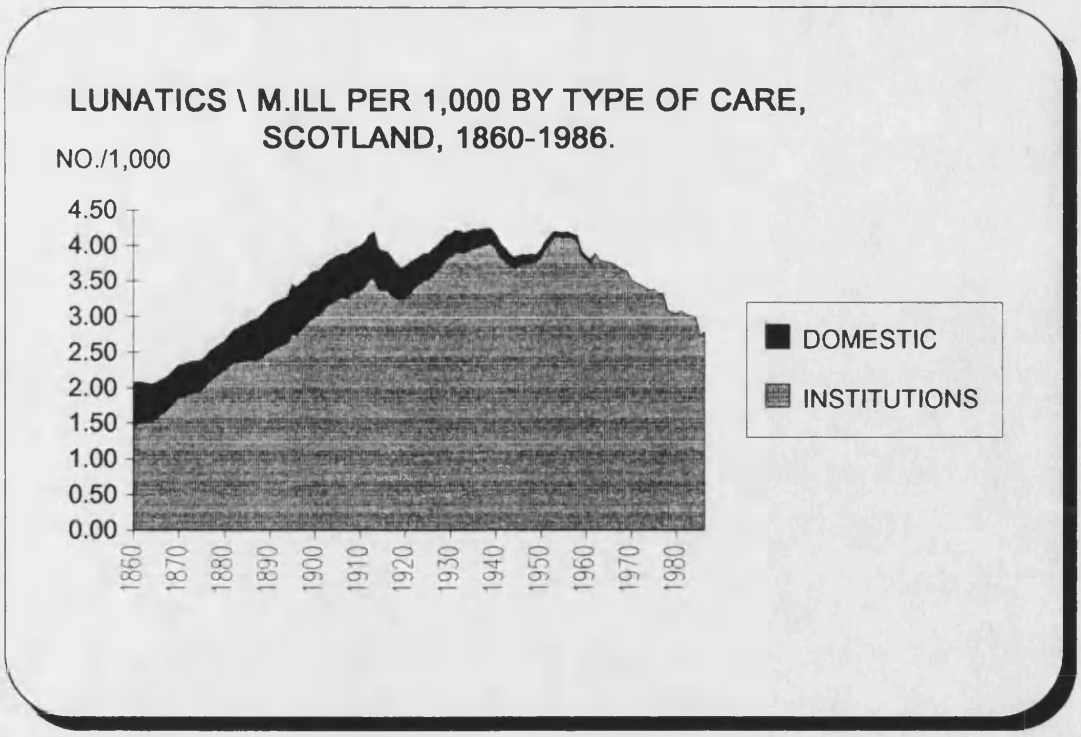


Number in care per 1,000 population

The ratio of psychiatrically ill persons to population is shown in Figure 6.5 and Table B.6 (excluding the mentally deficient) both in total for those in institutional care. The ratio for all psychiatrically ill per 1,000 population rose from 2.0 per 1,000 in 1860 to 3.5 in 1900.

This ratio peaked at 4.0 in 1914, as in England & Wales, declined during World War I[1] and recovered immediately afterwards to peak again in the late 1930s at 4.3. After a fall during World War II, it peaked again at 4.2 in 1954 before commencing a long-term slow decline to 3.8 in 1960, 3.6 in 1970, 3.0 in 1980 and 2.8 in 1986. Although non-institutional care accounted for a significant share of all care up to 1914, it declined sharply thereafter. The decline in the proportion of the population in psychiatric inpatient care after 1955 was much slower than was the case in England & Wales.

FIGURE 6.5



[1] As no data were published on the number of voluntary inpatients between 1938 and 1950, they have been interpolated as discussed in Appendix 1.

Mentally Handicapped

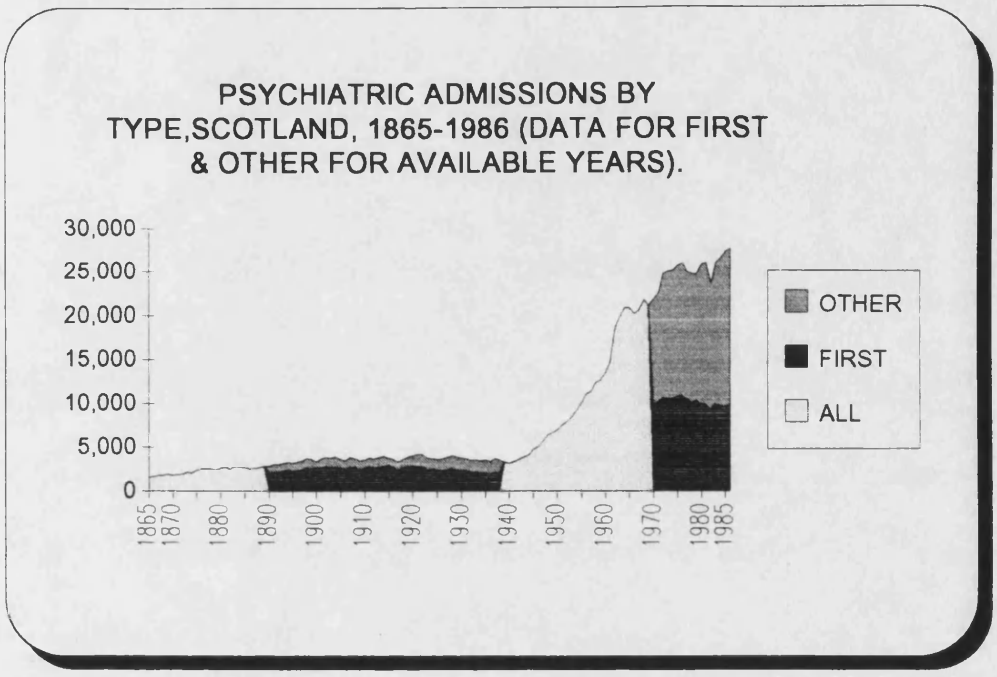
As discussed in Appendix 2, very few of the mentally handicapped were in care in Scotland. According to the Census of Population, no mentally handicapped were in institutions in any of the decennial censuses between 1861 and 1901, and 7% were so recorded in 1911 (HMSO, various years). Some of those who were boarded-out may have been mentally deficient, however, but no data exists with which to make estimates.

Admissions

Data on all admissions are available from 1858 and on first admissions from 1890 (based on new additions to the Register)[1]. Although there was a break in the data published by the General Board of Control between 1938 and 1954, Smith & Carstairs (1966) published a series showing total admissions during these years, based on unpublished Board of Control data. No data on first admissions are available between 1938 and 1965, and an annual series is available only from 1970. As shown in Figure 6.6 and Tables B.7 and B.8 (which distinguish first and other admissions where possible), the pattern of admissions followed that of England & Wales, in that the number of total admissions remained fairly steady up to 1938, and then rose sharply, with the data for the 1950s showing a three-fold increase, after which it doubled again in a decade and continued to rise thereafter.

[1] As shown in Appendix 2, new additions to the Register almost exactly matched first admissions during the period 1890-1938, during which both series were published.

FIGURE 6.6



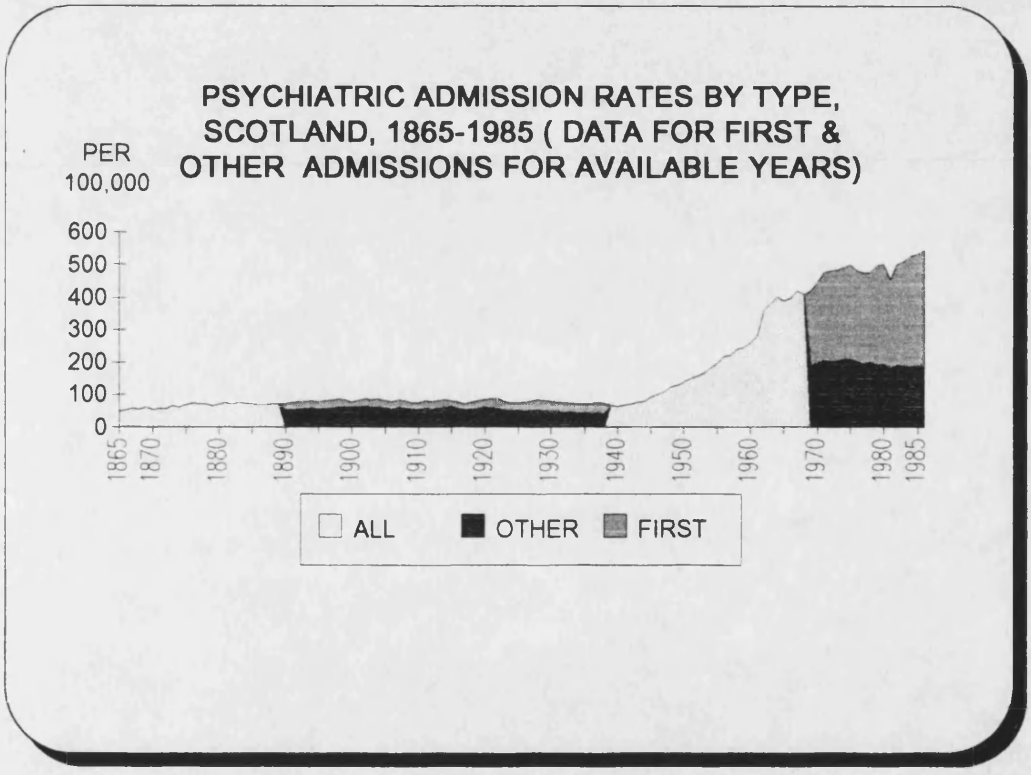
First admissions showed a similar pattern, remaining virtually unchanged up to 1938, with a sharp five-fold increase between 1938 and 1965 after which the number peaked in 1971 and fell slightly thereafter.

Total admissions rose from around 1,500 in the period 1858-1866 to reach 2,600 by 1880, and 3,000 by the 1890s. Peaking in 1903, the total declined slightly before peaking again in 1914. Admissions fell during World War I, rose again temporarily in 1921-3, but fell back to around 2,500 during the 1920s and 1930s. No data are available for the period 1938-53, but the 1954 figure represents a three-fold increase on 1938 to 8,500. This total doubled by 1963 to 18,000 and continued to rise to reach 22,000 by 1970 and 26,000 by 1980. The drop in 1979 may reflect industrial action in the NHS. The 1987 total was 28,000.

First admissions, as noted above, followed the same pattern, accounting for almost all admissions up to 1938 (2,030 admissions) and then jumping to 9,400 in 1965 and 9,800 in 1970, thereafter, peaking in 1976 at just under 11,000 and falling from then to 10,000 in 1980 and to 9,670 in 1987.

Expressing these admission data as rates per 100,000 population, as in Figure 6.7 (see Tables B.7 and B.8), reproduces the shape of Figure 6.6, indicating that the effect of population change was relatively small. The total admission rate increased by a factor of around 6 between 1945 and 1976. The first admission rate jumped five-fold between 1938 and 1965 and remained fairly steady at around 200 per 100,000 persons between 1965 and 1987, with a peak at 210 in 1976 and to 190 in 1987. Virtually all admissions were first admissions up to 1938 but the faster rise in total compared to first admissions reduced the share of first admissions to around 30% by 1987[1].

FIGURE 6.7

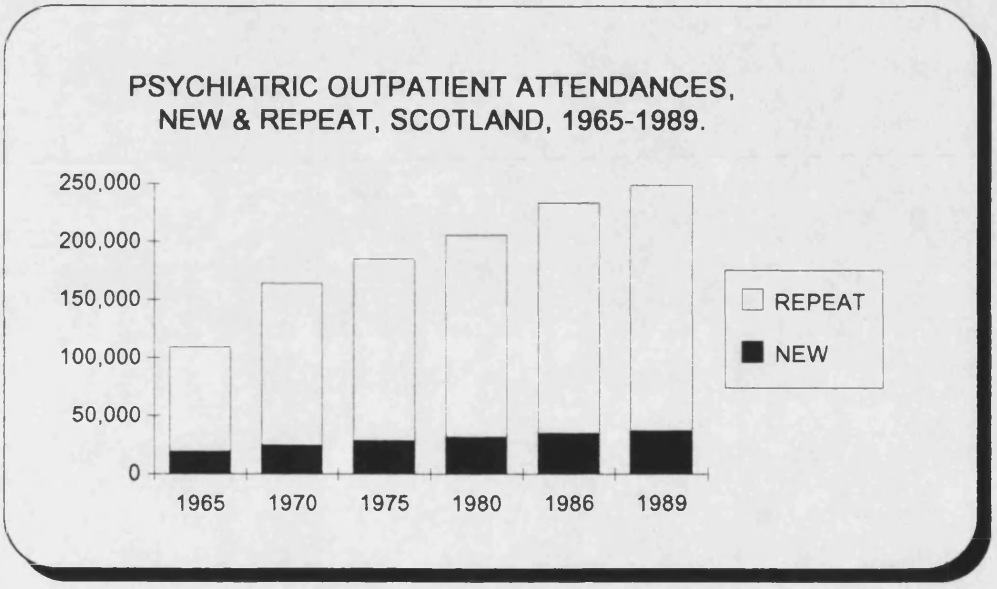


[1] Fewer admissions were certified than was the case with residents - 68% of admissions were certified in 1938 compared to 93% of residents. The proportion of admissions who were certified fell to 31% in 1954 and 14% in 1963, according to the reports of the General Board of Lunacy for these years.

Outpatients

Outpatient services expanded rapidly in the post war period, particularly from the mid-1960s as shown in Figure 6.8. No data have been located for the period prior to 1965, but the growth from that year has been dramatic, with a doubling in both first and non-first attendances. First attendances rose from 20,000 in 1965 to 40,000 in 1989 and total attendances from 160,000 to 260,000 in the same period (see Table B.12).

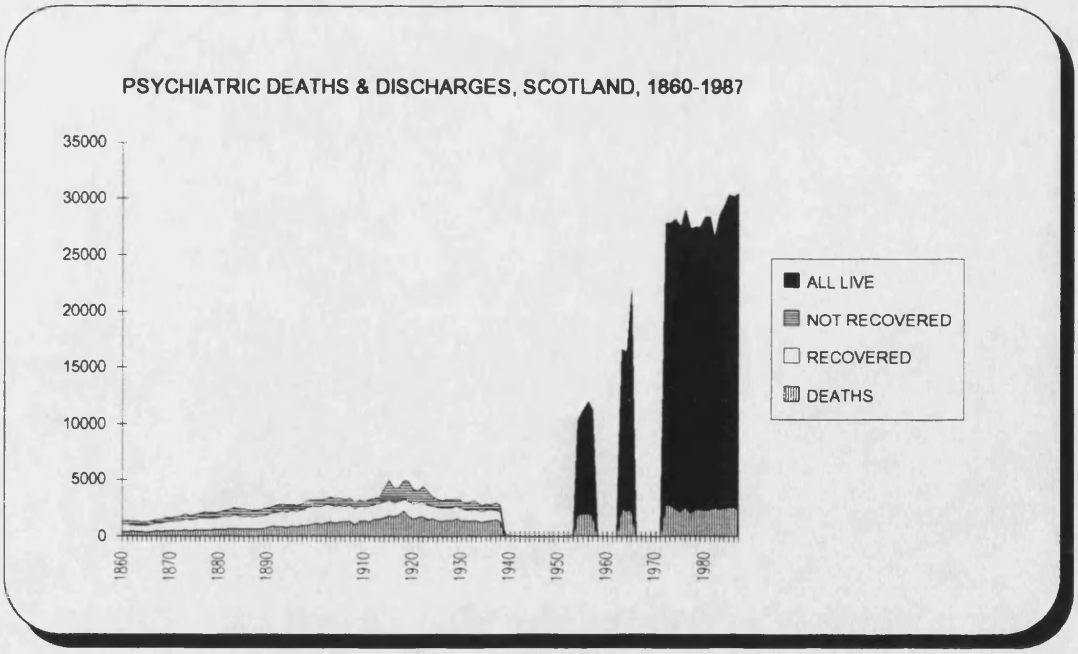
FIGURE 6.8



Discharges and deaths

Data on discharges by the three main types ('Recovered', 'Not Recovered', 'Dead') are shown in Figure 6.9 (and Tables B.9 and B.10), which indicates that deaths were the major component in the pre-World War I period, that is 1858-1914. As with England & Wales, total discharges grew slowly to 1938, from under 2,000 in 1880 to a peak of around 5,000 in 1914 and falling back to around 3,000 to 1938. There was a rise in all discharges in the war period, 1914-8, mainly accounted for by discharges "not recovered" as asylums were taken over for military use and also by deaths in the influenza epidemic of 1918. Overall the pattern of deaths and discharges mirrors that of total admissions with a big increase in the 1950s compared to the 1930s, but with a net inflow up to 1955 after which a net outflow commenced. The number of deaths remained largely unchanged, after a peak in 1918 due to the influenza epidemic. However, given the changing age structure of the inpatient population, adjustment for age and sex is necessary if mortality rates of inpatients are to be compared with those of the general population.

FIGURE 6.9



Note to Figure 6.9: No data published 1939 to 1954, 1958 to 1962 and 1964 to 1970.

Live discharges rose by a factor of around 13, from around 2,000 per annum in the late 1930s to some 26,000 per annum in the 1980s. The breakdown of discharges

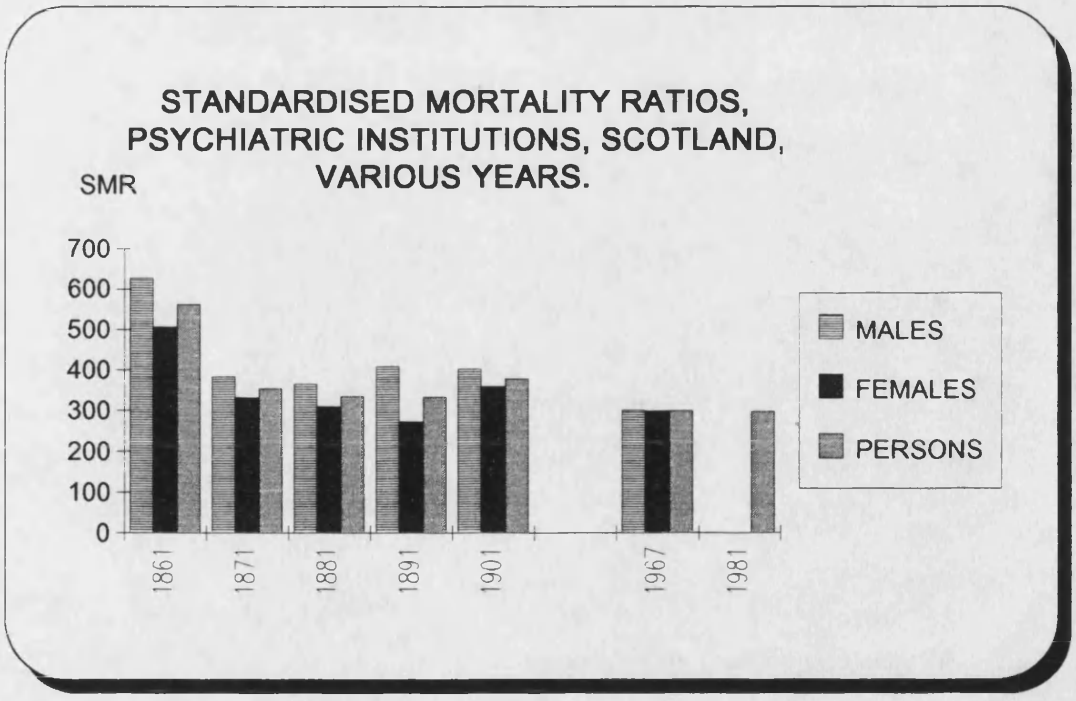
by "recovered" or "not recovered" was discontinued in the 1950s. As with total admissions, live discharges fell temporarily in 1979.

Standardised Mortality Ratios (SMRs)

Standardised Mortality Ratios (SMRs) for the District Lunatic Asylums in England & Wales were shown to be relatively high and the picture for Scotland was no different, as shown in Figure 6.10 (and Table B.11) , which is based largely on Census of Population data on the age profile of inmates of psychiatric hospitals between 1861 and 1901, with additional data for 1967 and 1981.

SMRs of between 300 to 400 applied in the period 1870-1901, which represented an improvement on the very high figure of over 600 for females and around 500 for males in 1861. The requisite data to estimate SMRs for the period 1901 to 1966 have not been located (see discussion in Appendix 2), but the ratios for 1967 and for 1981, as shown in Figure 6.10, indicate that SMRs of around 300 have persisted. The 95% Confidence Intervals, which are of the order of plus or minus between 5% and 10%, indicate that the likelihood of these high values being due to chance is negligible (see Appendix 2, Table B.11).

FIGURE 6.10



Section 2

Expenditure Data

Current Expenditure

The various series on current expenditure, which for Scotland are complex, are discussed in greater detail in Appendix 2 with data in Tables B13, B.14 and B.15.. This complexity resulted from the fact that lunatics and lunatic asylums were not fully funded by the Local Authorities until 1930, so that a Mitchell-and-Deane type series, (although published in their *Abstract of Historical Statistics*, 1968), is of little use. Funding of the maintenance of pauper lunatics and of the running costs of the District asylums was met from local taxes, supplemented by the imperial grant and by fees. Up to 1914, funding was entirely via the Poor Rate, after which it was shared equally with the Local Authorities up to 1930 after which the latter took complete responsibility after the 1930 Local Government reorganisation.

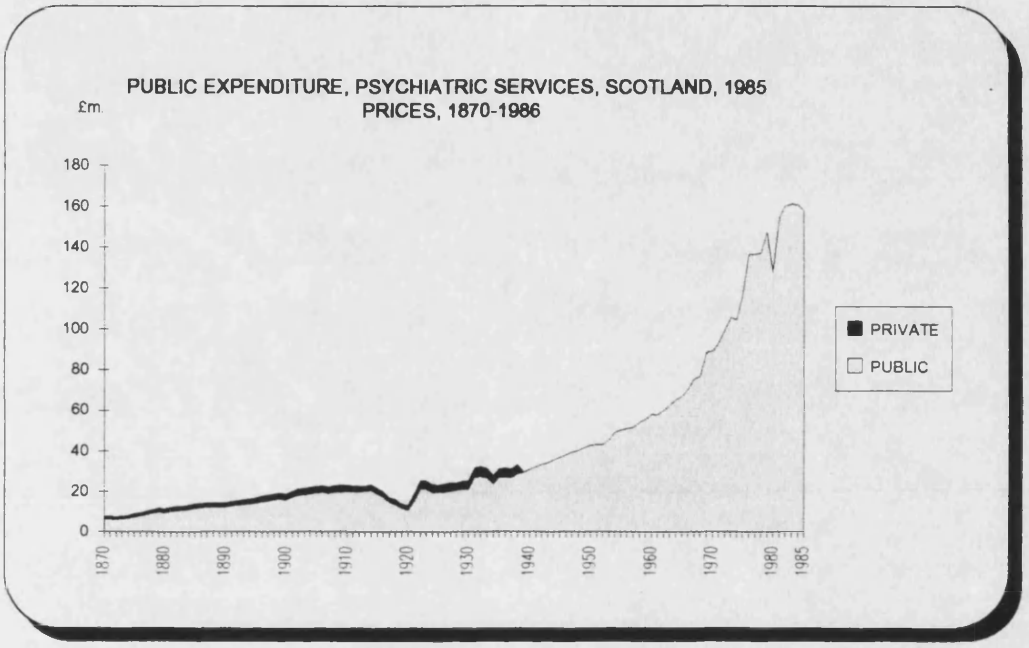
The best series on current expenditure (see Appendix 1 for discussion of the alternatives) appears to be one based on that of the Lunacy Commissioners for the period 1858-1938 covering spending on the maintenance of Pauper Lunatics in a range of institutions, including District Lunatic Asylums, Workhouses and "Boarded-Out".

This series, as used below, has been grossed up to include the following:

- full public sector current costs as opposed to expenditure on pauper lunatics, using a grossing up factor of 25% based on the estimated costs of buildings and repairs,
- the costs of certified non-pauper lunatics, based on the number of certified non-paupers, assuming equal unit costs, and
- the costs of voluntary inpatients, which have been combined with non-pauper certified lunatics in Figure 6.11 due to the relatively small number involved.

The series for total and public expenditure lay close to each other, due to the small size of the private sector, as shown in constant prices [using the GDP deflator for the UK] in Figure 6.11 (see also Table B.15).

FIGURE 6.11

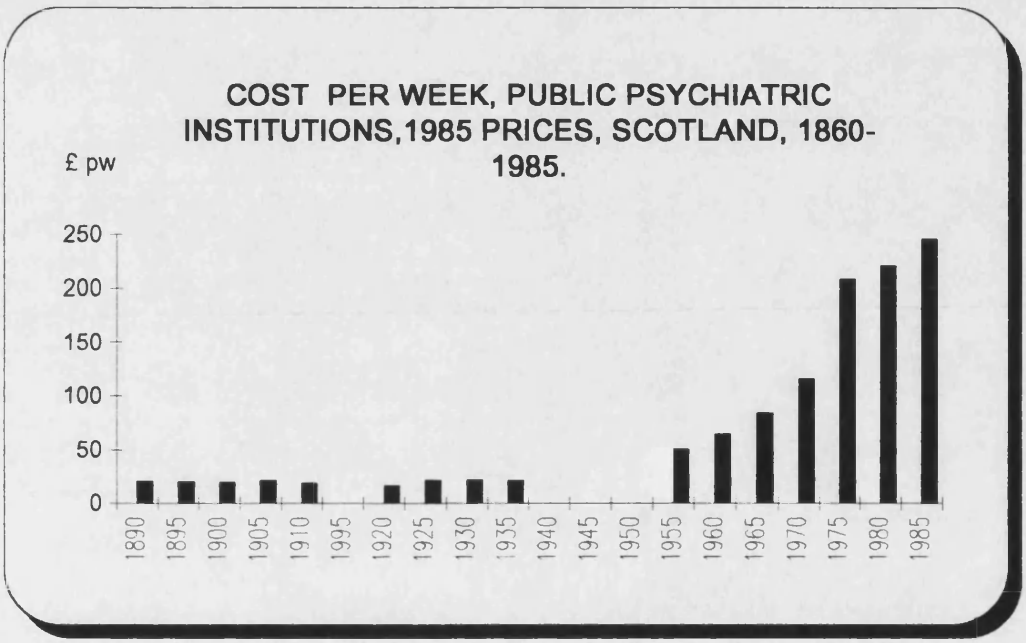


From 1951, only NHS spending is shown, as the privately financed sector was very small. Expenditure rose and fell with inpatient numbers from 1870 to 1938 - from £8m. in 1870 to £19m in 1900 before falling during the war to £13m in 1920 and recovering to £25m. in 1930 and £33m in 1938. Although no data are available between 1938 and 1950 (interpolated data were employed in Figure 6.11), NHS expenditure from the latter date showed a strong upward trend despite the fall in inpatient residents from 1955, rising from £43m. in 1951 to £58m. in 1960, £89m. in 1970, £128m. in 1980 and £168m. in 1987. This pattern is similar to that observed for both England & Wales, discussed in the previous chapter.

Unit Costs

The data on unit costs, that is on maintenance (or revenue after 1950) cost per inpatient per week, all in constant 1985 prices, are shown in Figure 6.12 (and Table B.16). The cost of keeping a patient in a lunatic asylum remained around £20 per week in 1985 prices between 1870 and 1935, with only minor changes. No data are available for 1935 to 1945.

FIGURE 6.12



By 1955 the (slightly more widely defined) unit cost had jumped to £51 per week, and doubled again by 1970 to £116. A further rise took unit costs to £221 in 1980 and £246 by 1985.

The evidence of rapid rises in unit costs in the period from 1955 parallels the pattern for England & Wales. The reasons for this and its implications are explored in Chapter 8.

Capital costs, Loan charges and Indebtedness

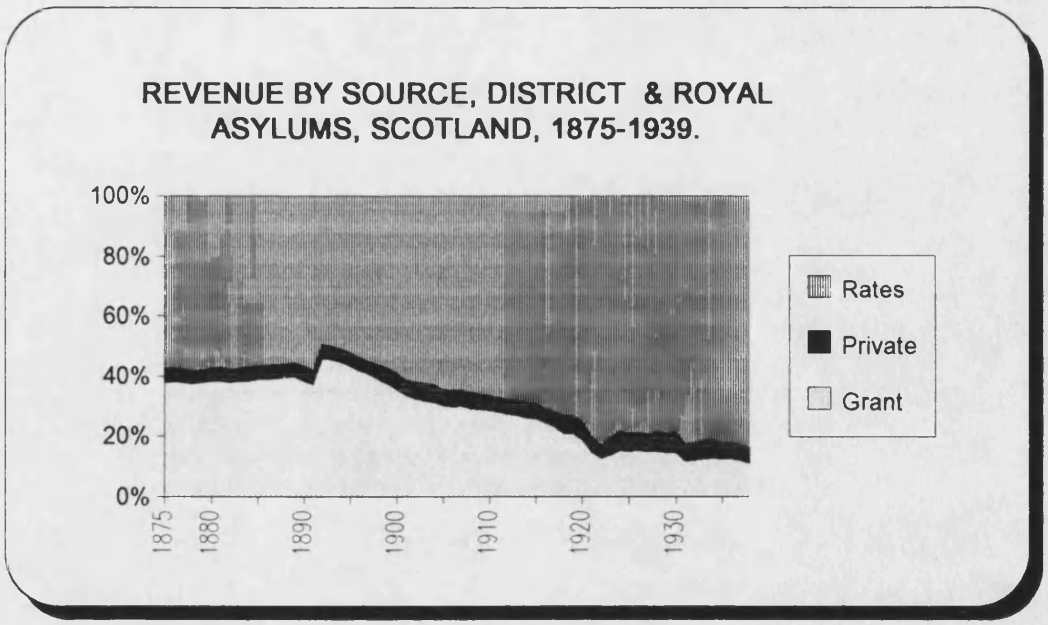
Capital expenditure data are available from 1890 to 1948. As shown in Table B.17, real expenditure (in 1985 prices using the GDP deflator) showed considerable fluctuation.

Spending rose from around £5m. in 1890 to around £14m. in 1904 before declining to under £3m. for most subsequent years, and falling to close to zero during World War 1. During the 1920s and 1930s, spending remained low but jumped to around £7m. in each of 1936 and 1937. As with England & Wales, although no data on capital spending on mental illness were gathered under the NHS, the levels probably remained low.

Sources of Revenue.

Data on the sources of income of the authorities responsible for public expenditure on lunacy are available from 1875 when the 'Four Shilling Grant' was introduced, as shown in Figure 6.13 (and Table B.18), which charts the contribution of both the imperial grant and of payments from private patients.

FIGURE 6.13



Capitation payments accounted for around 40% of revenue between 1875 and 1890 when local government reforms replaced capitation [1]with a grant fixed at £115,000 per annum. While this fixed grant initially accounted for over 50% of revenue, its failure to adjust with inflation led to a steady drop on its share of revenue. By 1920 the fixed grant amounted to only 10% of revenue and despite a rise as the grant was increased, it remained a minor source of revenue until it was abolished in 1930.

Private contributions to the maintenance of non-pauper or pauper lunatics remained low in Scotland, as shown in Figure 6.13 Private receipts amounted to around 5% of total receipts between 1875 and 1939. The share of fees was thus considerably lower than in England and Wales, where they accounted for up to 20% of revenue in the 1930s. In part, this may have been due to the fact that receipts from private inpatients in the Royal asylums would not have shown up in these accounts.

Debt

Net indebtedness data are available for the period 1917 to 1948. As shown in Table B.16, Appendix 2, in real terms (1985 prices), net debt fell from around £40m. in 1917, to under £20m. between 1920 and 1930. It subsequently rose steadily to over £40m. by 1940, and had fallen back to close to £20m. by 1948.

Given that the Royal asylums had been built out funds donated for philanthropic purposes, one might expect the ratio of loan charges to current public expenditure to be low. This ratio never exceeded 10%, falling from 9% in 1885 to 8% by 1900, 6% by 1920 and 3% by 1930 (Table B.16, Appendix 2).

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[1] The Imperial Grant amounted to 37% of Parochial Boards expenditure on pauper lunatics when it was introduced. This share increased to a peak of 46% by 1891 when it was set as a fixed amount of £115,000 each year by the 1889 Local Government Act (53rd Report of the General Board of the Commissioners for Lunacy in Scotland,p. lxii , 1911).
Thereafter its share fell to 34% by 1900, 28% by 1910, and it fell sharply after the War to 15% by 1920 and 13% by 1933, the last year for which data were provided before it was swallowed up by the block Local Authority grant.

Conclusions

The broad conclusion is that developments in Scotland were similar to those in England & Wales. Inmate numbers had the same peaks (before each war and in the mid 1950s) and troughs (during each war). Since the peak in 1955, however, the ratio of psychiatric inpatients per 1,000 population has fallen less rapidly in Scotland than in England & Wales. The decline has been around one third for the mentally ill, compared to around two thirds in England & Wales.

The age profile of inpatients has shifted dramatically, with over 50% aged over 65 in each of 1981, compared with under 10% in 1861. Slightly more females than males have been resident inpatients throughout the entire period.

The extraordinary rise in admissions, both total and first, whether expressed in numbers or rates, also parallels that in England & Wales, with dramatic post-World War II increases of orders of magnitude of five and more. These increases have continued with regard to total admissions but first admissions levelled off during the 1970s.

Mortality, as measured by Standardised Mortality Ratios, was relatively high in the Scottish lunatic asylums between 1861 and 1901 with SMRs of 300 and over. These high SMRs have persisted, as indicated by the values for 1967 and 1981, each of which were close to 300. The 95% Confidence Intervals for these estimates are relatively narrow, so that the possibility of these high values being due to chance is remote. Again, this pattern is similar to that in England & Wales.

Current expenditure matched inmate numbers up to the mid 1950s, but continued to rise thereafter despite the fall in inmates. As a result, unit cost exploded, rising by a factor of five between 1953 and 1985. Once again, such increases parallel the pattern in England & Wales.

Only fragmentary data are available on capital spending, but these too indicated wide swings from year to year, as was the case in England & Wales.

Net indebtedness data are available only from 1917 to 1948. In real terms, debt also showed considerable fluctuations, peaking at around £40m. in the early 1900s and again in 1940. By 1948, however, it had fallen by half, a decline which was also observed in relation to England & Wales.

Sources of revenue were less reliant on the imperial grant and on fees from private patients in Scotland than in England & Wales up to 1890. The failure to adjust the grant for inflation, fixed at £115,000 per annum in 1890, led to its decline as a source of revenue. The contribution of fees was also small in Scotland, due perhaps in part to the role of the Royal asylums. Against this, the ratio of loan charges to current expenditure was reduced by the fact that the capital costs of the Royal asylums were covered by philanthropic funds.

CHAPTER 7

IRELAND'S PSYCHIATRIC SERVICES: ACTIVITY AND EXPENDITURE TRENDS

Introduction.

The position for Ireland is complicated by the fact of partition in 1920 of the 32 counties into two States, the 26 County southern State and the 6 County N. Ireland State. This chapter deals with each of these entities in successive parts, with part 1 dealing with the 32 Counties up to 1920 and parts 2 and 3 examining the trends in the 26 and 6 County States respectively up to the late 1980s. As with earlier chapters, each part is divided into sections dealing with activity and finance. The main trends are presented graphically with the supporting data in Appendix 3.

Part 1.

Mental Illness Activity and Expenditure in Ireland to 1920

Section 1.1 Activity Data

The reports of the Inspectors of Lunacy[1] provided data on the number of inpatients in institutions of the various kinds each year and are summarised in Figure 7.1 (and Table C.1, Appendix 3). The range of types of care covered include :

* District and Auxiliary Lunatic Asylums,
* Workhouses,
* Central Criminal Asylum,
* prisons, and
* single Chancery patients.

[1] Inspectors of Lunacy were established in the 1840s and published annual reports up to 1919, which are available in the British Parliamentary Papers.

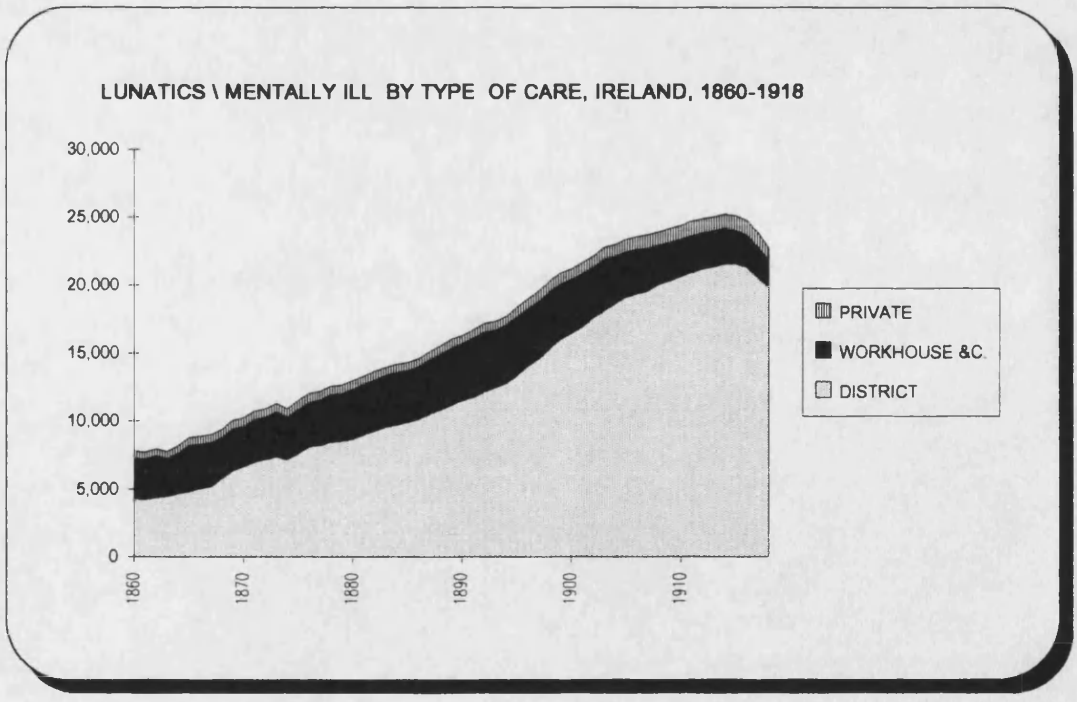
Total Number in Care

The total number in institutions grew sharply over the period, as shown in Figure 7.1, following broadly the same pattern as in England & Wales. The total doubled between 1860 and 1880 and rose by half again by 1900; from 7,800 in 1860, 13,000 in 1880, and to 21,200 in 1900. As with the other countries, the number peaked immediately before World War 1, at just over 25,000 in 1914, after which it fell to 23,800 in 1917. The factors associated with this decline are examined below.

District and Auxiliary Lunatic Asylums

As in England & Wales and in Scotland, the publicly provided lunatic asylums gradually increased their share of total provision: making up 55% of all places in 1860, 67% by 1880, 78% by 1900 and 87% by 1918. From Figure 7.1, it can be seen that the growth in the total number of lunatics detained was due entirely to the expansion of the District Asylums.

FIGURE 7.1



Workhouses

The other main institution was the workhouse, which as in other countries catered for some lunatics as well as the mass of destitute persons. The number of lunatics in these institutions grew too but less sharply, so that the share of all places accounted by the workhouses fell with most of the decline taking place between 1900 and 1918. The actual number rose from 2,500 in 1860 (or 32% of all places), to 3,500 by 1880 (27%), and 3,800 by 1900 (18%) before falling to 1,900 by 1918 (8%).

Criminal Asylum

The number in the Criminal asylum in Dundrum varied between 100 and 200 over the period, and although several hundred lunatics were detained in prisons in the period up to 1867, this number dropped sharply due to the legislation of that year (see Chapter 4). In Figure 7.1, the number in prison and those in Dundrum have been amalgamated with those in workhouses as otherwise the total numbers are too small to show in graphical format. The actual number is shown in Table C.1, Appendix 3.

Privately Cared For

The number of single chancery patients, about which data were published from 1880, remained small, rising from just under 100 in 1900 to 149 in 1913. Chancery patients have been amalgamated with private provision in Figure 7.1 but the actual number each year is provided in Table C.1 in Appendix 3.

Mental Deficiency[1]

UP to 1882, the Inspectors of Lunacy published data on the number of 'Idiots and Imbeciles' in the District asylums and up to 1918 on the number in the Poorhouses, as shown in Table C.2, Appendix 3. While almost all insane received institutional care, only a small proportion of the mentally deficient did so in Ireland. Of those that did, the

[1] As in the other chapters, the terms mentally deficient, idiots and imbeciles and mentally handicapped are used interchangeably, generally in line with the period under discussion.

workhouses provided the bulk of that care, so that around 50% of all workhouse lunatics were mentally deficient. around 10% of the inmates of the District asylums were so-classified. These data have been used below to calculate the treated prevalence ratios and to gross up for expenditure on psychiatric illness.

Public and Private Patients

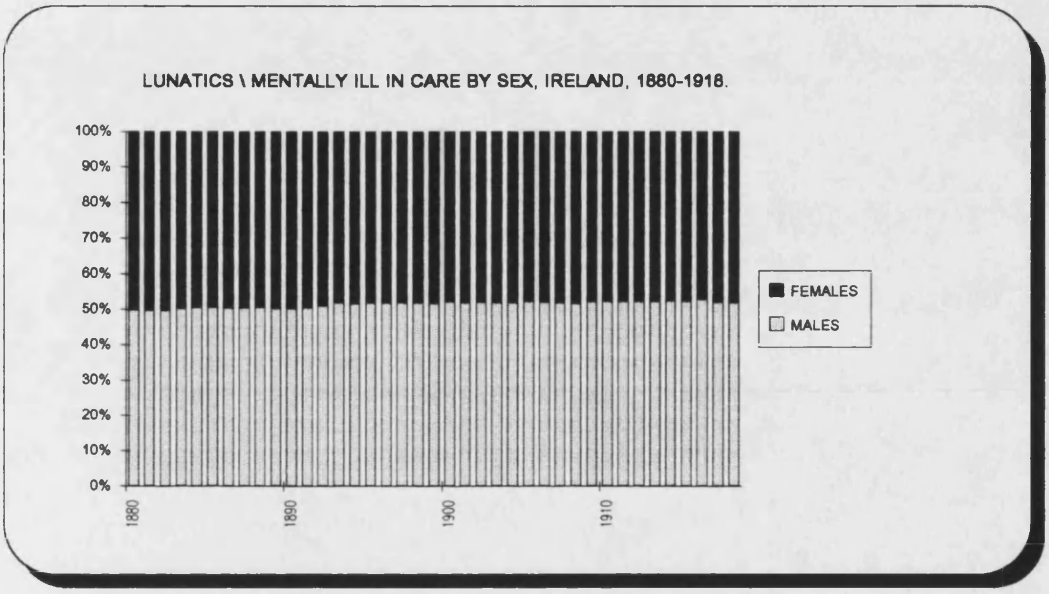
The division between pauper and private lunatics was more clearly drawn in Ireland than in the other countries in that relatively few inmates of the District Asylums were privately financed. The proportion of fee-paying patients remained around 2% in the period 1860-1880 and later fell to under 1%, probably for reasons to do with the legal status of commitment to these asylums, as discussed in Chapter 4. There was a running debate over whether or not the lunatic asylums were legally entitled to take such private patients under the 1821 Act (Second Report on Lunacy Administration in Ireland, Section 9, 1891). The bulk of committals to District and Auxiliary asylums were as 'dangerous lunatics' which attracted full state funding.

Only a small proportion of total places for persons of unsound mind were provided by privately owned hospitals or licensed houses - less than 5% through the period under consideration, as shown by Figure 7.1 (and Table C.1). Similarly, there were very few fee-paying patients in the public asylums (contributions from such fees are examined below under sources of revenue).

Sex

Overall, there was a slight but persistent majority of males in Irish psychiatric institutions over most of the period to 1920, as shown in Figure 7.2 (and Table C.3). This imbalance was more marked in the District Lunatic Asylums than in the other institutions.

FIGURE 7.2



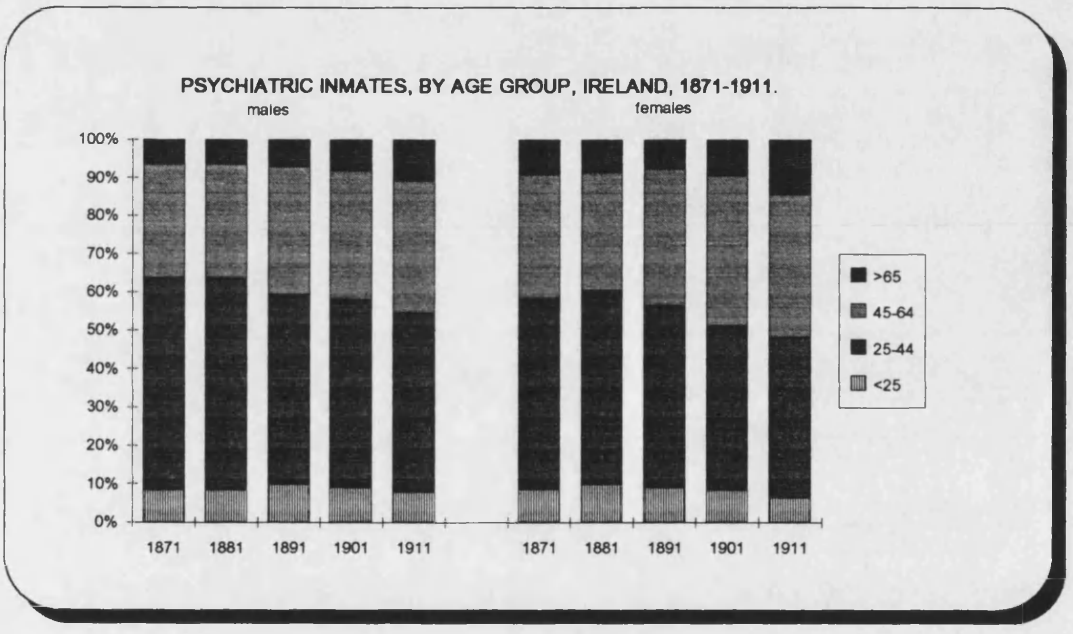
The proportion of males in the District Lunatic Asylums may reflect the legal status of committal, as suggested by the Inspectors of Lunacy, which considered that women might be less likely to undergo the process of being labelled dangerous lunatics (Annual Report of the Inspectors of Lunacy, 1906, p.xvii).

Ages

Data on ages, which are available throughout the reports of the Census of Population and shown in Figure 7.3 (and in Table C.4, Appendix 1) indicate that the population of the psychiatric institutions were mainly in the younger age groups, with around half in the 25 to 44 age group and around one third in the 45 to 64 group.

The proportion aged over 65 was small - under 10% between 1871 and 1911.

FIGURE 7.3

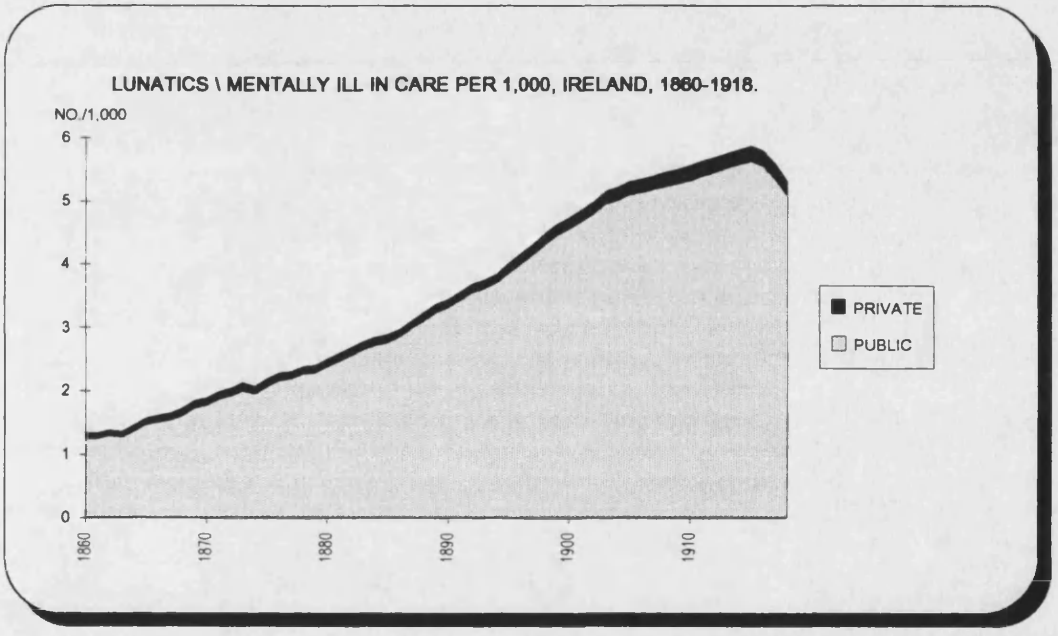


Ratio of Inpatients to Population

Given that the absolute number of lunatics in institutions were increasing and the population was falling, how high did the ratio of inpatients to population rise? Figure 7.4 (and Table C.5) indicates that the number of lunatics in care per 1000 persons rose from over 1 in 1860 to over 5 by 1914.

Very little of this increase was due to 'Imbeciles and Idiots', as they tended not be cared for in institutions, and where they were, these institutions tended to be workhouses. Imbeciles and Idiots, for which relatively good data are available as in Table C.2, have been excluded in Figure 7.4.

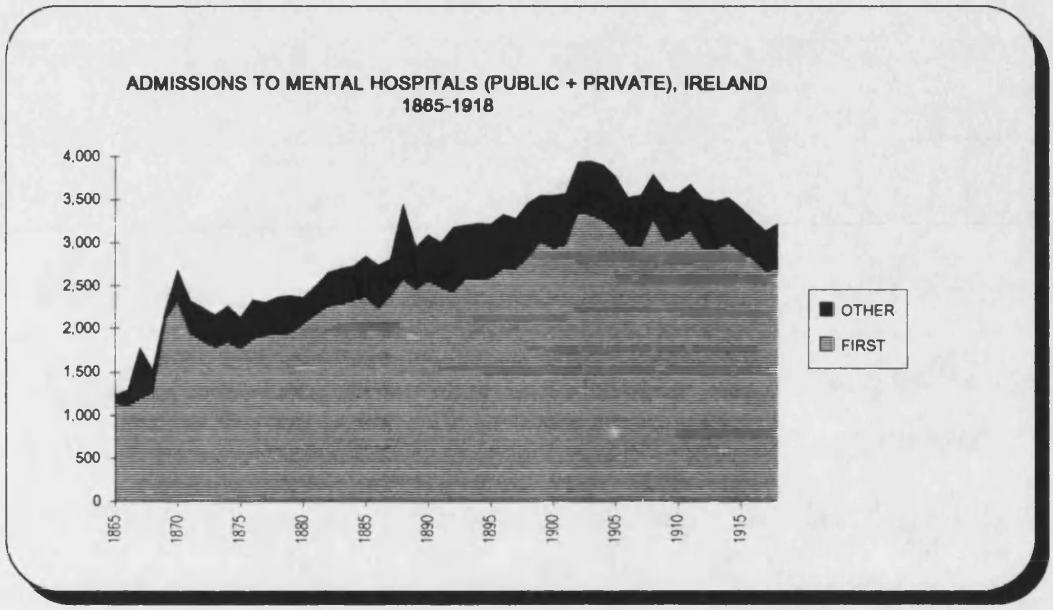
FIGURE 7.4



Admissions

Data on first and total admissions to the public and private asylums (excluding workhouses and prisons) are available from 1865 as shown in Figure 7.5. Total and first admission numbers moved in tandem due to the dominance of the latter. Total admissions rose from around 1,000 in 1865 to over 2,500 by 1870 before falling back to around 2,200 by 1873 after which the number increased steadily to a plateau of around 3,500 by the period 1900 to 1918.

FIGURE 7.5



First admissions made up between 80% and 90% of all admissions throughout the period, with a continuous but slow fall in the proportion. In 1865, 92% of all admissions were first admissions, falling to 81% in 1880, 78% in 1900, and 78% in 1918.

First admissions roughly doubled between 1865 and 1870, from 1,100 to close to 2,100, and fell back slightly during the 1870s before commencing a slow long-term rise

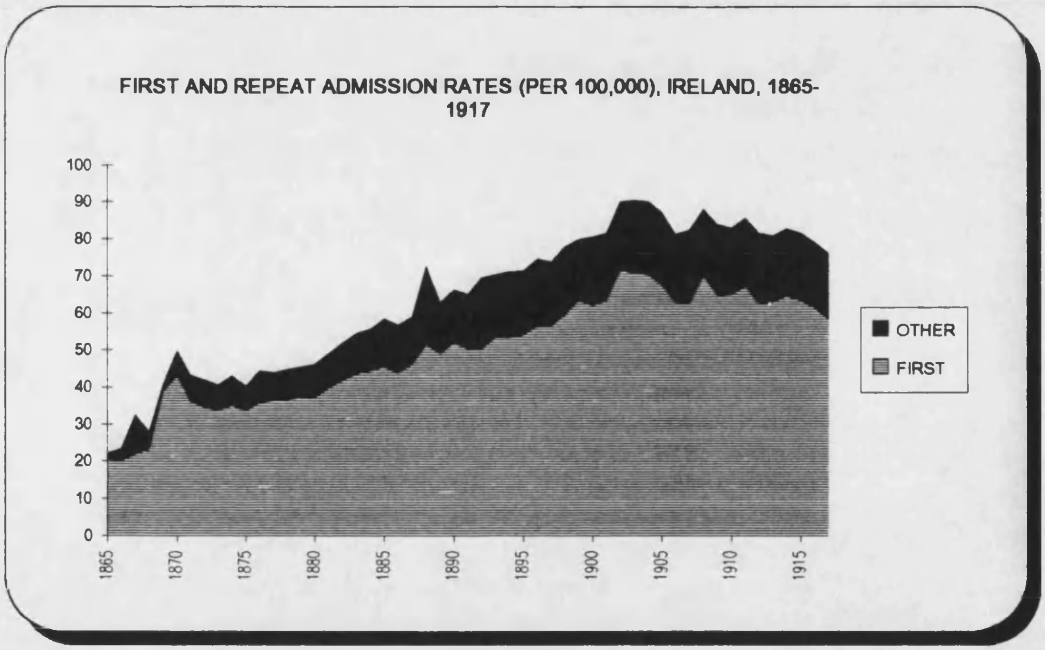
to a peak of around 3,000 per annum by 1900. During the early 1900s, the number of first admission stabilised, then fell to around 2,700 in 1917.

The bulk of the admissions were, as might be expected, to the public institutions. Admissions to private institutions amounted to between 5% and 10% of all admissions, with a slight upward trend throughout the period.

Admission rate

The decline in population led to a greater increase in admission rates as shown by Figure 7.6. While crude admissions increased by a factor around 3 between 1865 and 1910, the total admission rate increased by a factor of over 4, reflecting the population decline over this period.

FIGURE 7.6



The total admission rate rose as follows: from 21 per 100,000 in 1863 to 43 by 1870, 46 by 1880, 66 by 1890, 79 by 1900, peaked in 1902 at 90, but then fell to 87 by 1910 and continued to fall to 78 by 1918.

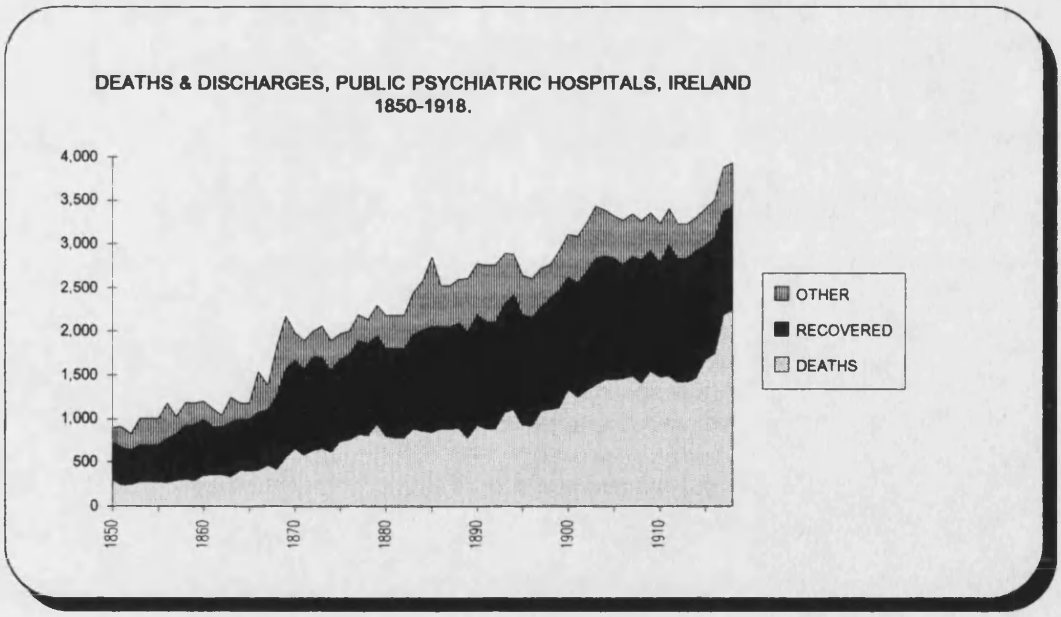
The first admission rate followed the same pattern, growing sharply from 20 in 1865 to 43 in 1870, before falling back to 37 in 1880. Thereafter a long rise was evident to a peak of 72 per 100,000 in 1902 before falling unevenly to 63 by 1917.

Both the overall and the first admissions were higher for males than for females throughout the period, a pattern in marked contrast to England & Wales and Scotland.

Discharges

The number of live discharges and deaths are shown in Figure 7.7 (and Table C.7), showed similar increases in magnitude to those for admissions, with a steady increase form around 1,000 in 1860 to around 3,000 by 1918.. The majority of all live discharges were deemed 'Recovered', with a much smaller proportion labelled 'Improved' or 'Unimproved'. 72% of all discharges were "Improved" in 1850, 73% in 1900, and 70% in 1918.

FIGURE 7.7



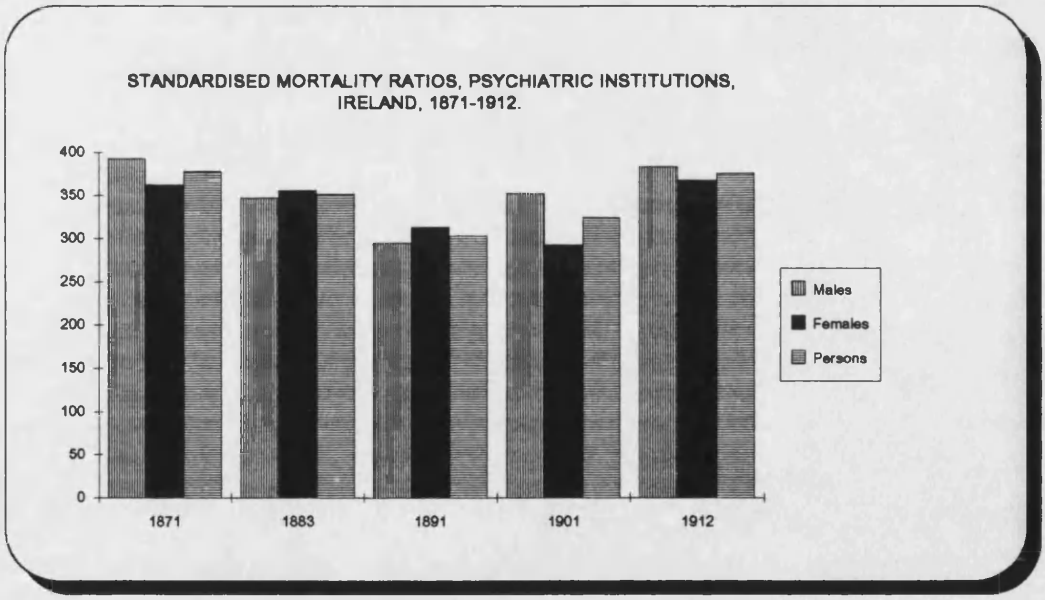
Deaths

Deaths, also shown in Figure 7.7, accounted for the bulk of the upward trend in deaths and discharges. Deaths rose from between 300 and 400 per annum pre-1865 to between 800 and 900 between 1880 and 1900. By 1900 deaths totalled 1,200 and remained in the range 1,200 to 1,400 through to 1917 but with a sharp rise to a peak of over 2,000 in 1918 due to the influenza epidemic of that year. Standardised Mortality Ratios (SMRs) are necessary to compare the death rates adjusted for age and sex.

Standardised Mortality Ratios[1]

The SMRs for the District and Auxiliary mental hospitals, as shown in Figure 7.8 (and Table C.8), were high: some three to four times above what would be expected if mortality in the District Asylums followed national death rates. The 95% Confidence Intervals were relatively narrow (Table C.8, Appendix 3), of the order of plus or minus 10% for persons and only slightly wider by sex, suggesting that these results were not due to chance.

FIGURE 7.8



[1] Standardised Mortality Ratios (SMRs), which show the ratio of observed to expected deaths, indicate the degree to which observed deaths exceed the level that would be expected.

EXPENDITURE

i) Current Expenditure

The data on current expenditure on pauper lunatics, published in the annual reports of the Inspectors of Lunacy, were more widely defined than in England & Wales or in Scotland to include the running costs of the District asylums. After 1900, the Local Taxation Returns published a series on Local Authority expenditure on the same group. However, since these series excluded the workhouse lunatics and the non-pauper lunatics, some grossing up is necessary. In addition, the mentally deficient must be excluded.

Two current expenditure in constant 1985 prices, are shown in Figure 7.9[1]:

i) public expenditure on District and Auxiliary asylums, covering both maintenance of paupers and running costs, but excluding loan charges, with spending on workhouse lunatics, costed at 50% of those in the District asylums and excluding the mentally deficient, and

ii) privately funded expenditure based on the number of patients in private hospitals and houses, and assuming identical unit costs to those of the District asylums ('Other' in Figure 7.9).

These two series moved in tandem, with the former accounting for the bulk of spending, and hence for the changes which occurred.

Total spending matched the rise in the total numbers in care, rising from under £10m. (in 1985 prices) in 1870 to a plateau of around £25m. in the period 1916-1914 after which it fell sharply to under £20m. by 1918.

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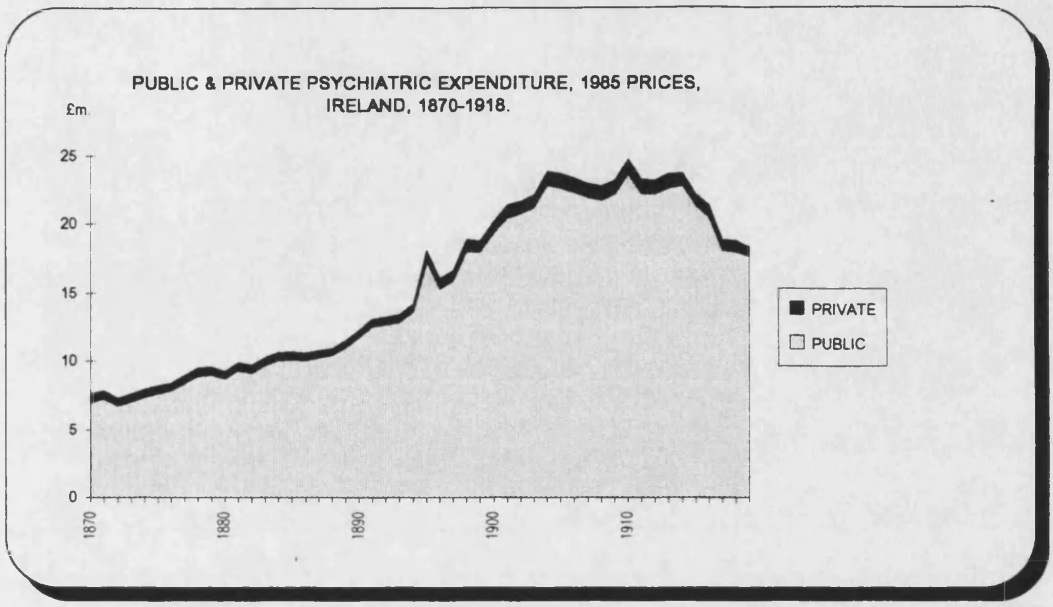
[1] Table C.9, Appendix 3 provides expenditure data in both current and constant prices.

FIGURE 7.9

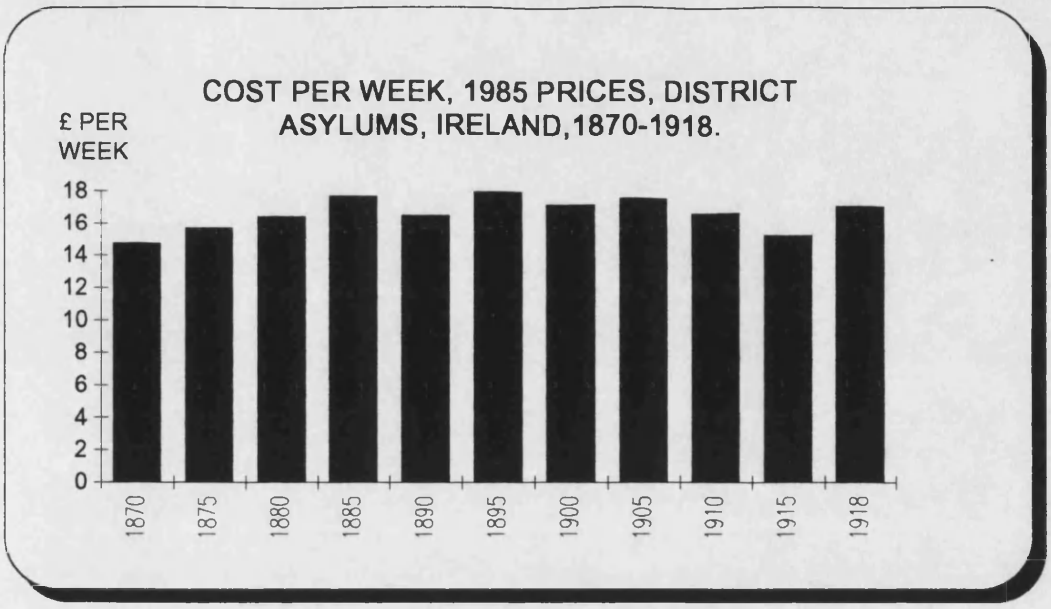


Unit Costs

The average cost per inpatient per week (in constant 1985 prices), as shown in Figure 7.10 (and Table C.10), showed remarkable stability, varying between £15 per inpatient per year and £18, indicating that the increase in spending shown in Figure 7.9 was due almost entirely to a rise in the numbers under care, rather than to increases in unit costs.

The apparent stability in unit cost conceals a major shift, however, between cost of provisions and cost of labour. In 1875 provisions comprised the major component of the unit cost at over 40% with wages and salaries at around 20%. By 1915, the share of provisions had fallen to under 30% and that of wages and salaries had risen to just over 30%. The implications of these shifts are discussed in Chapter 8.

FIGURE 7.10



Capital Costs and Indebtedness

Data on capital indebtedness are only available for part of the period, that is from 1900/1 when the accounts of the Committees of Lunatic Asylums began to be published in the Local Taxation Returns. These data are shown in Table C.11, Appendix 3. Indebtedness declined from £1.2m. in 1902 to £1.0m. by 1917.

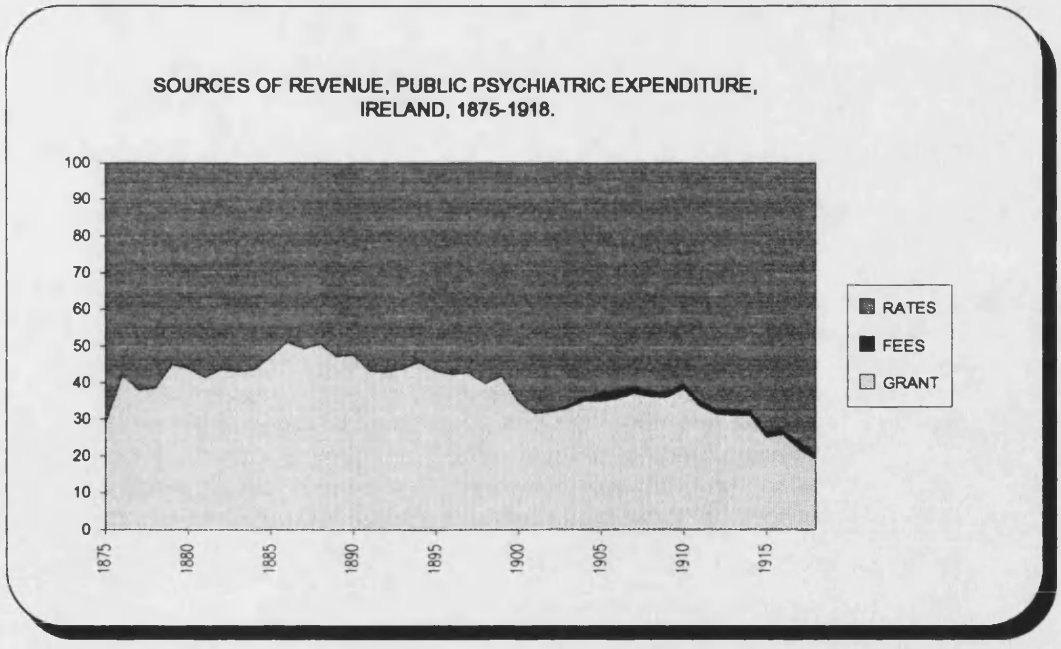
The only data on expenditure out of loans are those published in the Statistical Abstract covering the period 1907-1919, shown in Table C.11, which indicate low spending levels.

Sources of Finance

The role of the Imperial Grant which comprised capitation payments for pauper patients is shown in Figure 7.11 (and Table C.12). This grant accounted for around 40% of total receipts in the period 1875 to 1890 with a peak of 50% in the late 1880s. In the early 1890s its share began to decline following the Local Government Act of 1890, which limited capitation payments to the Local Taxation Account, so that its share in the 1890s hovered just above 40% before falling to around 35% during the period to 1912. The share of the Imperial Grant fell sharply during the War, so that by 1919 its share was below 20% for the first time.

Data on the contribution of private payments or fees to revenue from 1875 are also shown in Figure 7.11 - rising from 1.4% in 1875, 2.0% by 1900 and to 2.7% by 1919. The small role for private funding in the state hospitals in Ireland resulted, at least in part, from the complex legal position (discussed in Chapter 4) whereby a high proportion of patients were classed as dangerous lunatics.

FIGURE 7.11



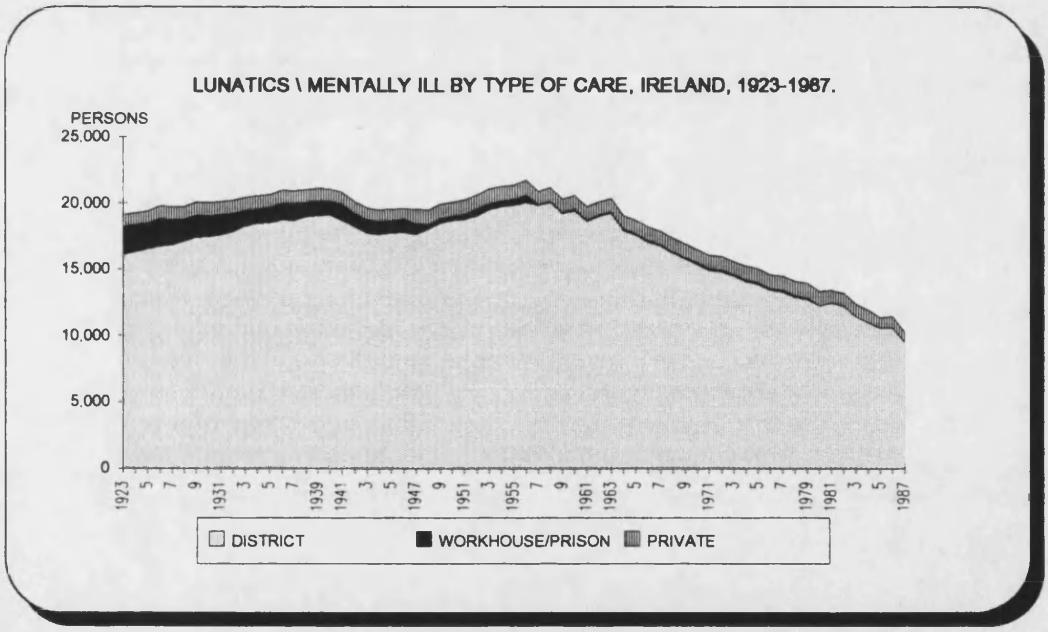
PART 2.

REPUBLIC OF IRELAND -1920 TO 1985

Numbers of Persons Under Care

Figure 7.12 (based on table D.1, Appendix 3) shows the number of lunatics by type of care from 1923, indicating a broadly similar pattern to that of England & Wales, with peaks in resident inpatients 1939 and in 1956. The total in care varied within fairly close limits between 19,000 and 22,000 in the period 1923 to 1945, and fell from a peak of 21,700 in 1956 to 16,500 in 1970, 15,400 in 1980 and 11,800 in 1987. The decline during World War II in Ireland was less steep than in England & Wales. Similarly the decline after the peak in 1956 was more gradual than in England & Wales, but more similar to Scotland.

FIGURE 7.12



District Lunatic Asylums

The District and Auxiliary asylums comprised the major portion of the institutional places: 84% in 1923, 93% in 1950 and 90% in 1980 and 1985. These institutions contained around 16,000 places in 1923, which increased to a peak of 19,000 in 1940, fell to 17,600 in 1944 and then increased to another peak of 20,000 in 1956. A slow long-term decline set in from 1956 which led to 15,400 places in 1970, 12,200 in 1980, and 8,900 by 1987.

The mentally deficient have been included in the above, however. As explained in Appendix 3, data were published on the number of mentally deficient inpatients in the workhouses to 1946 but not on those in the District and Auxiliary asylums. The latter have been estimated, based on the censuses of 1958, 1963, 1971. Overall, around 15% of District asylum inmates in these years were mentally handicapped compared to around 50% of those lunatics cared for in poorhouses. The mentally handicapped have been excluded from later analyses.

Workhouses

The number of lunatics detained in workhouses, which had been falling in the 32 County context, continued to decline in the 26 Counties - from just under 2,000 in 1923 to 1,500 in 1930, 1,000 in 1940 and 227 in 1950. The proportion of lunatics detained in workhouses thus fell from 12% in 1923 to 2% in 1946, a lower proportion than in England & Wales. From 1956, these institutions ceased to be part of the psychiatric services.

Criminal Lunatics

Data for the period 1923 to 1963 the number on criminal lunatics showed very little change with the total steady at between 110 and 80, or well under 1% of all lunatics. For ease of presentation, criminal lunatics have been amalgamated in Figure 7.12 with those resident in workhouses.

Private Institutions

The number of places in private facilities (shown in Figure 7.12 as comprising private mental hospitals and unlicensed houses) remained broadly unchanged throughout the period. Overall, there were around 800 resident inpatients in private hospitals in the 1920s and 1930s, falling to under 600 in the mid-1940s and recovering to just over 1,000 by the late 1950s. This number remained unchanged until the early 1980s when it dipped just under 1,000. The share of the private sector started at 4% of total places in 1923, fell to under 3% by 1945 and has risen steadily to 8% in 1987, due to the number of private places remaining largely unchanged while public places have fallen.

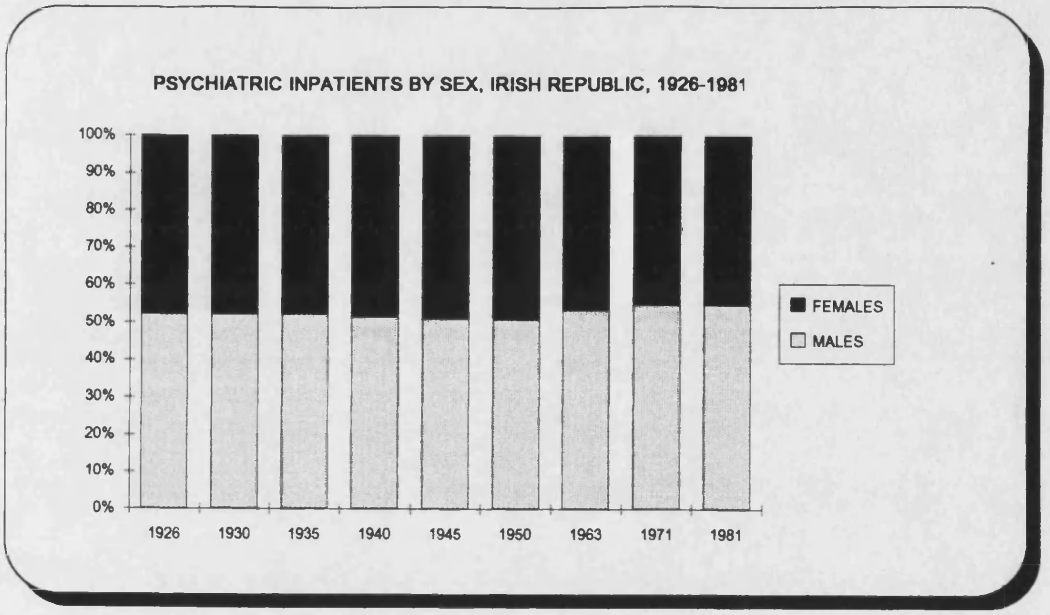
Single Lunatics

The number minded singly (for which data were provided up to 1956) whether by family or in unlicensed houses, varied between 100 and 300, or from just under 1% to just over 1% of all places.

Sex

Figure 7.13 (and Table D.2) shows that the slight imbalance in favour of males, which was evident in Ireland before the emergence of the Free State, persisted and widened; with males making up between 52% and 55% of all inmates of psychiatric institutions. The imbalance in favour of males was the reverse of the pattern found for England & Wales and for Scotland, where females outnumbered males. A female majority might be expected as the inpatient population aged, given females greater longevity.

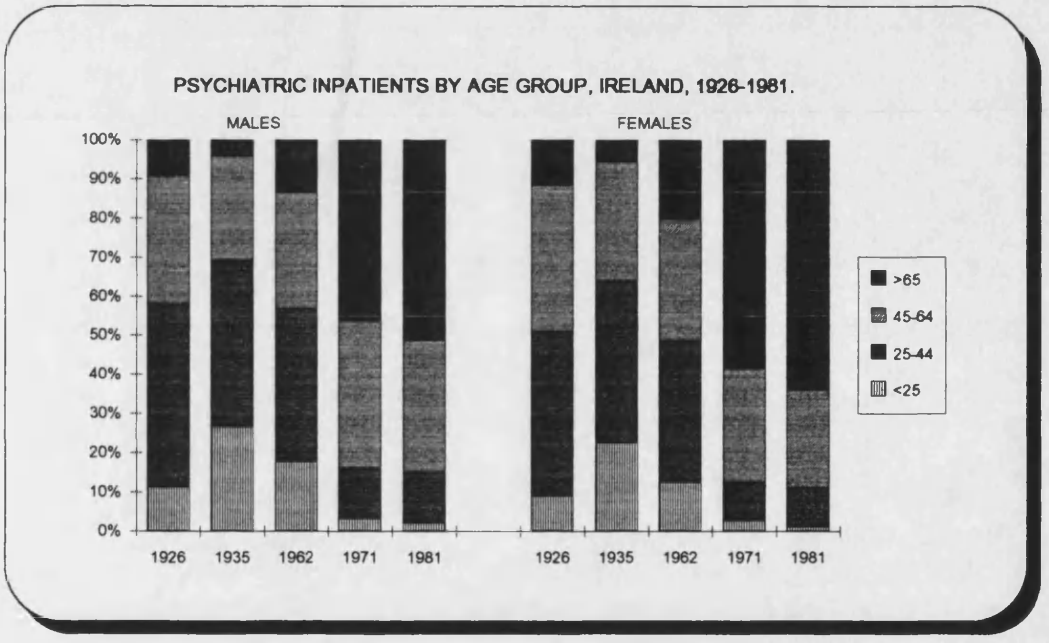
FIGURE 7.13


PSYCHIATRIC INPATIENTS BY SEX, IRISH REPUBLIC, 1926-1981
100%
90%
80%
70%
60%
50%
40%
30%
20%
10%
0%
1926
1930
1935
1940
1945
1950
1963
1971
1981
FEMALES
MALES

Ages of Inpatients

Data on the ages of inpatients in the range of institutions under the aegis of the Inspector of Mental Hospitals were published up to 1962, and the MSRB censuses provide the relevant information for 1963, 1971 and 1981. The age profile of inmates of the psychiatric hospitals in the Republic, as shown in Figure 7.14 (and Table D.3) shifted dramatically towards the older age groups. Although the proportion aged over 65 had been under 10% in the early years, similar to the pattern described above for the 32 Counties, it reached a dominant share by 1971 and 1981. In 1981 over half the males and nearly two thirds of the females were aged over 65.

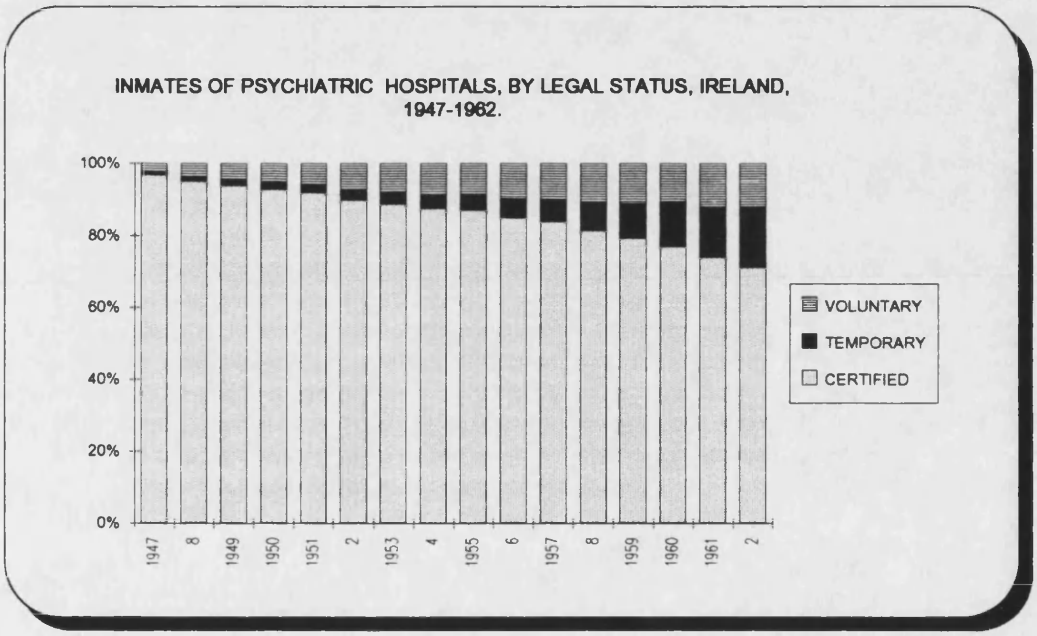
FIGURE 7.14



Legal Status

The 1945 Mental Treatment Act introduced the legal categories of 'Voluntary', 'Temporary' and 'Unsound Mind', similar to those introduced in the UK in 1930. The proportions of admissions in each category are shown in Figure 7.15 (and Table D.4), indicating that the bulk fell into the Unsound Mind category: 50% in 1947, falling to 10% by 1959, when over 50% were voluntary and the rest temporary.

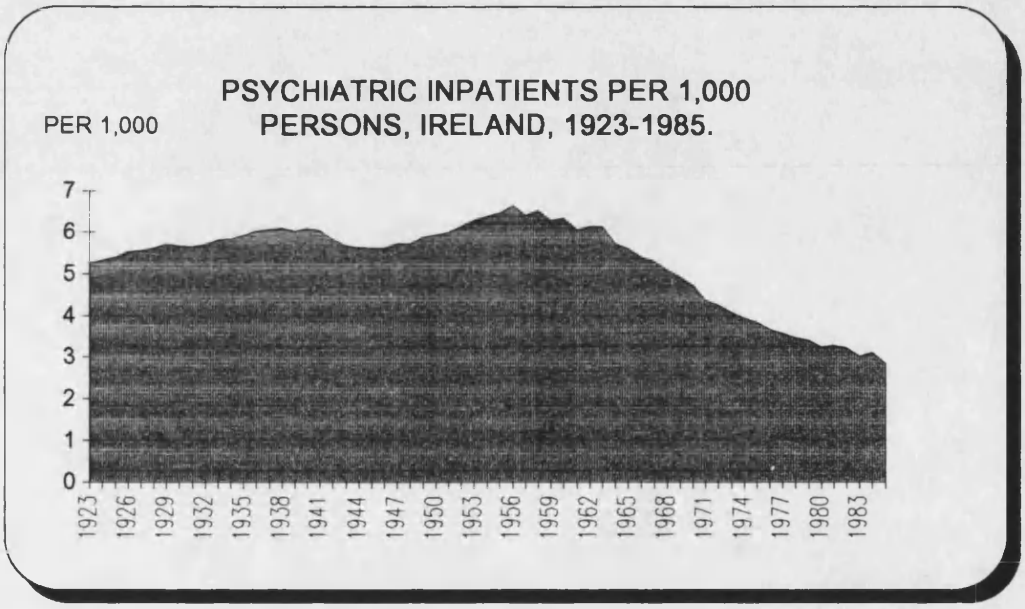
FIGURE 7.15



Ratio of Inpatients to Population

The ratio of lunatics per 1,000 persons, as shown in Figure 7.16 (and Table D.5) , omits the mentally deficient in the District asylums and poorhouses. The ratio of psychiatric inpatients to population showed a steady slow rise from its 1923 value of 5.3 places per 1000 to a peak of 6.1 in 1938, but the decline in the 1940s took the ratio back to around 5.6. The ratio rose to a peak of 6.5 in 1956. After several minor oscillations, a long-term decline set in taking the ratio to around 4.7 in 1970, 3.2 in 1980 and 2.8 by 1985.

FIGURE 7.16



Admissions

Data on admissions to the public and private psychiatric institutions were published by the Inspector of Mental Hospitals up to 1962 and by the Medico-Social Research Board (MSRB, various years) between 1965 and 1985. The pattern of admissions and admission rates in the 26 Counties was similar to that in England & Wales and Scotland, as shown in Figure 7.17 (and Table D.6). Total admissions remained stable until the late 1940s after which they increased sharply, rising faster than first admissions, and the increase in both tapering off in the mid-1970s.

FIGURE 7.17

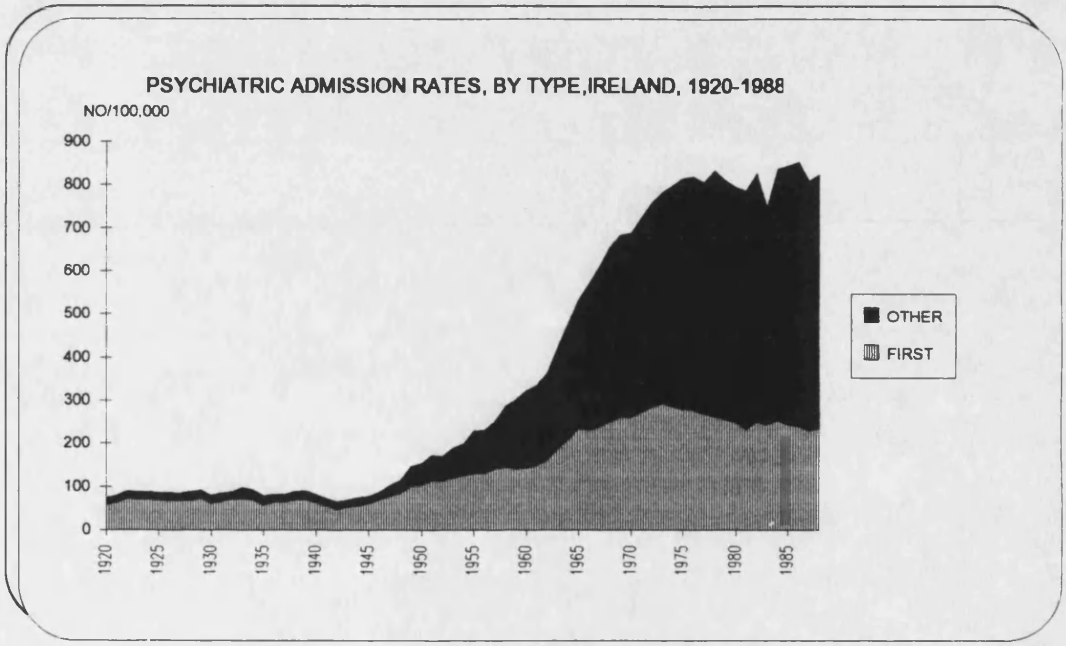


Figure 7.17 shows the total admission rate rising from around 100 per 100,000 in the period to 1940, to 200 by 1955, 300 in 1960, and over 800 by 1980. The first admission rate rose from 63 in 1940 to 101 in 1950, 144 in 1960, 249 in 1980, with a slight decline by 1984.

All admissions remained steady during the 1920s, (2,700 in 1920, 2,700 by 1930, 2,600 by 1940), and thereafter rising sharply: doubling in each of the next three

decades (5,800 in 1950, 12,600 in 1960, 23,000 in 1972, before slowing to a 25% growth between 1972 and 1984 (29,000 in 1984).

The bulk of admissions in the earlier years continued to be first admissions (79% in 1920, 77% in 1940) but as total admissions rose, this proportion fell to 47% in 1960 and 30% by 1984.

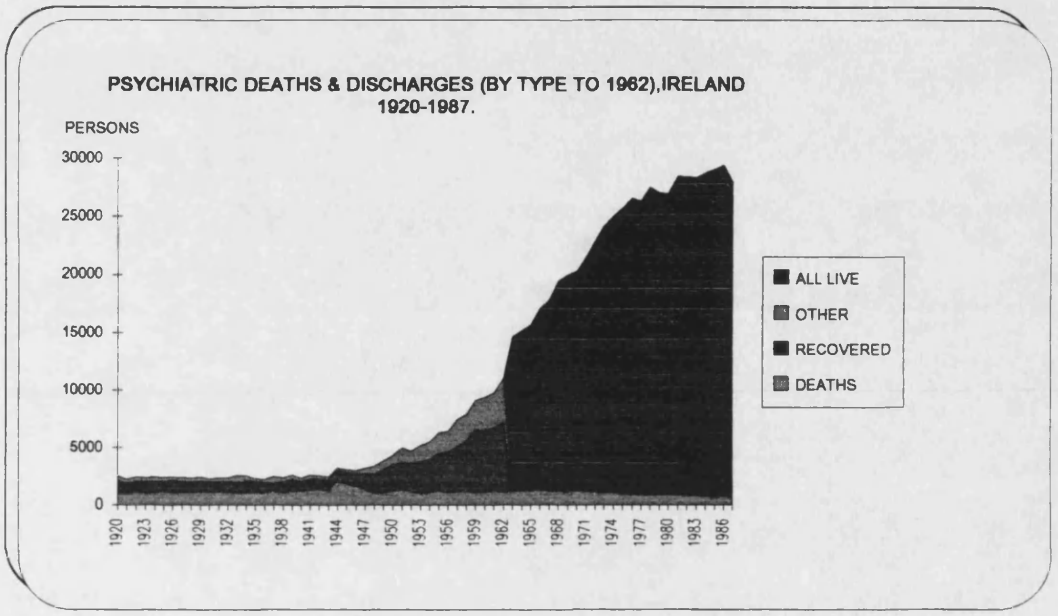
First admissions followed largely the same pattern with little growth to 1940 (2,100 first admissions in 1920, 2,000 in 1940), followed by rapid growth to 1973, after which they levelled off (4,000 in 1950, 6,300 in 1960, 9,000 in 1973 8,600 in 1980, 8,800 in 1984).

Although over 90% of all places for the mentally ill remained in the District and Auxiliary Asylums throughout the period, the share of the private sector was greater as regards admissions: 12% of first admissions and 13% of all admissions in 1926 were to private hospitals. These shares fell to under 10% respectively by the 1940s but increased to just over 20% by 1950, and to 35% and 27% by 1960 and 1976, respectively. Thereafter the proportions declined slowly, but by 1980 20% of first admissions and 16% of all admissions continued to be to private hospitals.

Discharges

Figure 7.18 (and Table D.7) shows that the level of discharges and deaths followed broadly the same pattern as that of all admissions, rising slowly between 1920 and 1940, and accelerating rapidly thereafter.

FIGURE 7.18



The bulk of live discharges continued to be classified as "Recovered" to 1950 (69% in 1920, 74% in 1940, 86% in 1950), but then dropped sharply to 50% by 1960. As the number of both admissions and discharges rose, the classification between recovered and not ceased to be made, so that only live and dead discharges can be distinguished.

Deaths

Deaths were almost as numerous as discharges in the first part of the period,[1] comprising 41% of all discharges in 1920, 48% in 1930, 52% in 1940, but falling to 22% in 1950. As the number of admissions and discharges began to increase rapidly in the 1950s, and the number of deaths showed little change, the share of deaths in discharges fell: to 9% in 1960, 6% in 1970, and 4% in 1980. The actual number of

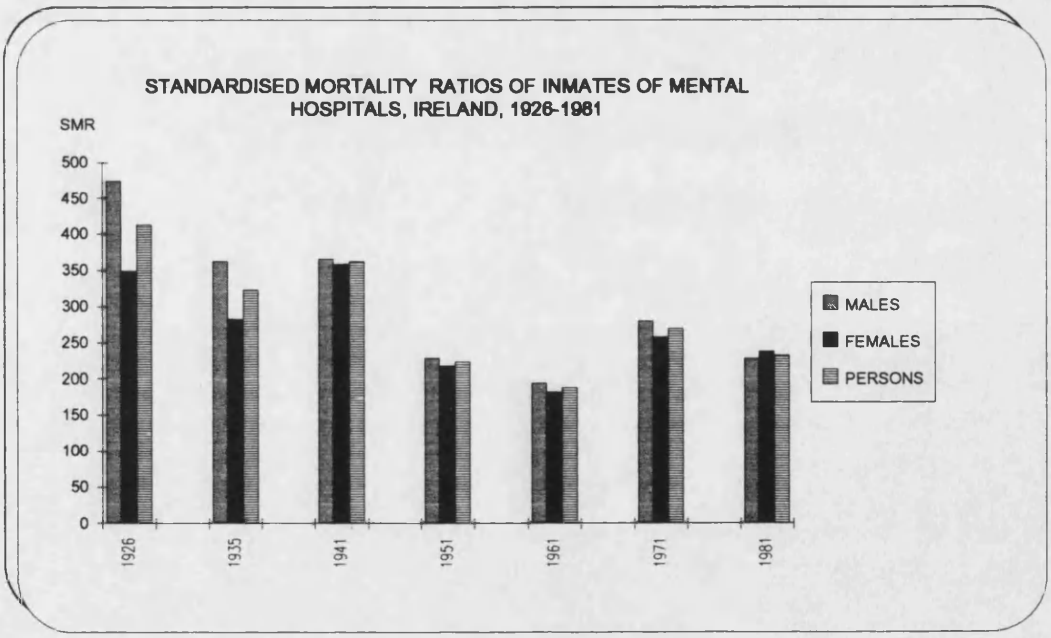
[1] Deaths were more common than live discharges in three years in the 1940s.

deaths showed little change over the period, however, running at around 1,200 per annum in the early part of the period and falling to just under 1,000 by the end. Analysis of deaths must, of course, take account of age and sex, as below.

Standardised Mortality Ratios (SMRs)

Standardised Mortality Ratios, as shown in Figure 7.19 for inmates of District mental hospitals in the Republic of Ireland, indicate that relatively high values applied to the Republic. SMRs in the period to 1940 were in the range of 300 to 400, or some three to four times expected levels. The SMR for males was well above that for females in 1926 and 1935 but both then reduced. The data for 1951 and 1961 suggested a drop in the ratios; to around 200 for persons, but these ratios rose again in 1971 and 1981 to around 250 and 220 respectively. The relatively narrow 95% Confidence intervals for each of these estimates (in Appendix 3) show that the overall raised mortality was highly unlikely to have arisen by chance, although the differences between the sexes are not statistically significant in the years after 1935.

FIGURE 7.19

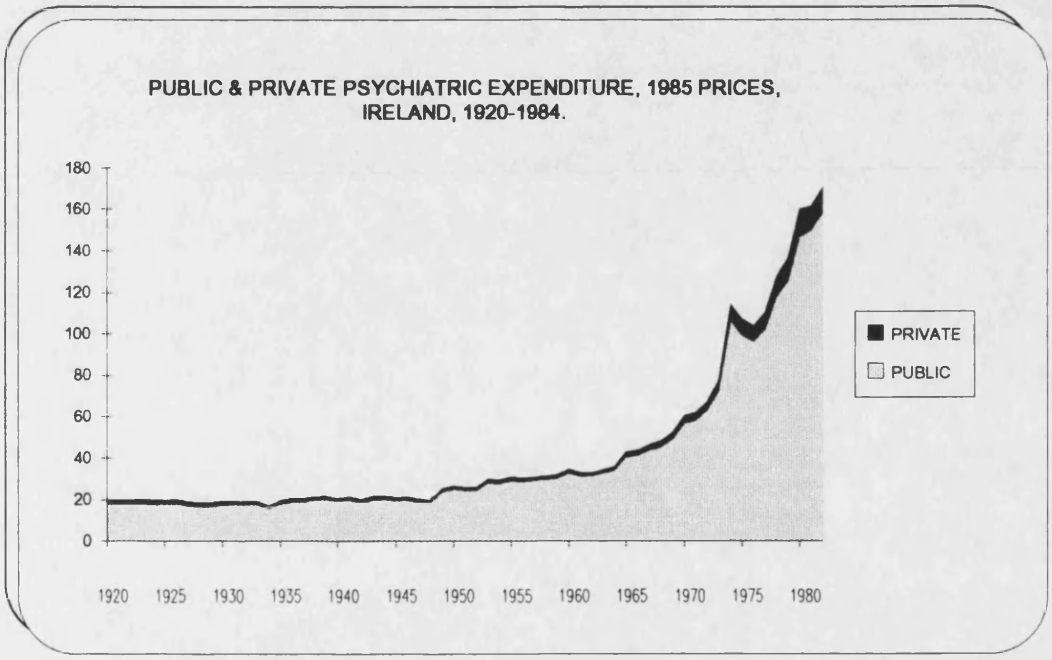


EXPENDITURE DATA

Current Spending

As the various data series for current expenditure cover only public expenditure, some grossing up is necessary for private spending. Current public and private spending on psychiatric health services for the 26 Counties are shown in constant prices[1] in Figure 7.20 (and Table D.10) for the period 1923 to 1984, with total spending dominated by public spending.

FIGURE 7.20



Total spending remained steady at around £20m. per annum from 1923 to 1945 after which a slow but regular increase is apparent. This increase took spending to around £27m. p.a. in 1950 and to £35m. in 1960. Spending then began to rise rapidly, doubling in each of the succeeding decades: to £61m. in 1970, and to £161m. in 1980.

---

[1] Expenditure has been deflated by the UK GDP deflator, due to the lack of an equivalent index for the Republic. This index moved in tandem with the Republic's Retail Price Index, which would thus give similar results (see comparison of different indices in Table D.11, Appendix 3). The UK GDP deflator has been preferred due to its greater universality.

The 1984 figure was £174m[1]. Privately financed expenditure remained small at under 5% throughout the period but increasing in the 1980s.

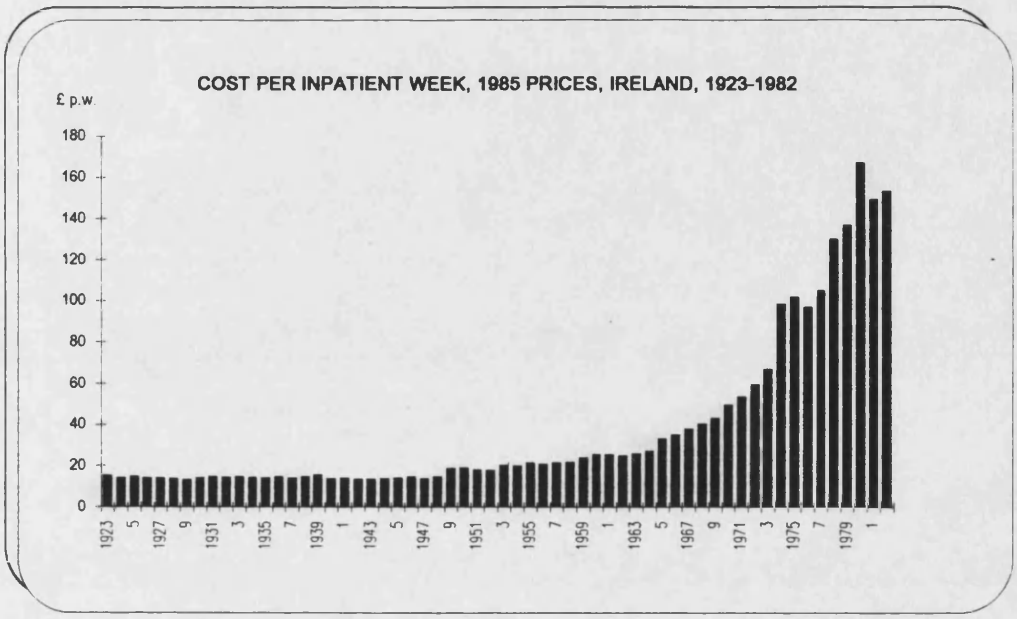
Unit Costs

Figure 7.21 (and Table D.12) shows average cost per patient for the period 1923 to 1981, again in constant 1985 prices.[2] Overall, the shape of the graph follows that of Figure 7.20 above, indicating that much of the increase in overall spending was due to sharp rises in unit costs, since the number of inpatients had fallen sharply.

[1] The unevenness apparent in the total spending in the mid 1970s results from relatively small but sharp changes in the public spending component. This was due to some large bunched pay settlements in the public services in the relevant years.

[2] The UK GDP deflator has been used due to lack of an equivalent for the Republic of Ireland. The effect of different deflators is discussed in Appendix 3.

FIGURE 7.21



Unit costs remained at around £15 per patient per week between 1923 and 1940. Between 1940 and 1960, they almost doubled to £26 per week, then doubled again to £61 by 1970 and rose by a factor of 3 to reach £168 per week by 1980.

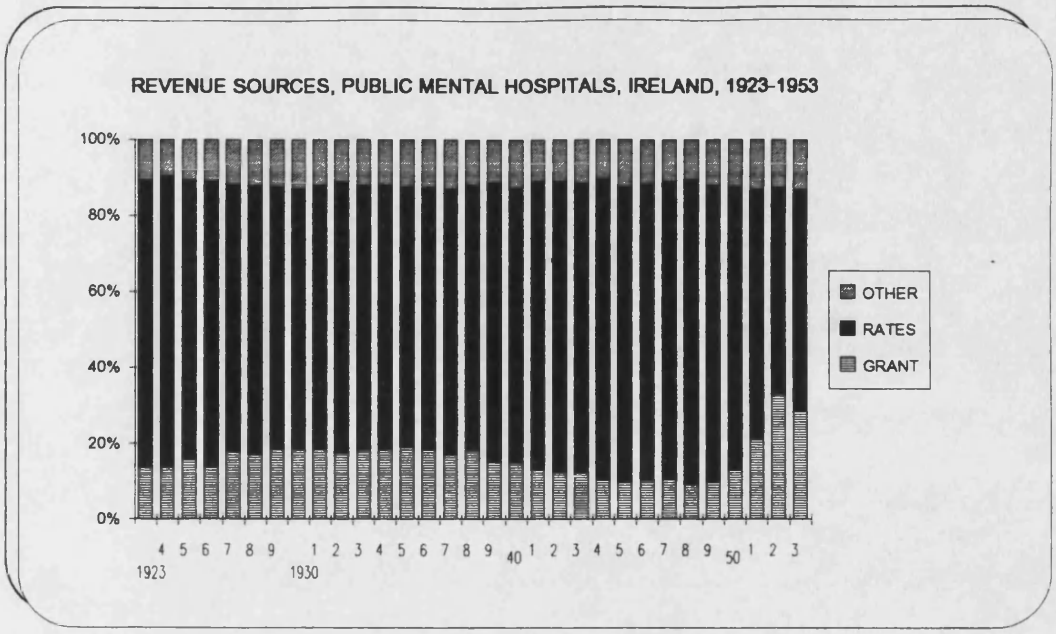
Capital Expenditure and Indebtedness

Relatively little data are available for the Republic of Ireland on capital spending or indebtedness. Capital indebtedness data were published by the Inspector of Mental Hospitals for the period 1923 to 1946, after which no such data were produced. After the 1945 Mental Treatment Act and the shift to greater Exchequer financial responsibility, the concept of indebtedness ceased to have meaning for the mental hospitals. Capital indebtedness fell from £0.7m. in 1922 to a minimum of £0.45m. in 1931 and thereafter rose to £0.869m. in 1940 and fell slightly to £0.696m. by 1956, the last year for which data were published.

Revenue

Between 1923 and 1957 mental hospitals were funded by grants, capitation, rates and other. Figure 7.22 (and Table D.13) shows that 'Rates etc.' accounted for the major share of revenue, dropping from 76% in 1923 to around 70% during the 1930s, increasing to around 80% in the late 1940s and falling to under 60% for the first time in the early 1950s. The share of 'Other' receipts (farm and private income) remained steady between 10% and 13% over the period, so that the variation was felt by the capitation grant whose share rose initially from 13% in the early 1920s to just under 20% in the 1930s, fell to 10% in the 1940s but rose sharply to around 30% in the early 1950s, when capitation was finally discontinued.

FIGURE 7.22


REVENUE SOURCES, PUBLIC MENTAL HOSPITALS, IRELAND, 1923-1953
100%
80%
60%
40%
20%
0%
4 5 6 7 8 9 1 2 3 4 5 6 7 8 9 40 1 2 3 4 5 6 7 8 9 50 1 2 3
1923
1930
OTHER
RATES
GRANT

PART 3
PSYCHIATRIC SERVICES IN NORTHERN IRELAND, 1920-85

ACTIVITY DATA

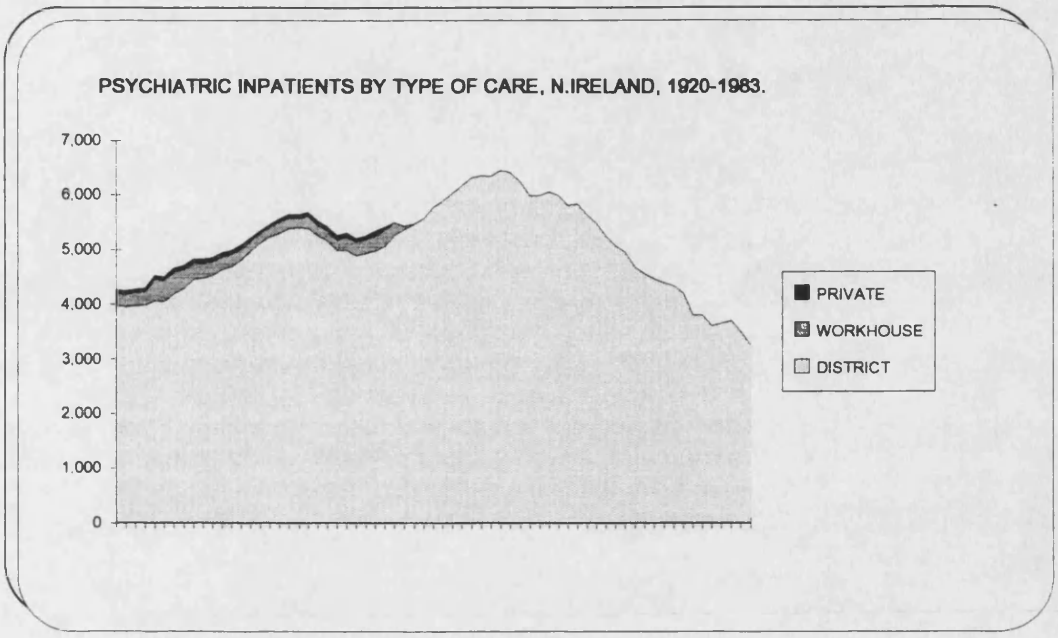
Data were published initially by the Inspectors of Lunacy, who were replaced in 1927 by the Home Department. The N. Ireland Hospitals Authority published data from 1945 to 1972 and Health and Personal Social Service Statistics for N. Ireland published data from 1972.

The total number of lunatics resident in institutions by type of institution, shown in Figure 7.23 (and Table E.1, Appendix 3), followed broadly the same pattern as England & Wales. The number rose by some 40% between 1920 and 1940, fell during the wartime 1940s, began to rise again during the 1950s to peak in the 1960s. Although the peak was somewhat later than in England & Wales, it was followed by a sharp decline during the 1970s and 1980s. The total number in care rose from 4,300 in 1920 to 5,700 in 1940 and to a peak of 6,500 in 1960 after which it fell to 3,800 in 1980 and 3,250 in 1986.

District Asylums

The District Asylums continued to play the dominant role they had previously played in the 32 county context. These institutions accounted for 93% of all residents in 1920, and 94% in 1956, and increased to close to 100% from 1960.

FIGURE 7.23



Poor Law Institutions

Although the Poor Law institutions made up the next largest type their share was small, accounting for 5% of all places in each of 1920 and 1946. This proportion declined sharply in 1947 and in 1948 these institutions were incorporated into the NHS. Overall, the Poor Law institutions played a lesser role in N. Ireland than in England & Wales.

Criminal Lunatics

The number of Criminal Lunatics was also small, falling from around 20 in the 1920s to under 10 in the 1930s and to zero in the period 1940 to 1967. Because of the small number of Poorhouse and Criminal Lunatics, these two groups have been amalgamated in Figure 7.23.

Similarly, the small number of private and Chancery lunatics has been amalgamated for presentation purposes.

Private Asylums

The numbers of inpatients in private asylums were small, never more than 50, or under 1% of the total places. The one small private asylum in N. Ireland closed down in 1946, leaving one private nursing home.

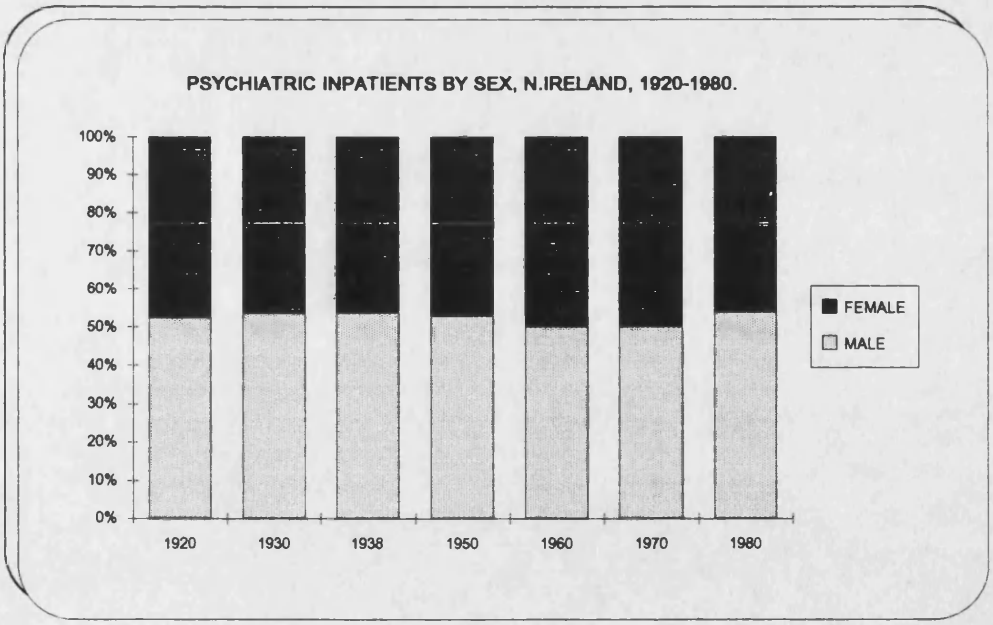
Single Lunatics

The number of Single Chancery Lunatics was also small, varying between 20 and 40 or under 1% in the years 1920-40 but rising thereafter to over 100 or 2% by the late 1950s. This category ceased to be distinguished after the 1960 Mental Health Act.

Sex

Figure 7.24 (and Table E.2) shows the balance between the sexes in the psychiatric hospitals of N. Ireland. The imbalance in favour of males, evident in the data for the 32 Counties prior to 1920 continued in N. Ireland.

FIGURE 7.24



Ages

Only data for 1921 and 1931 are available on the age profile of inmates of psychiatric institutions in N.Ireland. As in the other countries in this period, the population of N.

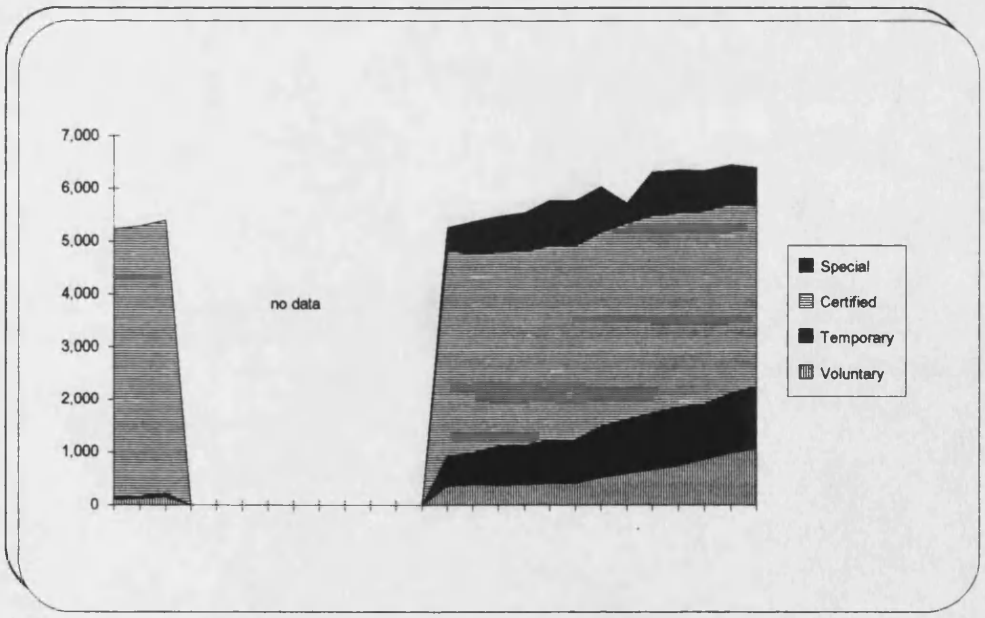
Ireland's mental hospitals was predominantly in the younger to middle-aged groups, with very few (under 10%) aged over 65 (Table E.3, Appendix 3).

Legal Status

The 1932 Mental Treatment (N. Ireland) Act introduced the same legal categories as the rest of the UK: Certified, Voluntary and Temporary. This legal classification was continued in 1946 by the Mental Treatment Act (N. Ireland), which introduced the further category of 'Special Care' for those variously referred to as Mentally Deficient or Mentally Handicapped.

As shown in Figure 7.25 (and Table E.4), prior to 1950 the overwhelming bulk of patients were certified lunatics. By 1950 70% of residents were Certified, falling to 47% by 1960. From 1950, there was a gradual and broadly similar growth in each of the other categories, so that by 1961 there were almost 1,000 persons classed each as voluntary and temporary. The number of persons in mental hospitals deemed requiring 'Special Care' (mentally handicapped) also rose to around 1,000 by 1961.

FIGURE 7.25



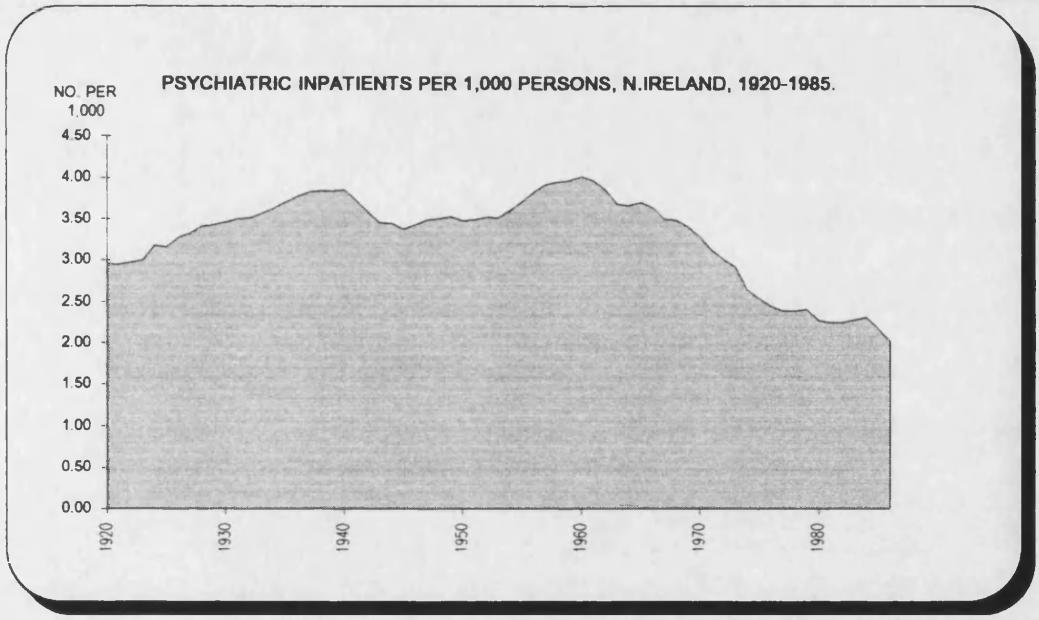
Note to Figure 7.25: No data published 1938 to 1958.

From 1964 the legal classification was changed to one of 'Informal', 'Part II', and 'Part III (c and d)'. From that date to 1972, the vast majority (over 90%) of patients were classed as 'Informal' with 'Part II' comprising most of the remainder and a small number in 'Part III' (compulsory detention).

Ratio of Inpatients per 1,000 Population

The treated prevalence, expressed in terms of psychiatrically ill inpatients (excluding estimated mentally handicapped inmates) per 1,000 population, is shown in Figure 7.26. Lacking data on the numbers of mentally handicapped in the mental hospitals pre-1950, it has been assumed that the 1950 total of some 600 applied in the earlier years. Thus the prevalence data prior to 1950 must be treated with caution.

FIGURE 7.26



N. Ireland had 2.8 psychiatric inpatients per 1,000 persons in 1920, rising to a pre-World War I peak of 3.8 in 1938. This declined to just over 3.0 in 1945 but began

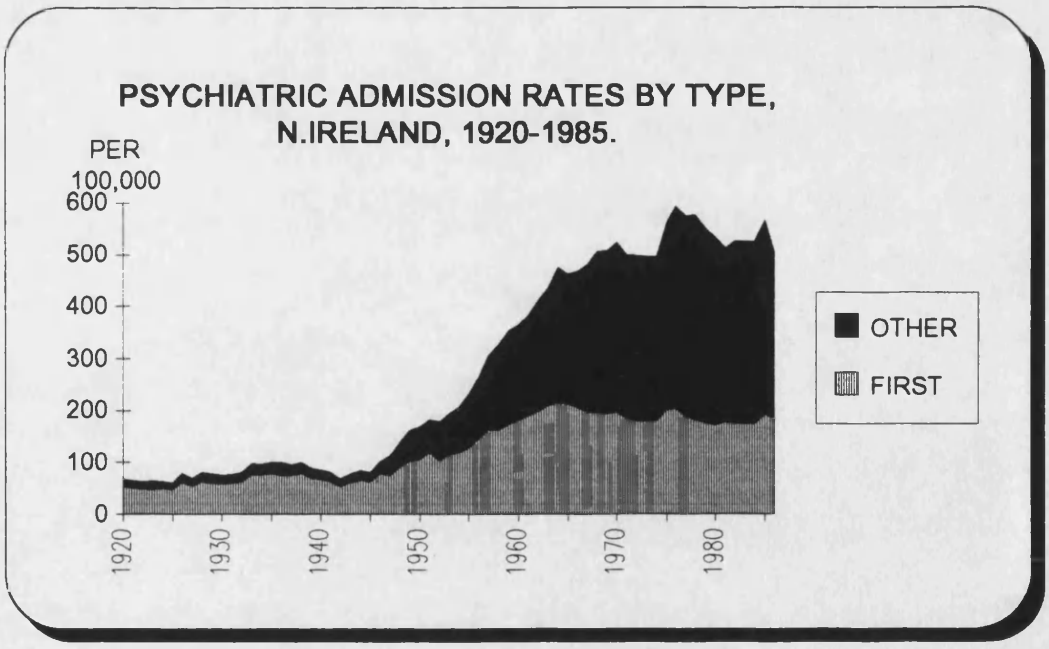
to rise again in the 1950s to reach a peak of 3.8 in 1961 and then declining to under 2.0 in 1986.

Admissions

The data on admissions and admission rates, summarised in Figure 7.27, show a stable pattern in both first and total admissions in the period 1920-1944. Total admissions were around 1,000 each year and the bulk (some 80%) of these were first admissions.

From around 1944 both began to increase, with first admissions rising to around 2,000 per annum by 1960 and levelling off at around 3,000 per annum from 1965. Between 1965 and 1986 first admissions have been in the range 2,500 to 3,000 each year. Total admissions (including first admissions) rose to around 6,000 by 1960, and 8,000 by 1970 before peaking at around 9,000 per annum in 1975, and fluctuated around that level to 1986.

FIGURE 7.27



The first admission rate (Figure 7.27) followed the same pattern as that of first admissions, rising from 51 per 100,000 in 1920 to 60 in 1930, 118 in 1950, 189 in 1960, 184 in 1970, and 177 in 1980 and 184 in 1986.

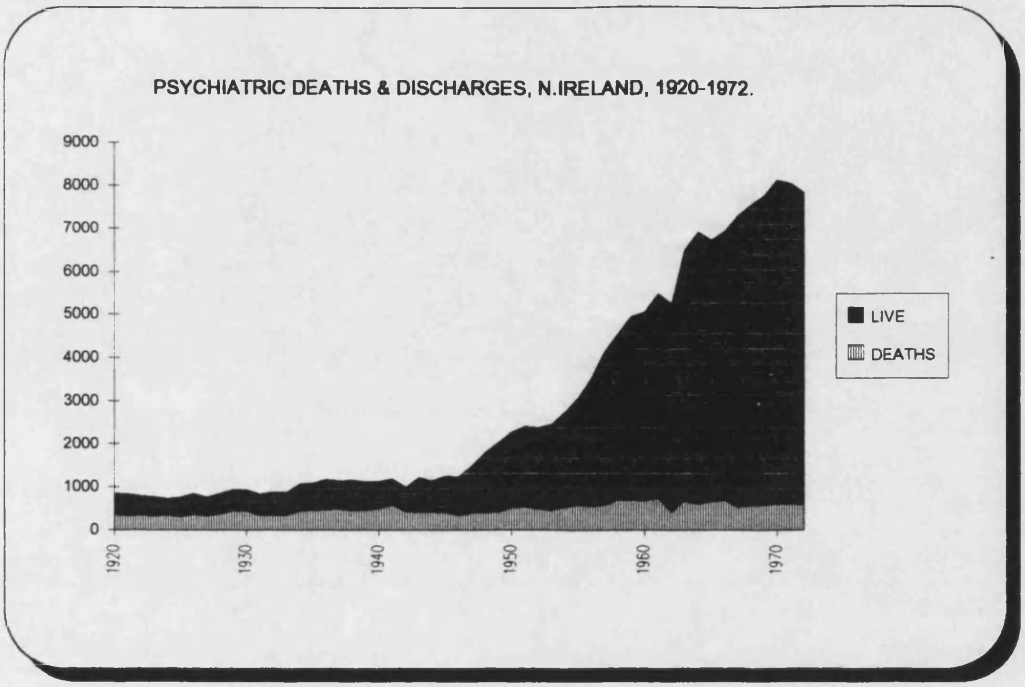
The total admission rate remained fairly steady at first, rising from 69 in 1920 to 87 in 1940, then almost doubling each decade to 169 in 1950, 365 in 1960, 524 in 1970 before stabilising at 533 in 1980 and 506 in 1986.

Deaths and Discharges

Deaths as shown in Figure 7.28 (and Table E.6), remained in the range of 300 to 500 between 1920 and 1950 (with two exceptions: 502 in 1940 and 578 in 1941). The number of deaths rose in the 1950s and 1960s but remained within the 500 to 700 range.

Live discharges were at close to the level of deaths in the period 1920 to 1940, but began to increase in line with total admissions from the mid-1940s. Live discharges jumped from 640 in 1940 to 1,760 in 1950 and continued to rise to 4,400 in 1960 and 7,530 by 1970.

FIGURE 7.28



Standardised Mortality Ratios

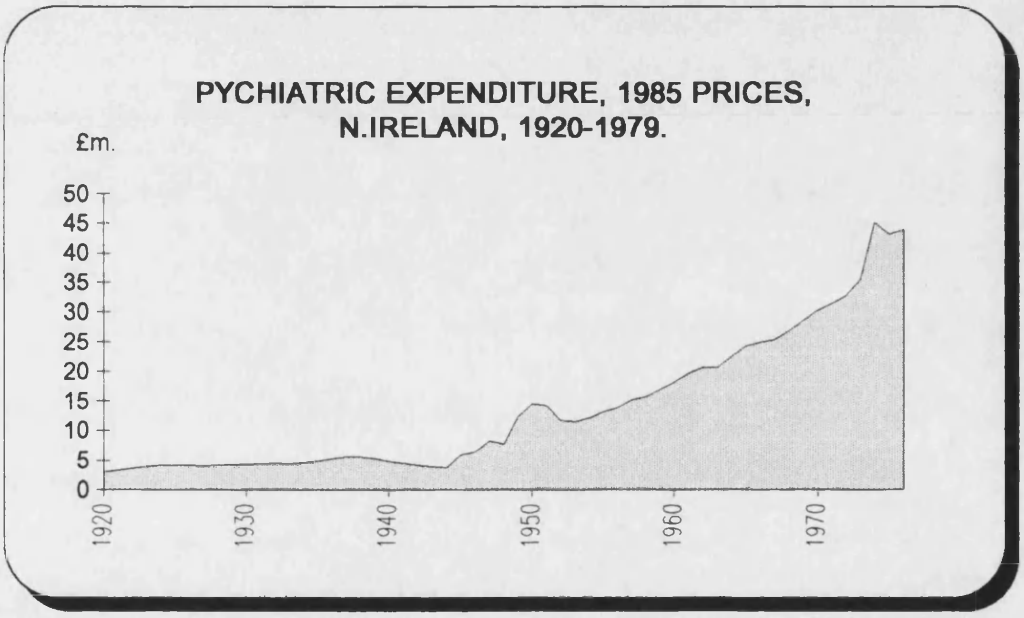
As data on the age profile of inmates of the mental hospitals of N. Ireland have been located for only two years, 1921 and 1931, SMRs can only be calculated for these years. As shown in Table E., Appendix 3, these SMRs were high: 441 in 1921 and 347 in 1931. As shown in the section on England & Wales, these high ratios were not peculiar to N. Ireland.

EXPENDITURE DATA

Current or Revenue Spending.

Figure 7.29 (and Table E.8) shows expenditure on mental illness and mental handicap in N. Ireland from 1920 to 1980 in constant prices (deflated using the UK GDP deflator - see Table E.8, Appendix 3). Non-capital expenditure in N. Ireland in constant prices remained steady at around £4m. between 1920 and 1940. Sharp rises in the period 1940-50 took the 1950 total to around £11m. From the early 1950s mental illness and mental handicap spending were disaggregated. Mental illness spending fell slightly in the early 1950s[1] but then rose steadily to reach £17m. in 1960, £29m. in 1970 and £44m. in 1977.

FIGURE 7.29

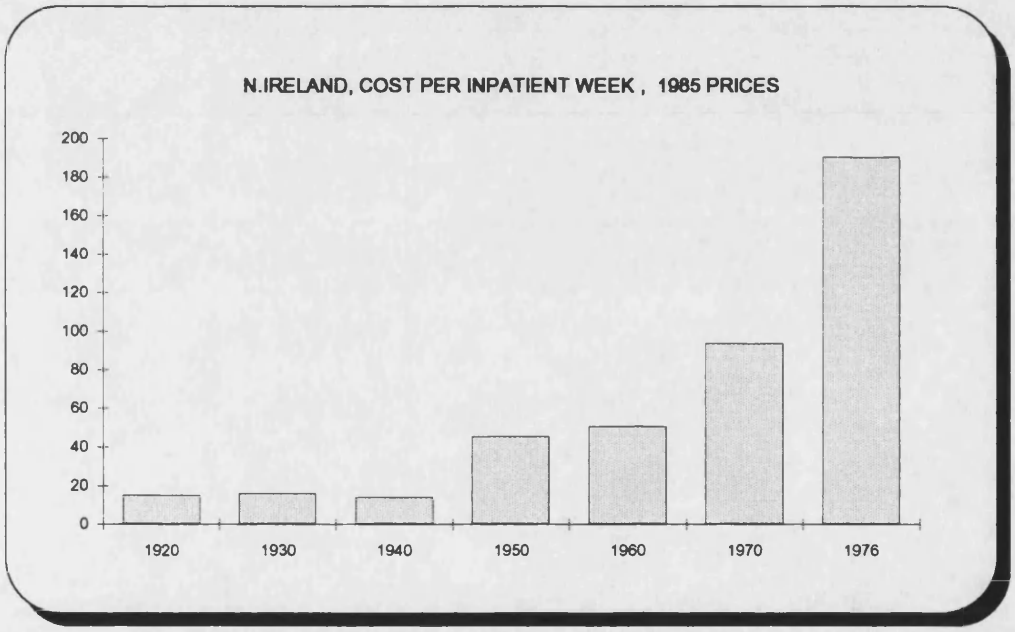


[1] Mental handicap, in common with the Republic of Ireland, received less attention in N. Ireland until the 1948 Act, due partly to the non-applicability of the 1913 Act to Ireland. Data on mental handicap spending are only available for the post-war period. Spending on mental handicap rose from £0.4m in 1951, £2.9m by 1960, and £7.0m. by 1970 and continued to grow to reach £12.5m by 1976. Put in terms of the share of the combined budget, mental handicap spending increased its share from 5% in 1952 to 14% in 1960 and 22% by 1970 and 26% by 1977.

Unit Costs

As in England & Wales, such data were produced annually, and are summarised in Figure 7.30 (and Table E.10) in constant 1985 prices . The average unit cost of maintaining a patient in the psychiatric hospitals of N. Ireland remained broadly constant to 1940, falling from £18 per week in 1920 to £17 in 1930 and £15 in 1940. 1959 saw a three-fold increase to £48, with a further relatively small rise to £53 by 1960. The average cost almost doubled again by 1970 to £88 per week and doubled again by 1976 to £178 per week. Thus between 1950 and 1976, unit costs increased by a factor greater than 4, after allowance for inflation as measured by the GDP deflator. The effects of using other measures of inflation are discussed in Chapter 8.

FIGURE 7.30



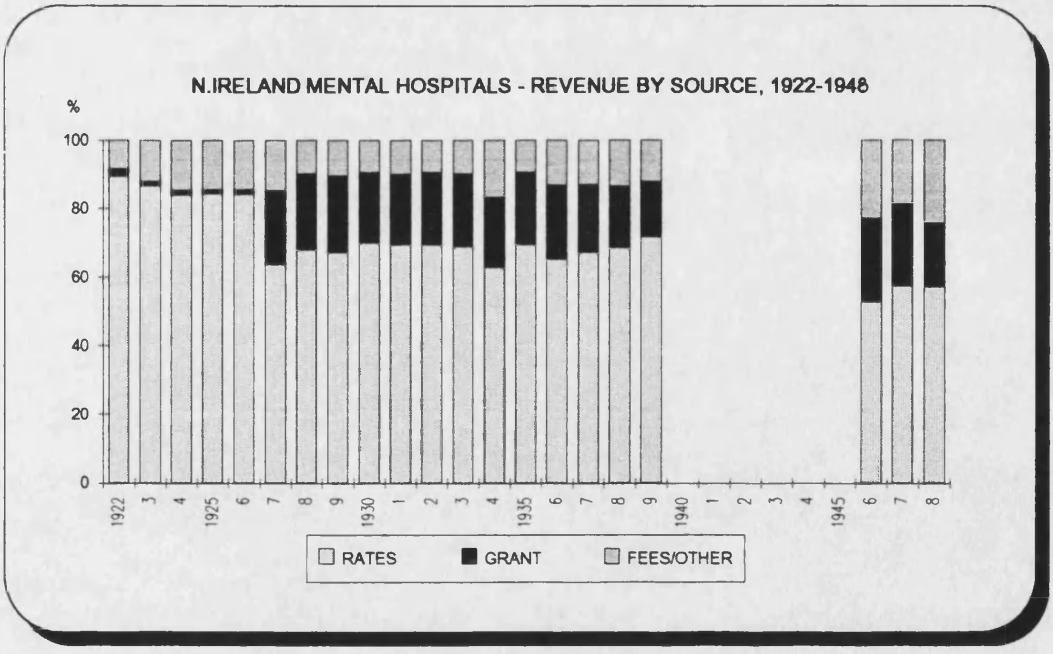
Capital Expenditure and Indebtedness

The data on capital expenditure (expenditure financed out of loans) for the period 1921 to 1948 are shown in Table E.11, Appendix 3) indicating that very small sums were expended under this heading: in ten out of twenty one years capital spending was less than £10,000. The highest spending took place in 1938-9 when £35,000 were spent. No data on Capital spending on mental illness are available post 1950. Similarly, no data have been located on capital indebtedness.

Revenue

The sources of income are shown in Figure 7.31 (and Table E.12, Appendix 3) for the period 1921/2 to 1947-8. In the early years of the N. Ireland state, Government grants appear to have been confined to payment for Criminal Lunatics so that the bulk of receipts originated with the County and County Borough Councils, whose share was 89% in 1921-2 , falling to 84% by 1925-6.

FIGURE 7.31



In 1926-7 a fixed Government Grant was introduced of just over £37,000 per annum, which had the effect of reducing the share of the County and County Borough Councils share of receipts to 64% in that year. However, because the grant was for a fixed sum, its share in total receipts fell from 10% in its first year to 8% by 1937-8. By 1945-6 the fixed grant had been increased to £90,000 but as expenditure and receipts had increased sharply, this increase did no more than keep the share of the Government Grant at around 8%.

Receipts from private paying patients (in whole or in part) in the public lunatic asylums accounted for around £20,000 over most of the period, with a doubling in nominal terms after World War II. Expressed as a share of revenue, these receipts accounted for between 6% and 11% of revenue over the period without any clear trend. After the initiation of the NHS in 1948, data on sources of revenue ceased, as was the case for the rest of the UK.

Conclusions

Several conclusions may be briefly referred to, notably

a) the similarity between Ireland & England and Wales as well as Scotland as far as the pattern of activity and finance are concerned, specifically:

b) the decline in the number of inpatients since the mid-1950s,

b) the rise in the first and total admission rate,

c) the extraordinary rise in spending which was

d) almost entirely accounted for a rise in unit costs, particularly in 1970s.

CHAPTER 8

TESTING THE MAJOR HYPOTHESES

INTRODUCTION

The present chapter subjects the hypotheses identified in Chapters 2 and 3 to empirical testing, using the data from Chapters 5 to 7. As discussed in Chapter 1, only a rather crude notion of testing can be applied, given the nature of the data. Testing in this sense might be compared to a coarse screen, against which hypotheses are passed to assess empirical plausibility as a guide to further exploration. On the basis of this empirical assessment, various key paradoxes are identified for more detailed examination in the succeeding chapter. As with the earlier chapters, the data are summarised graphically, with the relevant tables appended as Appendix 4.

EMPIRICAL HYPOTHESES

Seven testable hypotheses were identified in Chapters 2 and 3, as follows:

- the institutional hypothesis - that the development of the lunatic asylums was part of a trend towards greater institutional provision which was required by the break-up of traditional families and by the labour market.
- the epidemiological hypothesis - that there was an epidemic of mental illness as measured by first admission rates, probably of schizophrenia, in the latter half of the nineteenth century.
- the cheap warehouse hypothesis - that the emergent public lunatic asylums provided relatively cheap ways of warehousing awkward persons.
- the capitation hypothesis - that the capitation payments introduced in 1874 led to increases in the numbers of pauper lunatics in the public asylums.
- the relative cost hypothesis - that the run-down of the asylums and the shift towards community-orientated policies in the post-World War II period was propelled by rising unit costs.
- Wagner's Law Hypothesis - that Wagner's Law did not apply to the mental illness sector, as evidenced by the experience of England & Wales in the period 1939-45.
- the pharmacotherapy hypothesis - that the pharmacopotherapy revolution in the mid-1950s led to major changes in the pattern of service provision, specifically the run-down in the number of inpatient places in the psychiatric hospitals.

These hypotheses are discussed in turn below. An advantage of initiating the process with the institutionalisation hypothesis results from its clarification of the meanings which can be attached to the data on service use. The comparative review of inpatient and admission rates required by the epidemiological hypothesis summarises the data in ways which can be conveniently used to assess the plausibility of several of the other hypotheses.

HYPOTHESIS 1 - the institutional hypothesis

That the development of the public lunatic asylums was part of a move towards greater institutional provision

This hypothesis, which has been associated with Scull (1976, 1979, and 1990) and shared by a number of other writers, including Unsworth (1987), has, however, been largely implicit in the literature. Its importance derives from the possible substitutability of different forms of institutional care, which could in turn raise doubts about the meaning of data on service use. For example, to the degree that elderly persons were cared for in the psychiatric sector, service use levels in that sector would be overestimated and vice versa for other services. Abel-Smith & Pinker (1958) have shown how data from the Census of Population could be used in combination with other sources to track changes in the level of institutional provision by type between 1911 and 1951. This section employs similar data over the period 1851 to 1981 for the four countries to assess both the likelihood that psychiatric and other forms of care substituted for each other, and the degree to which the lunatic asylums were part of a move towards greater institutional provision.

The hypothesis, as put forward by Scull, makes two claims: firstly, that the development of the lunatic asylums was part of a trend towards greater institutionalisation of society in the period from 1840 to 1950, and secondly, that their run-down was part of a process of deinstitutionalisation or 'decarceration' after the mid 1950s.

Such a hypothesis, if corroborated, could help explain why Ireland and later the Republic of Ireland, was an outlier in term of treated prevalence and incidence. If the overall level of institutional provision in Ireland was relatively less than England & Wales, then the psychiatric institutions might have substituted for other forms of care, for example, by having lower thresholds for admission and residence.

The available data allow two issues to be addressed:

* the degree to which there was a trend in each of the countries towards greater institutional provision in the period 1840 to 1950, and a decline thereafter, and
* whether there is evidence of a substitution between types of institutional care.

With regard to whether there was a trend towards greater institutional provision, previous chapters have shown that institutional provision for the mentally disordered increased during the period 1850 to 1900, remained high between 1900 and 1955 and since then has been in steady decline. Was this expansion, maturity and decline part of a general process that applied to other social institutions or was it peculiar to the mental illness/handicap sector? Scull suggests that it was part of a general process.

The second question is arguably as important. If one is to take seriously the data on trends in the institutions catering for the mentally ill and mentally handicapped, one must define the boundaries of the sector. To check whether there were substitutions between different institutions catering for the same client group, any comprehensive study should encompass the range of relevant institutions. The Census of Population data permit a check on the degree of substitutability between different institutional types. None of the studies of lunacy or mental illness, which were reviewed in Chapters 2 or 3, have addressed this question.

An attempt to answer these questions requires data on the full range of institutions in society. A definition of the range of institutions, along with the number of persons resident in institutions is conveniently provided by the decennial Census of Population for each country.[1]

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[1] The Census of Population not always decennial in each country, due to exceptions such as War.

England & Wales: Census Data on Institutions [1]

The Census data on the proportion of the population in institutions in England & Wales for the years 1851 to 1981, shown in Figure 8.1 (and Table F.1, Appendix 4), exhibits considerable stability over the period with some evidence of increased institutionalisation through most of the period. The proportion of the population who were inmates in institutions varied between the fairly narrow limits of 10 and 14 per 1,000. This ratio rose from a minimum of 10 per 1,000 in 1851 to 11 in the period 1871 to 1891, rising again to 14 by 1911 before falling to 12 in 1921. After a recovery to 13 in 1931, 14 per 1,000 of the population were institutionalised in each of 1951, 1966 and 1971. The 1981 Census showed a small drop to 13 per 1,000. Overall, then, there was an increase of some 40% in the gross institutionalisation rate between 1851 and 1911 and very little change since then.[2]

Four main institutional types are distinguished in Figure 8.1:

* lunatic asylums (including those asylums for the mentally handicapped),
* hospitals,
* prisons, and
* workhouses / 'Homes for the Elderly' / 'Homes for Children'.

---

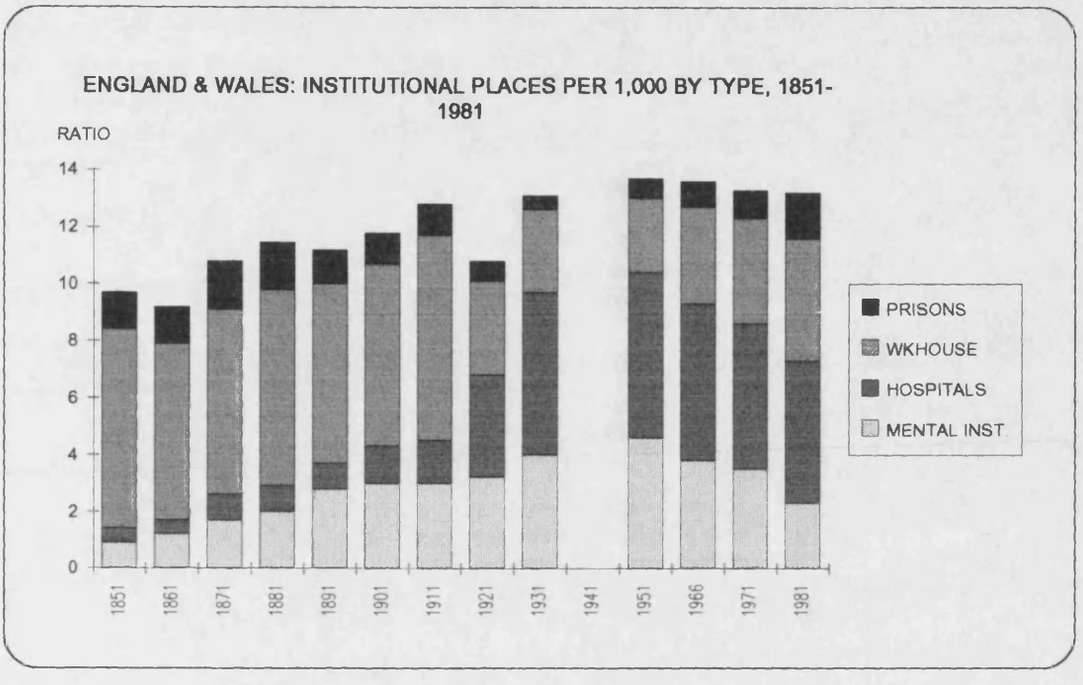
[1] A useful article by Pearce (1990) presented an official view on the Census of Population data on institutions. His main points concerned the problems of deciding whether or not to count persons who may be in institutions for short periods as inmates. Both the 1971 and the 1981 Census distinguished three groups: those with length of stay under six months, those with length of stay greater than six months and those who worked in the institutions. Pearce also discussed the effects that the timing of the census can have. For example, if taken during school holidays, the numbers in temporary accommodations, like hotels, will tend to be inflated. This study focuses on those likely to be resident in institutions for more than six months, thus excluding hotels and boarding houses. Lack of appropriate data has necessitated the inclusion of acute hospitals.

[2] The actual proportions were as follows:

1851	10%
1861	9%
1871	11%
1881	11%
1891	11%
1901	12%
1911	14%
1921	12%
1931	13%
1951	14%
1961	14%
1971	14%
1981	13%

Although a number of other types of accommodation were identified in the Census, such as hotels and guest houses, and the homeless, these have been omitted in Figure 8.1, because of the relatively small size of these sectors and their lack of relevance to the hypotheses under review.

FIGURE 8.1



From Figure 8.1 it is clear that most of the increase in the institutionalisation rate between 1851 and 1911 was due to the lunatic asylums, and to a lesser extent to the hospitals. A gradual segregation of institutional types away from the all purpose workhouse (defined in Figure 8.1 to include Homes for the Elderly and for Children after 1921) was a dominant feature as first hospitals and later homes for the elderly and children were identified separately.

Thus, while there a trend towards a larger proportion of the population being in institutions, this was not part of a general increase in all types of institutions but rather due mainly to a growth in the lunatic asylums.

The main institutional type in Figure 8.1 emerges as the miscellaneous category comprising Workhouses to 1921 and Homes for the Elderly and Children thereafter. The decline in this group between 1891 and 1901 was due to the Poor Law hospitals being defined separately as hospitals rather than classified under Workhouses. The number of places per 1,000 population in Homes for the Elderly and for Children in 1951 is almost identical with the proportion who were inmates of Workhouses in 1931[1].

Over the period, the mental institutions (defined in the Census to include institutions for the mentally handicapped after 1921) made up around one quarter of the total institutional places provided, with a rise to 1951 and a decline thereafter. This decline was due roughly equally to those institutions catering for the mentally ill and those catering for the mentally handicapped.

The expansion of these mental institutions in the period 1851 to 1951 does not appear to have been at the expense of other institutions. There was an upward trend in the three types of institution excluding Workhouses in each decade up to 1951, with the variation in the total due to the Workhouses up to 1911 after which hospitals were separated out, leaving 'Homes for the Elderly' and 'Homes for Children' in this category. The proportion of persons in these institutions, after showing little change in 1921 and 1931, expanded between 1951 and 1981. The proportion of the population in hospitals expanded sharply in 1921 due to classification of the former workhouse infirmaries, with little change evident between 1921 to 1981. The relatively small proportion who were in prisons rose until 1881, fell from then to 1931, and expanded to 1981.

The data on the proportion of the population who were incarcerated in prisons does not support the view that such institutions declined during the period after 1945. The

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[1] A note of caution must be sounded over the workhouse establishments. Given the lack of information on the reasons for people being inmates, this study has not attempted to break down workhouse inmates between physically ill and able-bodied. Abel-Smith & Pinker were able to do so using data from a survey of the health status of workhouse inmates. The mentally ill were distinguished in the Lunacy Commissioners data, regardless of were they were housed, and so the caveats about the workhouse inmates does not apply to them.

proportion of the population so detained rose in each census between 1951 and 1981. The fall in the proportion of the population in psychiatric hospitals was accompanied by a roughly proportionate fall in the overall level of institutional provision, notwithstanding the small increase in the numbers in prisons. Overall, there is no evidence of any major substitution between mental hospital places and other institutions taking place in the period 1951 to 1981.

This impression is buttressed by the data on the age profiles of the various institutions. As reviewed in Chapter 5, the psychiatric institutions showed a predominance of the younger to middle aged groups, in contrast with a predominance of the elderly in the workhouses and general hospitals[1].

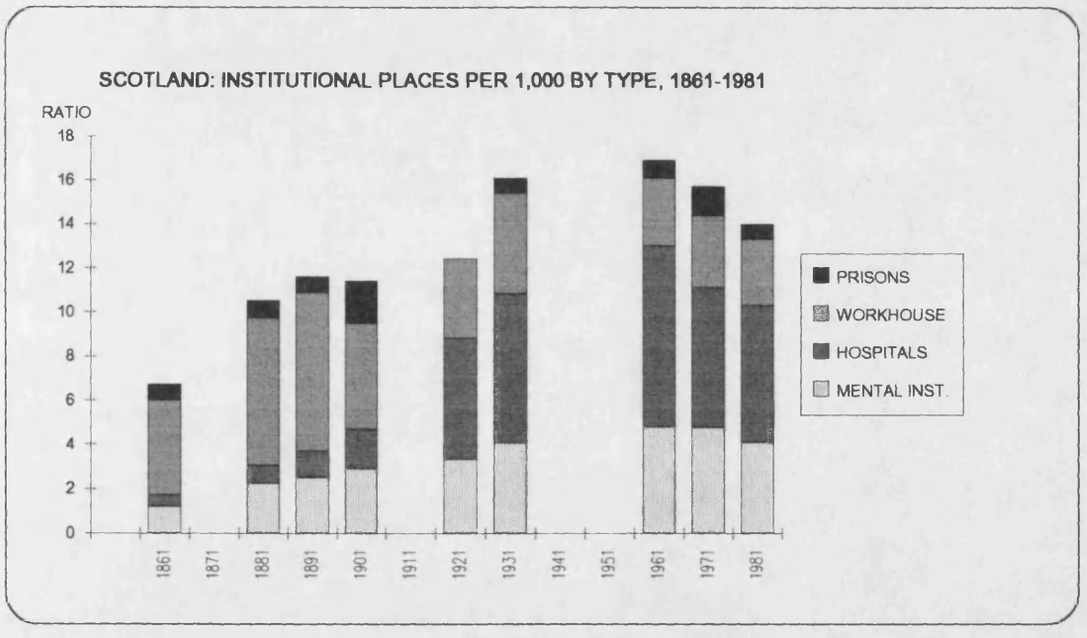
[1] While more analysis could be carried out, for instance on the age structure of the inmates of the various institutions, the lack of change at an overall level, combined with the more detailed analysis of the ages of psychiatric inpatients in Chapters 5 to 7, suggests that such analyses would add little to the understanding of the hypothesis under discussion.

Scotland

Comparable Census of Population data are provided for Scotland in Figure 8.2 (and Table F.1, Appendix 4), indicating a broadly similar pattern, but with a more pronounced pattern of expansion and decline than for England & Wales.

The overall level of institutional provision rose from under 7 per 1,000 in 1861 to between 11 and 12 in each of 1881, 1891, and 1901[1]. The 1931 total was 16 per 1,000 and that for 1961, 17, the highest of any year. This proportion fell to 16 per 1,000 in 1971 and 14 per 1,000 in 1981.

FIGURE 8.2



As in England & Wales, the main institutions in the period to 1901 were the Workhouses, whose share fell as the hospitals under their aegis gradually were

[1] No comparable data appear to have been published for 1911 or 1951.

separated out, starting from 1921. The share of the residual category in Figure 8.2, Homes for the Elderly and for Children, showed little change between 1921 and 1931, after which it fell in each census year thereafter. From 1931 hospitals became the largest institutional type, with an expansion in 1961 and a decline thereafter, which accounted for most of the decline in the overall ratio after 1961.

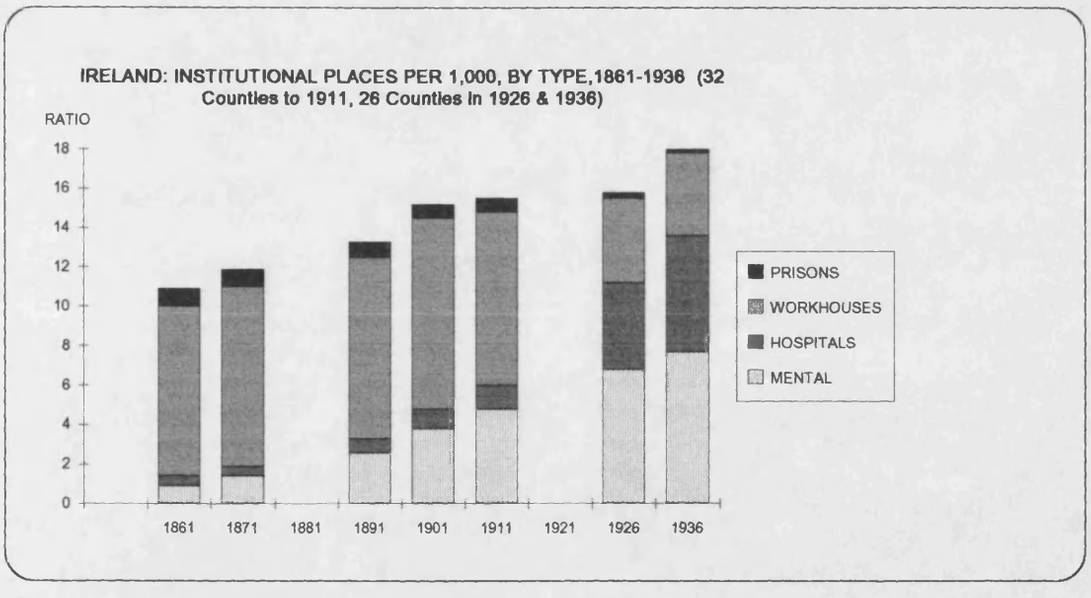
The lunatic asylums, (later mental hospitals and including institutions catering for the mentally handicapped from 1921) expanded to 1961 and show a slight decrease thereafter. These institutions housed under 1 per 1,000 population in 1861, but increased steadily to a peak of 5 per 1,000 in 1961, and fell back to 4 per 1,000 by 1981.

Ireland

Equivalent data for the 32 Counties up to 1911 are shown in Figure 8.3 (along with corresponding data for for the 26 counties for 1926 and 1936, the only years for which the Census of Population published data -see Table F.1). The total level of institutional provision rose from 12 per 1,000 of the population in 1871 to 15 per 1,000 in each of 1901 and 1911. As with the other countries, the Workhouses made up the main group in this early period, accounting for over 80% of all the places, followed by the lunatic asylums. By comparison, the hospitals and the prisons made up relatively low shares of total provision. This increase in the lunatics asylums accounted for the bulk of increase in the overall ratio between 1861 and 1911.

The lunatic asylums contained 1 per 1,000 of the population in 1871, a share which rose steadily to 4 by 1901 and 5 per 1,000 by 1911.

FIGURE 8.3



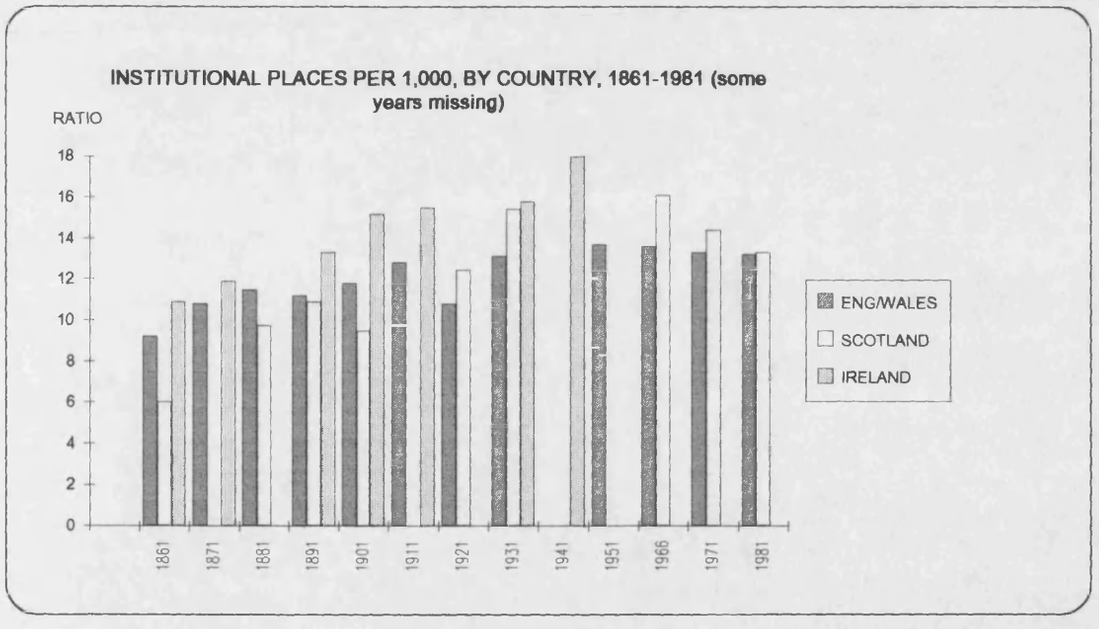
The Free State / Republic of Ireland

The 1926 and 1936 Censuses of Population provided data on the numbers in the various institutions but later census publications provided only aggregate data on the numbers in the various types of institutions. Those data show the 1926 total of 14 per 1,000 was similar to that of 1911 but with a growth to 18 per 1,000 by 1936. This expansion was due largely to the hospital sector but growth also occurred in the lunatic asylums, whose share expanded in both 1926 and 1936.

Inter-country comparisons and conclusions

The level of overall institutional provision by country is summarised below in Figure 8.4, for England & Wales, Scotland and Ireland for the years for which data are available.

FIGURE 8.4



In broad terms, these results indicate that:

* first, an overall trend towards greater overall institutionalisation in each country between 1851 and 1911, with variations by country to around 1951, and less marked declines thereafter,
* second, most of the growth in the proportion of the population in institutions in the period to 1951 was due to the psychiatric institutions (including institutions for the mental handicapped),
* third, the decline in the proportions in the psychiatric institutions since the mid-1950s has not been accompanied by any major decline in the overall institutionalisation rate in England & Wales. In Scotland, the decline was due more to general hospitals than to mental hospitals.
* fourth, Ireland had a higher overall level of institutional provision than England & Wales which in turn had a higher provision than Scotland.

The evidence reviewed above provides some support for the hypothesis that there was a trend towards greater institutionalisation in the nineteenth century, but little support for any process of overall deinstitutionalisation in the latter half of the twentieth. The lack of support for the deinstitutionalisation thesis is most true of England & Wales, since in Scotland the institutionalisation rate peaked in 1961 and has fallen since.

The differences between the rates of psychiatric institutionalisation between Ireland and the other countries cannot be explained by the hypothesis of a substitution between institutional types of provision there, since Ireland was relatively well provided with all types of institutions.

These data lend credibility to the validity of the data on psychiatric service use reviewed in Chapters 5 to 7, in that they provide no strong evidence of substitution between different types of institutions. What institutional substitution that appears to have occurred concerned the workhouses on one hand and the general hospitals and Homes for Elderly and Children on the other. Mental institutions accounted for much of

the growth in the proportion of population in institutions up to 1951 but the decline in this sector since then has not led to reductions in the overall ratio in England & Wales or in Scotland.

HYPOTHESIS 2 - the epidemiological hypothesis

*** the pattern of service use, as measured by treated prevalence and incidence, is consistent with an increase in mental illness in the late nineteenth century caused by an epidemic, probably due to a viral infection and mainly to do with schizophrenia.**

This hypothesis, which is associated with Hare and Torrey, argues for a medical (demand-side) rather than a nosocomialist (supply-side) explanation of the rise in the number of persons in the psychiatric hospitals in the late nineteenth century. Hare (1983) has provided the most thorough empirical statement of this hypothesis by charting the increase in both treated prevalence (ratio of inpatients to population) and first admission rates for England & Wales between 1850 and 1900. Torrey (1981) has also argued in favour of an epidemic of schizophrenia having occurred. The accounts of the activity levels for each country, as outlined in Chapters 5 to 7 enable this hypothesis to be evaluated both by country and over a longer time period, running up to 1986. Before looking at these trends, however, some consideration must be given as to how the available data might enable such a hypothesis to be tested.

Firstly, if an epidemic of infectious mental illness occurred, one might plausibly expect it to take a similar form in neighbouring countries. While delays might occur in the arrival and transmission of the infectious agent, one would expect each country to show a broadly similar pattern of incidence, as measured by first admission rates. Changes in the stock of inpatients, while of interest, might be expected to be more influenced by a range of other factors, such as the financing arrangements and the availability of home-orientated as opposed to inpatient services[1]. Key components in the pattern of incidence (as measured by first admission rates) by country might include both the levels of service use and the turning points in these.

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[1] Changes in the stock of inpatients might, it is suggested in Chapter 9, be regarded as more determined by supply-side rather than demand-side factors.

Secondly, one would want to examine the service use data over the longest time period possible. Hare examined the service use data up to 1900 but as shown in Chapters 5 to 7, the data series for each country can be extended to the mid-1980s. It is difficult to see any justification for imposing time limits on the period for which such data might be allowed as evidence.

For these reasons, the following paragraphs consider the different levels of activity in the lunatic asylums and mental hospitals in the four countries from when data became available (around 1850 for total inpatients and total admissions, from 1898 for first admissions in England & Wales, with slight differences in the other countries) up to 1985. The number of inpatients per 1,000 population[1], as shown in Figure 8.5 (and Table F.2, Appendix 4) indicates a broadly similar pattern for England & Wales and Scotland, but with Ireland as a clear outlier with a ratio which rose to roughly double that of England & Wales by 1914, and which continued to rise thereafter in the Republic of Ireland but not in N. Ireland. This ratio peaked in each country in the mid-1950s (slightly later, around 1960, in N. Ireland) after which considerable declines have been evident in each country. The ratio in England & Wales had fallen by two thirds of its 1955 level by 1985 while these ratios for Scotland and Ireland (North and South) fell by around half over the same period.

The inpatient to population ratios for England & Wales were generally similar to those of Scotland - a little above Scotland until the 1920 and a little below thereafter. While the ratio began to decline in England & Wales and in Scotland after the mid-1950s, that decline did not begin until the early 1960s in N. Ireland, after which the rate of decline was similar.

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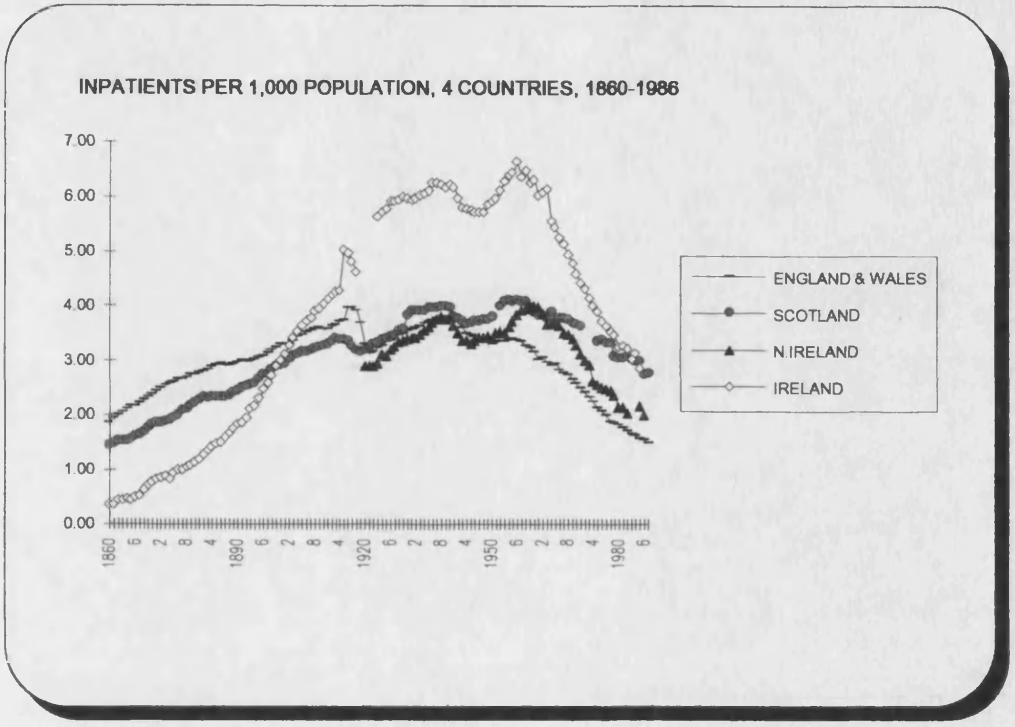
[1] The data for England & Wales and Ireland refer to those in institutional care only, while those for Scotland include those in domestic care, reflecting the importance of the policy of boarding-out. The data for Ireland, both Republic of Ireland and N. Ireland. exclude the mentally handicapped.

FIGURE 8.5



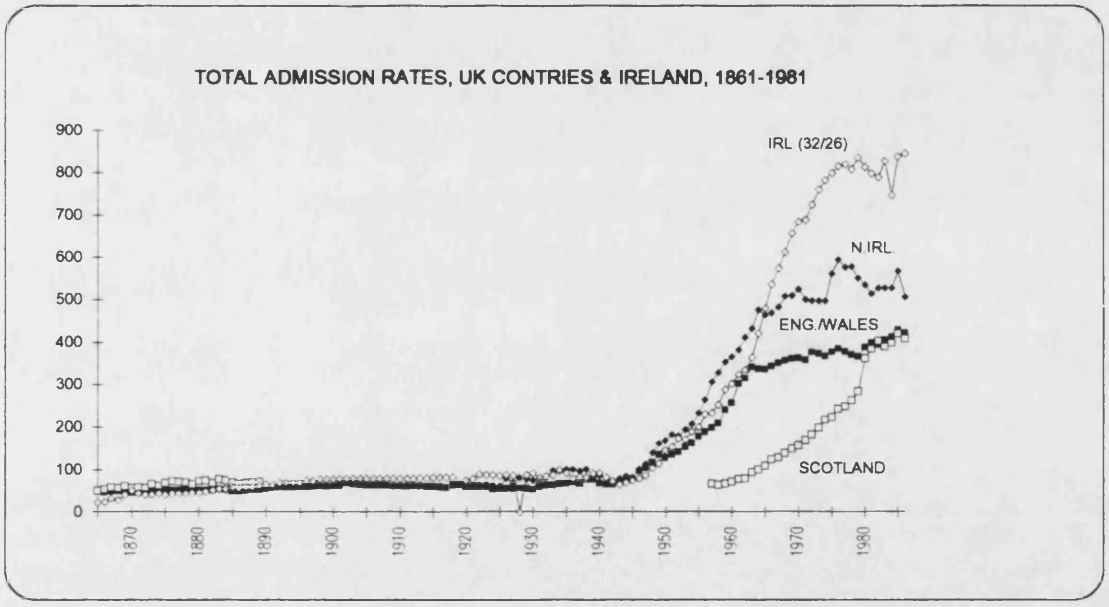
Ireland had a lower ratio than England & Wales up to around 1900, but with a stronger upward trend than that in England & Wales. The ratio for Ireland rose steadily from 1860 to 1914, over which time it increased from 1.3 to 5.8 persons per 1,000, while that for England & Wales rose from 1.8 to 3.8. Ireland's annual rate of increase was just under 3%, while that for England & Wales was just over 1%.

The Republic of Ireland had inpatient ratios which moved broadly in parallel to those of England & Wales in the period 1920 to 1960 but from the much higher base which had been set by 1920. Similar, temporary declines occurred in both countries in the number of residents during the early 1940s, followed by a relatively sharper increase in Ireland after 1945. From the mid-1950s these ratios declined in each country - from 8.5 per 1,000 in the Republic of Ireland to 5 in 1986, compared to a fall from just under 3.5 per 1,000 in England & Wales to around 1.5 in 1986.

Admission rates

Total (first plus repeat) admission rates followed broadly similar patterns in each of the four countries, as shown in Figure 8.6 (and Table F.2, Appendix 4). In each country[1], the total admission rate was the same at around 50 per 100,000 between 1860 and 1940, after which it increased sharply in all countries, by factors ranging from 7 to 12. The growth in the total admission rate eased off first in England & Wales at around 350 to 400 per 100,000 in the early 1960s, and in Scotland in the 1970s at around 500 per 100,000. Higher overall admission rates were evident for N. Ireland at around 600 per 100,000 by the 1960s, and even more so in the Republic of Ireland where the rate continued to rise to a peak at around 800 per 100,000 in the late 1970s after which it levelled off.

FIGURE 8.6

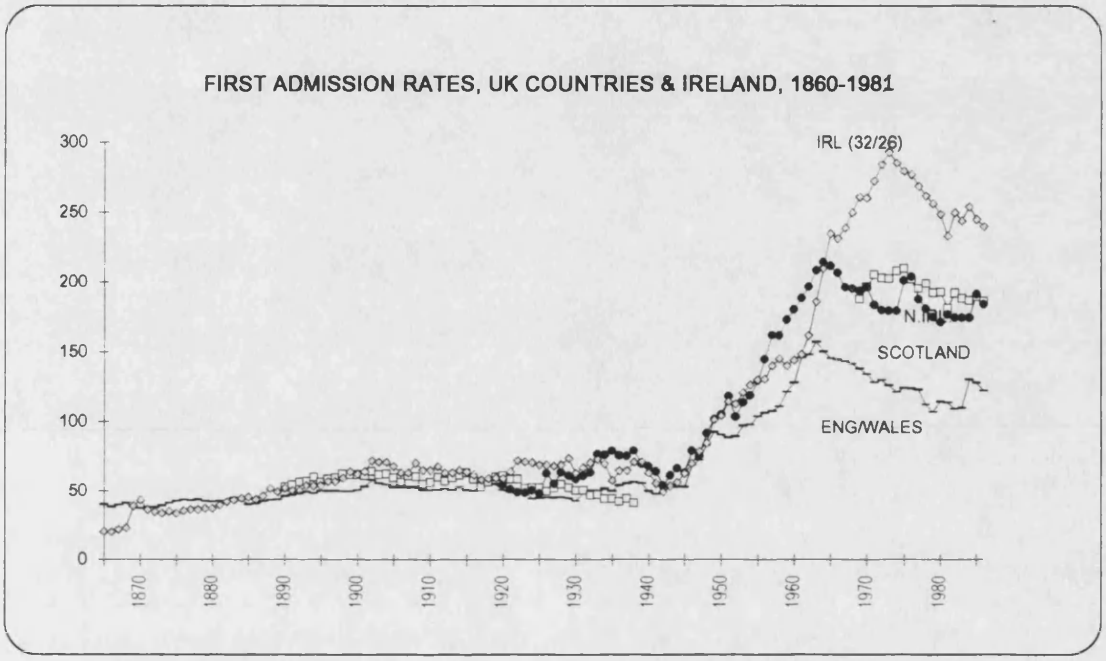


[1] Admission rates are those to County and Borough Asylums in England & Wales, later NHS mental hospitals, while those in Scotland are similarly defined. Admission rates in Ireland are also similarly defined but include the private sector. As discussed in Chapter 6, major gaps exist in the data for Scotland.

First Admission Rates

First admission rates[1], shown in Figure 8.7 (see Table F.3, Appendix 4), also followed a fairly similar pattern with each country having stable rates to World War II and rapid increases thereafter.

FIGURE 8.7



The first admission rate for England & Wales rose from 34 per 100,000 in 1860 to 50 in each of 1900, 1910 and 1920, before falling back to 42 in 1930 and 50 in 1940. Thereafter it rose to 90 in 1950, 128 in 1960, 134 in 1970 before falling to 114 in 1980 and 122 in 1986[2]. Ireland had a somewhat higher first admission rate in the period 1890 to 1940, running at between 60 and 70 per 100,000 compared to around 50 for both England & Wales and Scotland. The data show each country as having similarly increased rates between 1955 and 1960, with the (interpolated) rate for England & Wales peaking at 157 per 100,000 in 1963 while the rate for the Republic of Ireland

[1] Defined similarly to those for total admission rates, as discussed in previous footnote.

[2] The available data on admission rates by diagnosis are discussed in Chapter 9. The first admission rates after 1970 were little affected by the new diagnoses associated with alcohol and drugs. These rates were generally low for England & Wales - 5 per 100,000 in 1970, 9 in 1980 and 11 in 1986. The rates for Ireland were much higher - 46 per 100,000 in 1970 rising to 75 in 1980 and 69 in 1986 (MSRB, various years)

peaked at 293 in 1973. Rates in both countries then declined sharply. Scotland (which lacks data between 1938 and 1971) and N. Ireland both showed increases which were similar to each other with a rise to just under 200 per 100,000 between 1960 and 1980.

With regard to Hare's epidemiological hypothesis, two points are worth stressing. First, while the 12 point rise in the first admission rate for England & Wales between 1860 and 1900 (from 38 to 50 per 100,000), is notable, his emphasis on it seems misplaced historically due to the much greater change in first admission rates after 1945. The first admission rate doubled in England & Wales between 1940 and 1952 and rose by a further 50% by 1963 after which it fell back to around 100 by 1986. Similar increases applied to the other countries.

Second, Ireland was different from the other countries, in having higher levels of treated prevalence (inpatients per 1,000 population) and treated incidence (first admission rate) but with similar turning points to the other countries. These differences persisted in the Republic of Ireland and, at somewhat lower levels, in N. Ireland after 1920. The pattern was not identical, however, in each country. Ireland, and later the Republic of Ireland, had relatively higher rates both for total admissions and first admissions for most of the period.

Overall then, these comparative data, which provide some support for Hare's epidemiological hypothesis, raise many other questions to do with trends in each country after 1945. One way forward would be to disaggregate trends in first admission rates by 'form' and diagnosis. Such an analysis is provided in Chapter 9.

HYPOTHESIS 3 - the cheap warehouse hypothesis:
That the emergent public lunatic asylums provided relatively cheap ways of warehousing awkward persons.

This hypothesis, which has been advocated by many writers, including Scull (1979) but also by Hodgkinson (1967) and Cochrane (1987), could be evaluated by comparing unit costs in the range of relevant institutions, specifically the workhouses which as discussed above, would have provided the main alternative to the lunatic asylums as possible receptacles for awkward persons. The fact that a significant number of lunatics were cared for in the workhouses supports the claim that they provided the main institutional alternative to the lunatic asylums.

If the lunatic asylums provided relatively cheap accommodation, one might expect their unit costs to be below those of the workhouse. Fortunately, relatively good data are available on the unit costs of indoor relief in the workhouses in England & Wales, and these (with suitable amendments) are compared with unit costs in the County Lunatic Asylums in Figure 8.8 (see also Table F.5 , Appendix 4).

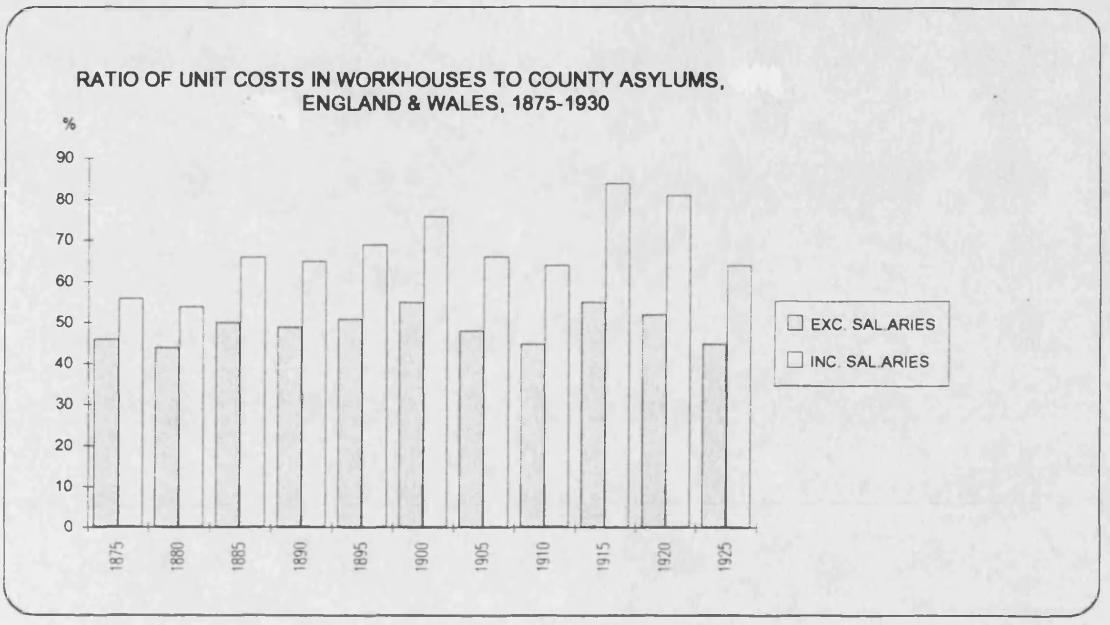
Although the English Poor Law authorities [1] produced activity and expenditure data in long series, the data on the maintenance costs of indoor relief excluded labour costs. Data on the salaries of Officers were provided under a separate heading, without any guidance on the split in their responsibilities (and budgets) between outdoor and indoor relief or between psychiatric and other inmates. Salaries of officers rose from 13% of combined indoor and outdoor relief expenditure plus salaries in 1857 to 29% by 1900 and 35% by 1919. Since the unit cost data for the lunatic asylums included labour costs, it appears that a meaningful comparison must include the workhouse labour costs between indoor and outdoor relief.[2] Given the lack of hard data with which to allocate

[1] Data were published on costs by the Poor Law Law authorities covering long periods - see reports of the Poor Law Commission, 1835-48; Poor Law Board, 1849-70; the Local Government Board, 1871-1919; Local Taxation Returns, 1883-1914; and Local Government Financial Statistics, 1916-48. Also see Williams (1981).

[2] The widely quoted comparison in the historical literature, which put workhouse unit costs at around 50% of

salaries between indoor and outdoor relief, the ratio of workhouse units costs to those of the county asylums is shown in Figure 8.8 both excluding and including salary (allocated pro rata by gross expenditure on indoor and outdoor relief).

FIGURE 8.8



The results show that the maintenance costs of indoor relief, excluding salaries, remained at around 50% of the unit costs in the lunatic asylums, a finding that receives support from the literature discussed in Chapter 2. When salaries are included in the unit costs of the workhouses, the latter show both variation and some tendency to rise over time: from between 50% and 60% of asylum unit costs in the period before 1880, to between 60% and 70% in the period 1885-1915 before peaking at over 80% in 1915 and 1920 and then falling back to 72% in 1930.

Overall, these figures provide no support for the hypothesis that the lunatic asylums provided a relatively cheap method of warehousing awkward persons. Workhouse accommodation could have been provided for between half and three quarters of the cost per inmate, depending on the costs of staffing. Indeed, as shown in the accounts

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those in the lunatic asylums, appears to have ignored the labour cost element in the workhouses.

of each country, sizeable proportions of lunatics remained in the workhouses up to 1948 and beyond. The authorities' attempts to control the number of lunatics cared for in the workhouses were partly successful and also led to separate provision for lunatics within workhouses, some of which later became incorporated into the mental handicap hospitals.

Advocates of the social control thesis could argue that the more specialised and expensive lunatic asylums were necessary because of the possible disruption caused by lunatics. Against this it must be remembered that segregation *per se* does not necessarily imply social control. The advocates of moral therapy, who believed that they could cure lunacy, saw segregation as necessary to apply their methods. Further, the recognition of lunacy as an illness provided a counter argument to the doctrine of 'lesser eligibility' of the workhouse. Overall, it seems inescapably the case that the lunatic asylums had considerably higher unit costs than the workhouses and that this excess persisted throughout the period of growth of the asylums.

HYPOTHESIS 4 - the capitation hypothesis:

That the capitation payments introduced in 1874 led to increases in the number of pauper lunatics in the public lunatic asylums .

This hypothesis, which has been advocated by Maudsley (1877), Webb (1920), Hare (1985), as well as Cochrane (1985), Hodgkinson (1967) and Scull (1990), could take several empirical forms in that the introduction of the capitation payments in 1874 could have:

a) increased the total number of pauper lunatics in care above what it would otherwise have been, and/or

b) shifted the balance of pauper lunatics in care in favour of institutions which received the capitation grant.

With regard to a), the distinction between the stock (prevalence) and flows (incidence) of mental illness must be stressed. Increases in the stock of pauper lunatics in types of care eligible for the capitation grant would show up mainly in the number of pauper lunatics in the County and Borough asylums since these contained over 90% of such eligible lunatics. From the point of view of flows of newly diagnosed pauper lunatics, the introduction of capitation payments might be expected to:

i) increase either the number or rates of admissions, both first and total, and/or

ii) reduce the (live) discharge rate.

An examination of the data (presented above in Figures 8.5 to 8.8, and in the relevant chapters relating to England & Wales, Scotland and Ireland), suggests that the introduction of the capitation grant in 1875 had remarkably little effect on any of the relevant series. Considering England & Wales first, the trend in the stock of pauper lunatics in the County and Borough Asylums showed no change before and after 1875. That trend continued steadily upward to 1914, both in absolute numbers and in relation to population.

Similarly, no sharp changes were apparent in the division of provision for pauper lunatics between the lunatic asylums and the workhouses, as shown in Chapters 5 to 7. The number of pauper lunatics in the workhouses remained fairly steady while the number in the lunatic asylums continued to grow, so that the proportion in the workhouses fell steadily. Given the rough equality of costs between the two types of provision from the point of view of the local decision makers after capitation was introduced, and the opposition of the Lunacy Commissioners to workhouse provision, the persistence of pauper lunatics in the workhouses may well have been due to pressure of places rather than any other factors.

The pattern with admissions is more clear cut in that there was no upward trend immediately before or after 1875: both the annual total and first admission rates remained almost unchanged between 1860 and 1890. Similarly, the level of live discharges showed no major decline over the same period.

The above pattern, which applied to England & Wales, also fitted Scotland and to a lesser extent Ireland. Scotland, it will be remembered, was unique in having capitation payments which applied to all forms of care and which were limited in cash terms after 1890, so that the average capitation payment decreased as the number of pauper lunatics increased. These diminished levels of capitation payments do not appear to have led to reductions in Scotland's inpatient to population ratio relative to England & Wales, as shown in Figure 8.5.

Ireland, which experienced full capitation for longer than the other countries, with a greater reliance on it as a source of revenue, exhibited a steady upward trend in the total number resident in the lunatic asylums both before and after 1875. No sudden changes were apparent in the distribution between the asylums and the poorhouses. The total admission rate in Ireland showed a slight upward trend from 1875 right through to 1914, after a peak in the years 1869-71 and a fall to 1874. Thus, while capitation payments may have had more of an effect on the numbers admitted and detained as pauper lunatics in Ireland, the effect does not appear to have been

substantial. Further, the reduction of capitation payments in the early 1900s and their eventual abolition in the mid-1940s do not appear to have had a noticeable effect on the patterns of service use.

The overall conclusion, then, must be that the empirical data offer little or no support for the hypothesis that capitation payments expanded the number of pauper lunatics above the long term trends in England & Wales and in Scotland. Given the constraints on the use of such historical data, the hypothesis receives little support from the data. Ireland, however, which was an outlier in terms of its relatively high levels of service use, may have been affected by capitation. The outlier status of Ireland is considered further in Chapter 9.

HYPOTHESIS 5 - the relative cost hypothesis:

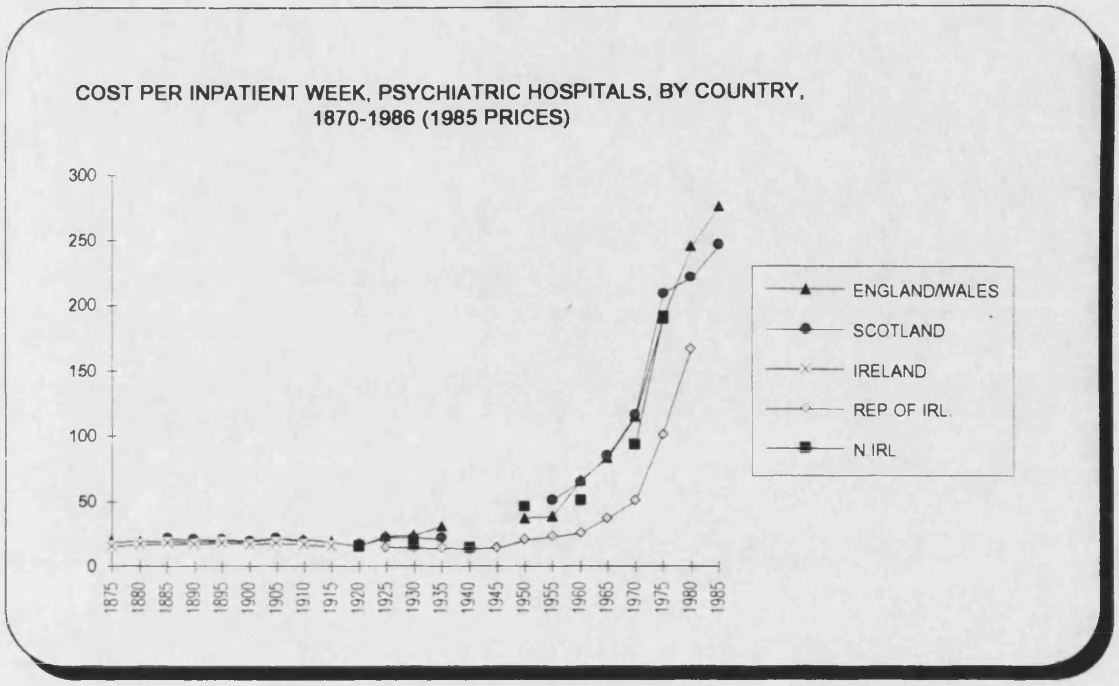
That the run-down of the asylums and the shift towards community oriented policies was propelled by rising costs of inpatient care, due to factors such as the relative price effect, reduced working hours, equal pay and trade unionisation.

Unit costs, such as per inpatient week or year, provide the best measure of costs, since they are adjusted for the number of inpatients. This hypothesis, put forward by Scull (1977), can be examined first at the aggregate level of trends in unit cost by country and then in greater detail for England & Wales, making use of the data on the pay and conditions of mental hospital nurses provided by Stanton (1983).

Unit Cost Trends by Country

Figure 8.9 (and Table F.6) shows the trends in unit costs per inpatient week for each of England & Wales, Scotland and Ireland for the period 1875 to 1986. As discussed for each country in Chapters 5 to 7, these unit costs showed considerable stability up to around 1955 in each country after which they rose dramatically, with 5 to 7 fold increases evident by 1986. These increases, which are combined in Figure 8.9, are remarkable both for the similarity across country and the pattern stability to around 1950 followed by sharp increases. Overall, these data provide no support for the hypothesis that rising unit cost were a cause of the run-down in the number of inpatients from the mid-1950s - rather the rising costs may have been a consequence. To explore this possibility, more detailed examination of the components of these unit costs is required.

FIGURE 8.9



The Relative Price Effect

The relative price effect arises from the possibility that costs tend to rise more rapidly in certain sectors of the economy, primarily in the service sectors, than in the economy as a whole. Such an effect could result from limited scope for productivity increases in those service (or other) sectors[1]. To the extent that economy-wide wage rises applied with some sectors able to offset these by increased productivity, the unit costs in the less productive sectors would rise inexorably. O'Connor (1973) generalised this insight into the so called "fiscal crisis of the state" which Scull (1977) in turn invoked in explaining the run-down of the mental hospital numbers from around 1955.

[1] The concept originates with a study by Baumol (1967) of the problems associated with funding a symphony orchestra, whose scope for productivity increases was limited by the requirement to play at a certain speed! Thus once they had maximised their live performances and recording opportunities, they could no longer increase their productivity.

The magnitude of a relative price effect is usually measured by comparing the price index for a particular product with the economy-wide price index - the GDP deflator (Heald, 1983). Unfortunately, sector-specific price indexes are seldom available, not least in the mental health services. However, a mental illness price index can be constructed for England & Wales for various years using Stanton's (1983) work on mental hospital nurses earnings, reviewed in Chapter 2 above.

Since Stanton's work covered only one - albeit the largest - expenditure item, namely mental hospital nurses pay for the years between 1919 and 1974, several assumptions have been made to compile the relevant price index. Data exist on the proportion of expenditure accounted for by the pay of mental hospital nurses and some other groups such as medical staff, professional and technical staff, cleaners, and porters[1]. The pay levels for these other groups have been assumed to have moved in line with nurses earnings. Overall, these groups total pay bill amounted to around 50% of that of nurses, with little differences apparent. The prices of the remainder of the inputs have been assumed to move in line with consumer prices, as measured by the Retail Price Index (RPI) [2]. Figure 8.10 (and table F.7) shows the resulting mental hospital price index (MHP) as well as the GDP deflator and the RPI, all set at 100 for 1919.

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[1] See discussion of unit costs in relevant chapters for each country.

[2] RPI for later years, and its predecessors for earlier year (Mitchell & Deane, 1968).

FIGURE 8.10

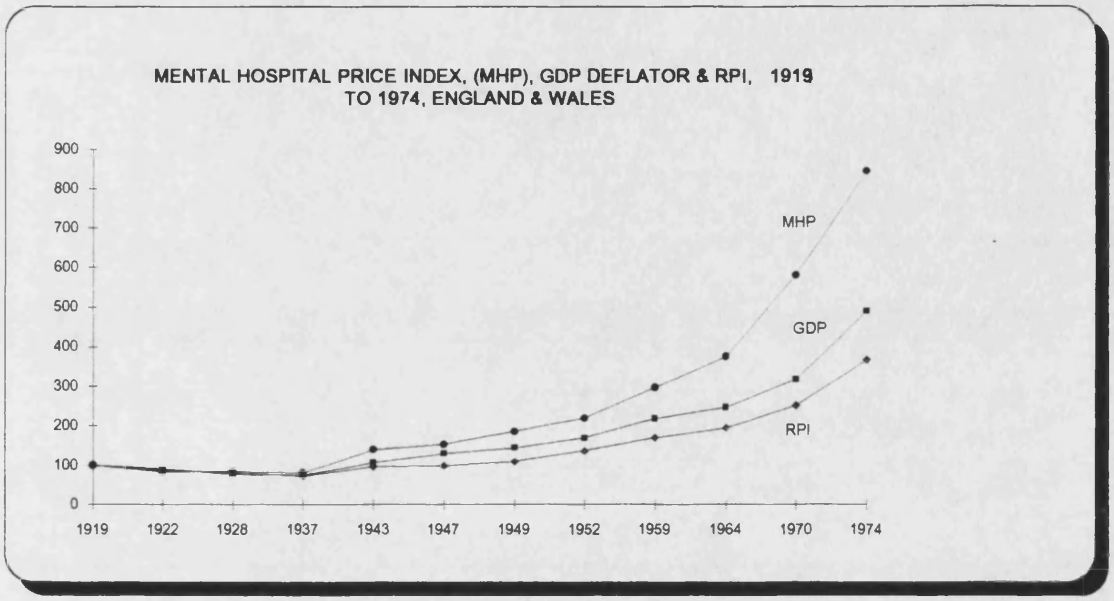


Figure 8.10 provides some evidence of a relative price effect, as evidenced by the divergence between the Mental Hospital Price Index (MHP) and the GDP Deflator, with the former rising faster than the latter. Between 1919 and the late 1930s, the divergence was slight but widened during the War, and after a slight post-war fall, rose steadily from the 1950s through to 1974[1].

The percentage difference between the the MHP and the GDP deflator provides a convenient measure of the relative price effect. A continuing relative price effect would show up in a widening difference between the two indexes. A negative relative price effect applied in 1920s, but turned to a small positive effect after 1928. This gap widened in the period 1937 to 1943, fell back slightly in 1947 before widening again in 1949, with little change to 1952. Successively larger divergences were apparent in

[1] The dates for which the Mental Hospital Price Index has been constructed depend on the years for which Stanton has provided data.

1959, 1964 and 1970 respectively. The 1974 figure showed a narrowing of the gap from its maximum of 80% in 1970.

Scull (1977) postulated that the relative price effect prompted the run-down of the lunatic asylums in the 1950s. Support for such an hypothesis would would require evidence of a strong relative price effect in the decades prior to the turning point in the number of inpatients in the mid-1950s. While there is some evidence of a weak relative price effect in the 1930s and during the 1939-43 War, the main period when a strong relative price effect operated was after 1952. Thus, the hypothesis that the relative price effect led to the decline of the psychiatric inpatient population receives little support from the data. The relative price effect was weak or absent in the pre-World War II period and the major increases occurred in 1964 and 1970 (when around half of the total increase between 1919 and 1974 occurred) - well after the decline in the number of inpatients had begun its course. If the policy of deinstitutionalisation was prompted by the relative price effect, it was a completely unsuccessful policy in curbing this effect.

Scull (1983) in an afterword to his earlier (1977) argument, suggested in response to critics that continued increases in psychiatric expenditure might have occurred if 'decarceration' had not been developed as a policy. Applied to the relative price effect, this argument would suggest a relatively greater price effect than that observed would have applied, were it not for 'decarceration'. Such an argument would, however, miss the central point that psychiatric expenditure and especially unit costs rose dramatically after 1955. Neither the empirical evidence nor the policy discussions of the time point to any concern by policy makers with costs, let alone with the technicalities of the relative price effect.

Finally, it should be noted that the relative price effect is confined to the prices of inputs without any attention to the quantity of outputs. Given that the numbers of inpatients resident in the mental hospitals had fallen to a third of its 1955 total by 1980, unchanged relative prices would have led to a three-fold rise in unit costs,

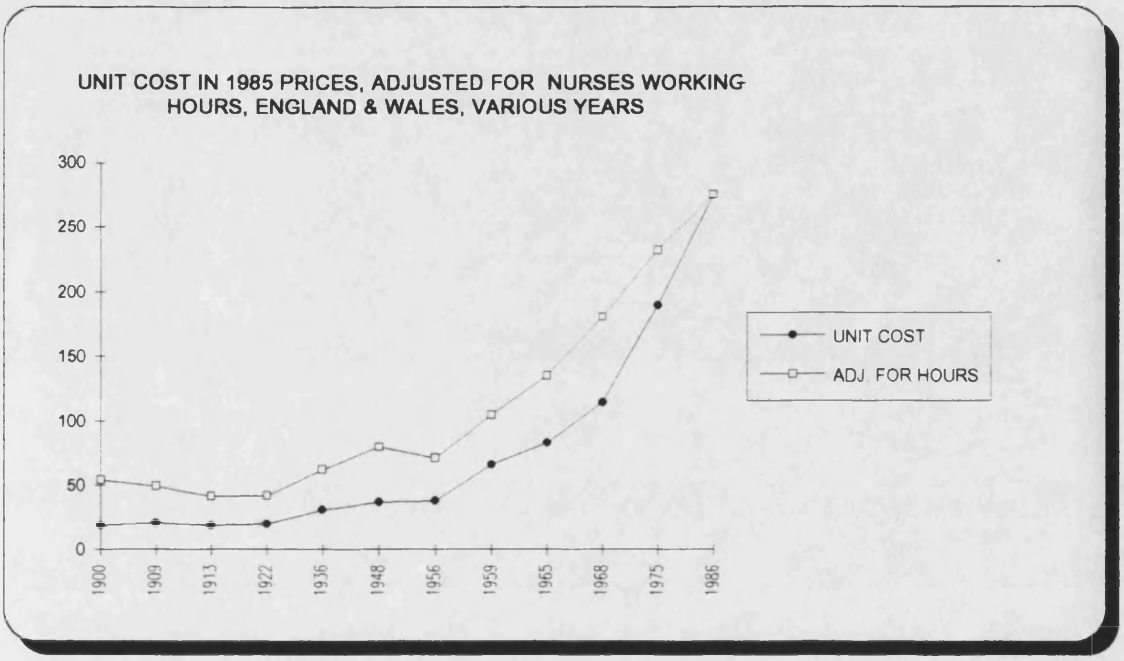
ceteris paribus. Unit costs, as shown in Chapter 5, rose by a factor of around 4 between during this period. Any relative price effect operated on top of a much stronger trend towards higher unit costs due to the decline in the number of inpatients.

Shortened Working Week / Unionisation

These two topics can be conveniently examined together, given that trade unionisation of mental hospital nurses (known as attendants until 1919) developed largely through a struggle for a reduced working week after World War I (Stanton, 1983, p.90). In 1911, the average working week of mental hospital attendants was put at 84 hours, a figure which fell to a recommended 60 in 1919, but which was increased back to 66 in 1922, before falling to 54 in 1935, 48 in 1948, 42 in 1964 and 40 in 1971 (Stanton,1983, p.98).

Figure 8.11 shows unit costs for England & Wales as in Figure 8.10, but also with an adjustment to increase costs as if the working week had been 37 hours in 1909. Although such adjustment has the effect of moderating the rate of increase by increasing the unit cost for 1909, the effect is relatively small given the magnitude of the overall increase over the period. Instead of a 14-fold increase in unit cost between 1909 and 1986, adjustment for hours worked yields a 5-fold increase (see Table F.8, Appendix 4).

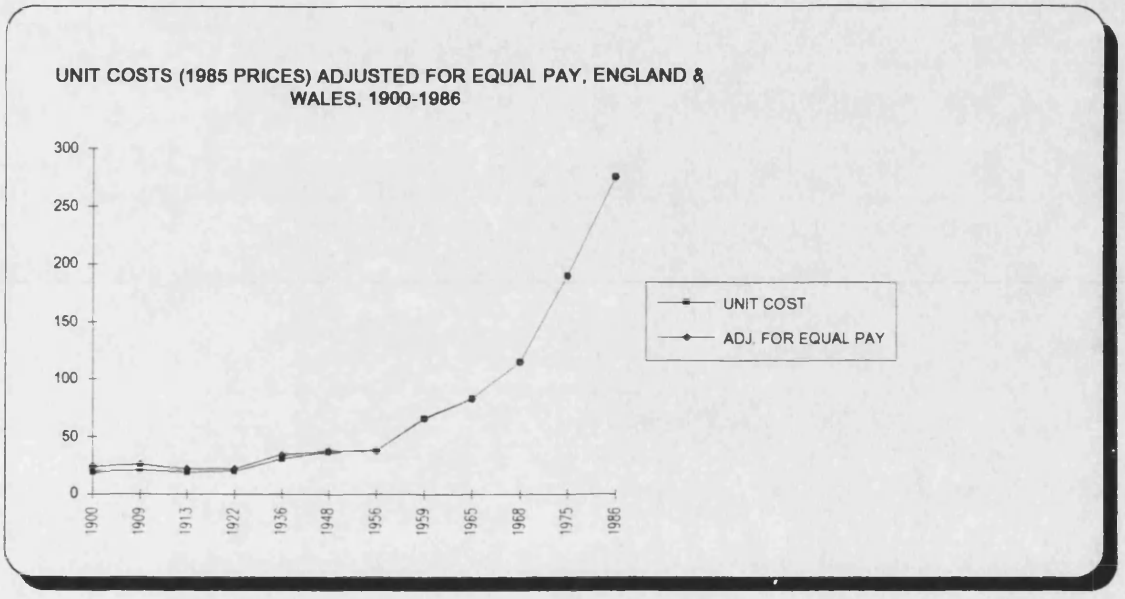
FIGURE 8.11


UNIT COST IN 1985 PRICES, ADJUSTED FOR NURSES WORKING HOURS, ENGLAND & WALES, VARIOUS YEARS
300
250
200
150
100
50
0
1900
1909
1913
1922
1936
1948
1956
1959
1965
1968
1975
1986
UNIT COST
ADJ. FOR HOURS

Equal Pay

The degree to which equal pay for female nurses contributed to the increase in unit costs can be explored by assuming equal pay had applied for all years since 1909, as shown in Figure 8.12. The effect of equal pay was almost imperceptible, due to the fact that female nurses had achieved 80% of the starting pay of males nurses in 1919 and had achieved 97% by 1949 (Stanton, 1983, p.97).

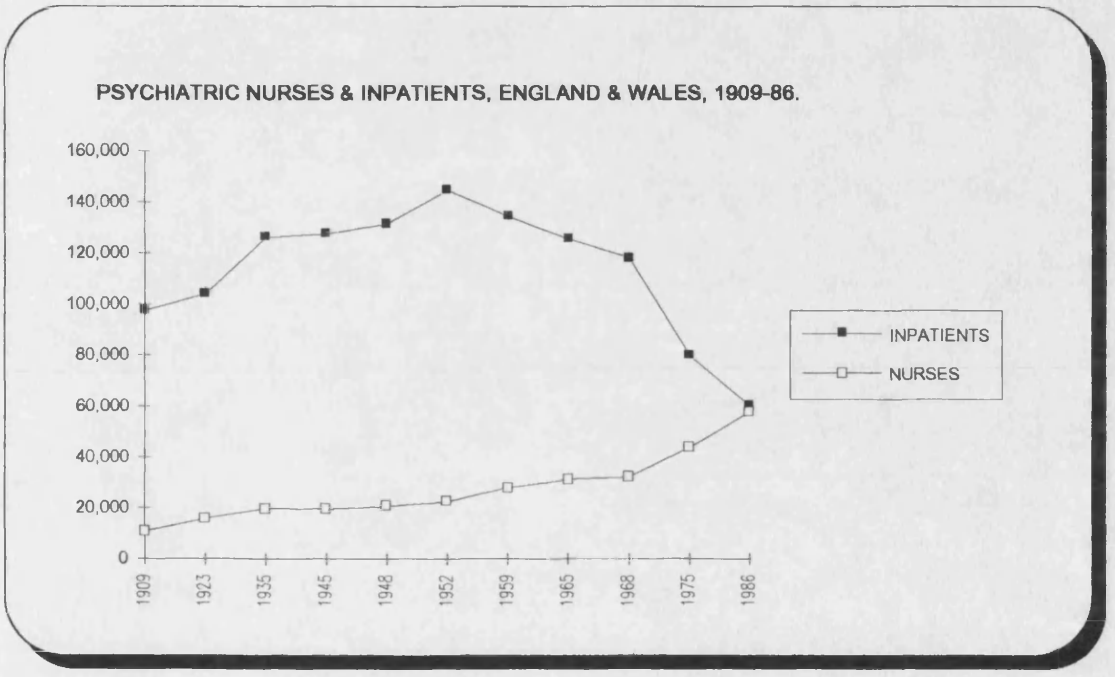
FIGURE 8.12



Ratio of Nurses to Inpatients

The central reason for the increase in unit costs was the increase in the number of nurses while the number of inpatients decreased, as shown in Figure 8.13. The number of nurses increased steadily, almost doubling from 8,300 in 1900 to 15,500 in 1922, doubling again to 31,300 by 1965, and almost doubling again to 57,800 in 1986[1].

FIGURE 8.13



During the same period the number of mental hospital inpatients fell, after peaking in 1955, with the result that the ratio of inpatients per nurse rose sharply as shown in Figure 8.14. From just under 9 nurses per inpatient in the period 1900 to 1922, the ratio fell to around 6 in each of 1923/4 to 1956. Therafter, as the number of inpatients declined and the number of nurse grew, the ratio fell sharply to 4.8 in 1959, 4.0 in 1965, 3.6 in 1968, 1.8 in 1975 and 1.0 in 1986.

[1] The number of mental hospital nurses rose as follows: from 8,300 in 1900, 12,500 in 1913 and 15,500 in 1922, 19,700 in 1935, 20,611 in 1949, 28,027 in 1959, 32,352 in 1969, 43,652 in 1975 and 60,000 in 1986 -see Table 4.8 in Appendix 4.

FIGURE 8.14

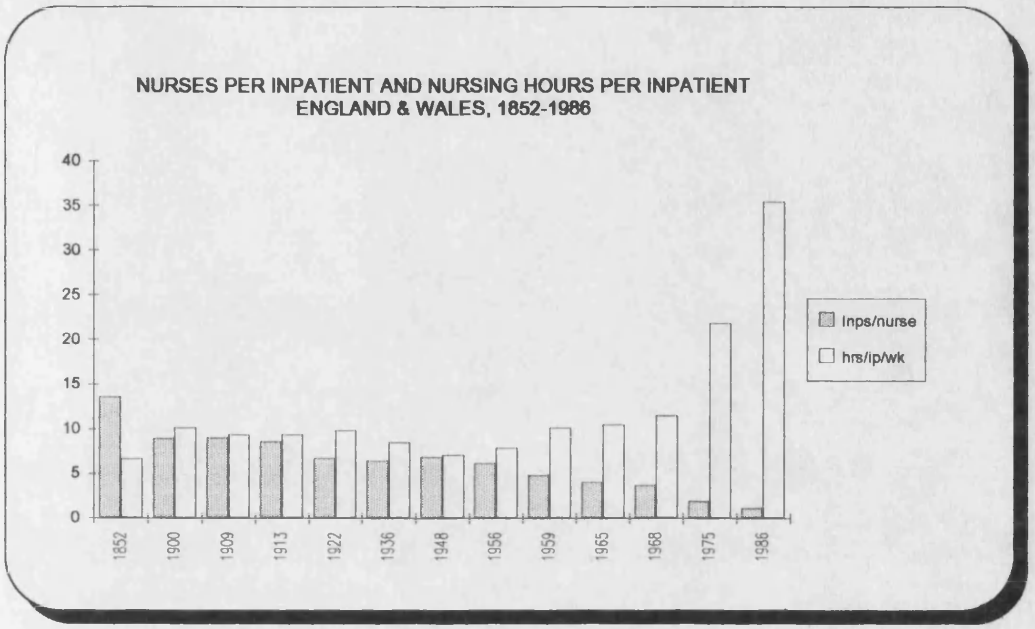


Figure 8.14 also shows the number of nurses hours per inpatient per week. This ratio, which takes account of the changes in the working week of mental hospital nurses discussed above, showed little change between 1900 and 1965, remaining at 10 nursing hours per inpatient per week, but then rose sharply to 22 in 1975 and 35 in 1986. The dramatic increase in this ratio since 1965 indicates the dominant role of nurse and inpatient numbers in explaining the rise in inpatient unit costs over this period.

Conclusions regarding Relative Cost Hypothesis

Three points are worth stressing from the above examination of unit costs in England & Wales:

Firstly, although unit prices rose sharply between 1875 and 1986, the bulk of this increase was after 1955 and hence likely to be more a consequence rather than a cause of the decline in the number of inpatients.

Secondly, neither relative prices nor equal pay were major contributors to this increase, and while a reduced working week contributed more to the increase in unit costs, it did so in the period before 1948.

Thirdly, the main factor underlying the increase in unit costs was the increase in the number of psychiatric nurses at a time when the number of inpatients was falling, so the nurse to impatient ratio fell sharply from 6 to 1 in 1956 to close to parity by 1986. The average number of nursing hours per inpatient per week, after having remained close to 10 between 1900 and 1965, rose to 22 in 1975 and 35 in 1986.

HYPOTHESIS 6 - Wagner's Law:

That Wagner's Law did not apply to the mental illness sector, as evidenced by the period 1939-44 during which a postponement effect seemed to have applied.

Wagner's Law states that spending on certain sectors, notably the publicly financed sector, tends to rise as national income rises. Since national income has risen steadily over the past century in the UK and Ireland, Wagner's Law would predict a corresponding increase in the share of public expenditure in GDP. As discussed in Chapter 2, this hypothesis was examined by Culyer and Jacobs (1972), who suggested that the drop in public mental hospital spending in World War II showed that Wagner's Law lacked universal validity. The similar fall in World War I, discussed above for each country, would seem to lend weight to their suggestion, which was confined to an analysis of the period 1920 to 1959.

However, the rise in spending on mental health services, mainly in the mental hospitals, despite the rapid decline in the number of inpatients since 1955, suggests that some version of Wagner's Law has plausibility. What has happened, of course, as discussed above, was that the decline inpatient number was not matched by any reduction in staff. Instead, increased staff numbers have been accompanied by shorter working weeks and equal pay by sex.

The postponement effect suggested by Culyer and Jacobs in relation to the spending and activity changes during World War II (and plausibly during World War I) was due to staff and buildings being devoted to other purposes during the war years, with a reversion to normal practices with peace. Thus a postponement effect might be expected, unless the war had wreaked havoc, for example by destroying buildings or killing staff. Only a particular, extreme version of Wagner's Law, which made no distinction between periods of war and peace, would seem to be open to the refutation suggested by Culyer & Jacobs.

If the expenditure reductions in line with the number of inpatients during wartime disproved Wagner's Law, one might have expected a similar decline in spending when the number of inpatients commenced a long term decline after 1955. As applied to the period after 1955, Wagner's Law has an obvious plausibility in underlining the failure or public expenditure on psychiatric services to adjust to the dramatic decline in the number of inpatients. Although Wagner's Law states no universal truth, its essential insight may relate to the organisational and political difficulties of reducing resources to a programme which is being run-down in peacetime conditions. Factors which may have been associated with the rise in unit costs are discussed in Chapter 9.

HYPOTHESIS 7 - the pharmacotherapy hypothesis:

*** that the pharmacopotherapy revolution in the mid-1950s led to major changes in the pattern of service provision, specifically the run-down in the number of inpatient places in the psychiatric hospitals.**

This hypothesis, which has been advanced by Jones (1972) and Taylor (1990) but contested by Scull (1977 and 1990), suggests that the development of new drug treatments enabled the fall in inpatient places after 1955. As discussed in Chapter 5, data exist on prescriptions only for England & Wales and then only for the period from 1961 (see Table A.12, Appendix 1), making direct hypothesis testing difficult. More indirect data, such as on admission and prevalence rates, can however, be usefully employed.

Scull (1977) rejected the pharmacopotherapy hypothesis on the basis of timing, pointing to the rise in discharges from some psychiatric hospitals from around 1945, long before the new drugs became available. Such data however, fail to make his case. As shown above, both the number of total admissions and discharges had begun to expand sharply from 1945, and continued to do so until the 1980s. Unless discharges had increased from 1945, given the magnitude of the increase in admissions, the stock of inpatients would have increased by factors of up to 10- fold in the next decade. Both admissions and discharges increased, almost in line, with one critical difference - the net inflow became a net outflow in 1955.

The similarity in the date of the switch from net inflow to net outflow in each of the countries examined is striking. In 1955 the stock of inpatient began to decline in each of England & Wales, Scotland and the Republic of Ireland, while the decline did not begin until 1960 in N. Ireland. It is worth noting that a similar decline started in the United States around the same time (Raftery, 1992). Some new factor seems likely to have intervened in that year, and the only candidate is the advent of new drug treatments.

The influence of new drug treatments on inpatient numbers could have occurred in a number of ways. Although it is often assumed that these drugs led to declines in the number of long stay inpatients, their effect could as easily have been on the reduction of recruitment to the stock of long stay patients. The stock of long stay patients may thus have been reduced by lack of recruitment combined with deaths. That deaths have been the main contributor to the decline has been suggested by several authors, but no analysis has separated the various effects. Chapter 9 explores this issue in more detail.

Overall, given the striking similarity in the turning points around 1955 in the long term trends in inpatient to population ratios in each of the countries examined, it would be difficult not to see this hypothesis as being supported by the data. Further analysis is provided in Chapter 9.

CONCLUSIONS

This chapter has reviewed the seven hypotheses derived from the literature review in Chapter 2 against the empirical evidence marshalled in Chapters 5 to 7. The testability of the hypotheses has been demonstrated, given the limits of refutability imposed by the subject and the data. Three hypotheses have been corroborated

- the epidemiological hypothesis, a demand-led explanation which posited changes in first admission rates between 1850 and 1900 leading to increased provision of psychiatric services,
- Wagner's Law, a supply-side account, which suggested that public expenditure would continue to rise despite the fall in the number of inpatients after 1955, and
- the pharmacological hypothesis, which posited a major role for the new drugs introduced in the mid-1950s in explaining the run-down in the level of inpatients.

Four hypotheses have been falsified:

- the institutionalisation hypothesis, according to which both the rise and the fall of the lunatic asylums were part of general trends in the overall levels of institutional provision in society,
- the cheap warehouse hypothesis, under which the lunatic asylums provided relatively cheap accommodation for the awkward,
- the relative cost hypothesis, according to which the run-down of the asylums after 1955 was due to increasing unit prices due in turn to factors such as the relative price effect, shorter working week and equal pay, and
- the capitation funding hypothesis, which suggested that this method of funding led to increases in the level of psychiatric service use.

Arising from this review, three paradoxes may be identified as a means of structuring further analysis in Chapter 9.

The three paradoxes to be explained

The first paradox to be explained concerns the opposing trends in stocks (down sharply after 1955) and flows (inflows and outflows up sharply after 1945). The history of psychiatric service provision can be summarised in terms of contrasting trends in stocks and flows of inpatients. By the stock of inpatients is meant the number of psychiatric inpatients at a point in time) and by flows the number flowing in and out of psychiatric hospitals per period of time [1].

While a naive view sees a single group exhibiting these contrary traits, different groups of patients may have been affected. While it has been variously suggested that the advent of new drugs led to the decline in inpatient numbers (Taylor, 1989), others have suggested (Freeman 1991, Wing, 1992) that the stock of long stay resident inpatients declined largely through deaths. These issues have not, however, been systematically examined.

A second paradox concerns the failure of spending on psychiatric services to adjust downwards with inpatient numbers after 1955. Instead of psychiatric hospitals closing or scaling down (by reducing total costs by cutting back on staff and disposing of buildings), costs have risen. This persistence of unchanged or increased levels of public spending provided the foundation for the plausibility of Wagner's Law, as discussed in

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[1] The analysis of the stock of resident inpatients per 1,000 population in England & Wales in Chapter 5 indicated three periods:

* 1860 to 1885 when there was a rise from 1.5 per 1,000 in 1860 to 3 per 1,000 by 1885,
* 1885 to 1960, when there was a relatively stable level of between 3 and 4 per 1,000 between 1885 and 1960, with peaks before each of the Wars and in 1955,
* 1960 to 1986 which showed a sharp decline to 1.5 per 1,000 by 1986.

Three periods can thus be distinguished with both inflows and outflows:

* 1860 to 1945 - inflows rose at a slow but steady rate, rising by 50% between 1854 and 1909 after which they levelled off until around 1945. Outflows followed this pattern, with the net difference leading to a slow growth in the stock of inpatients,
* 1945 to 1960 - both first and total admissions rose sharply, the former by a factor of over 3, the latter by a factor of 2.5.

Up to 1955 net inflows exceeded net inflows so that the stock of inpatients increased until the position reversed and the stock began a long term decline.

* 1960 to 1986 - first admissions peaked around 1963 and fell thereafter, while total admissions continued to rise to 1986.

Chapter 8. This combination of rising total costs and reducing inpatients has led to a dramatic escalation of inpatient unit costs, with the ironic result that non-institutional alternatives have come to appear relatively cost effective.

A third paradox concerns the role of Ireland, which, as shown in Chapter 8 had a dramatically higher stock of inpatients compared with England & Wales and Scotland from around 1900 to 1986, as well as much greater total and first admission rates from around 1950. Any satisfactory account of the history of trends in psychiatric provision, whether focused on the demand or supply side, should be capable of explaining the Irish experience.

These paradoxes are examined in Chapter 9.

CHAPTER 9

EXPLAINING THE PARADOXES

Introduction.

This chapter examines the scope for a more refined account of the history of the psychiatric sector which would help explain the three paradoxes identified in Chapter 8:

a) the contrasting pattern of stocks and flows of patients,

b) the continued rise in expenditure, and

c) Ireland's outlier status.

A review of the economics of the psychiatric services points to a polarity between demand and supply orientated explanations, with the epidemiological and progressive schools favouring the former, the epidemiological and social control school, the latter. On the basis of the hypothesis testing in Chapter 8, both demand-side and supply-side explanations require more detailed analysis of the patterns of service use. This chapter first examines service use data relating to demand, specifically first admission rates by diagnosis. Supply-side data are then reviewed, including trends in the stock of inpatients, and in the levels of outflows from the psychiatric hospitals.

Regarding demand, it is argued that first admission rates provide the least contaminated measure of the incidence of mental illness, which in turn initiates the demand for services. First admission rates for England & Wales can be broken down by 'form'[1] for various years up to 1920 and by diagnosis from 1948 to 1986, with less extensive data for the other countries.

Supply-side explanations can be seen as relating more to the stock of patients and the outflow from hospitals since both are to some degree under the control of the hospital. Analyses of trends in the inpatient stock and of the components of the

[1] Donnelly (1983) discusses the evolution of both the 'forms' and the 'causes' of insanity in early nineteenth century Britain.

outflow enable consideration of the plausibility of supply-side hypotheses, such as the pharmacological revolution.

The examination of the decline in the stock of inpatients by diagnosis and by duration of stay shows two main factors: the predominance of schizophrenia among the inmates and the degree to which the decline in inpatients was due to the long stay (over 5 years) group. In addition, the outflow from the psychiatric hospitals is shown to have been more due to dead than to live discharges.

Finally it is argued that these insights help further understanding of the three paradoxes noted above.

Economics, Demand and Supply

The concepts of supply and demand, two of the most basic tools of economics, have been used to classify the hypotheses derived from the literature of the history of mental health services. Although basic concepts, they have not been employed in the history of psychiatric services before. An economic historian (Jones,1990) has recently commented on the power and limitations of using such classifications:

> 'Certainly as the 'facts' rearrange themselves around the notions of supply and demand, there is a frisson of discovery: one sees order for the first time, as from a peak in Darien. It is easy to forget that one is standing on the ground, on land composed of politics and other substances.' (Jones, 1991, p.165).

While the concepts of supply and demand can be usefully employed, two limitations must be acknowledged:

- the indirect and limited measures of demand and supply that are available, and
- the weakness of economic theory in relation to institutions.

Demand and supply in psychiatry

The demand for psychiatric health services is a particular type of demand in that it is mediated by three sets of agents: the relatives or carers of the patient, the doctor dealing with the case, and the legal system. The demand for health services is normally seen in the health economics literature as being for health rather than for services *per se*. The demand for services is thus a 'derived' demand for the services required to reach the goal of healthiness. That demand is mediated by the medical doctor who acts as an agent for the patient. This position is complicated with psychiatric illness by the fact that the patient's rationality may be affected by the disease, with the result that relatives or carers may provide the initial impetus to a medical consultation. Because of the possibility of abuse, any treatment of the patient takes place in a context which is more legally regulated that for many other medical treatments. Patients' rights are defined and the use of custodial or involuntary services monitored. Demand for psychiatric services is thus strongly mediated by other agents, whose decisions will inevitably be influenced ('contaminated' in statistical terms) by other factors, including the supply of places available.

First admissions and demand

Any talk of a demand for psychiatric services must consequently take into account the peculiar ways that this demand is mediated. First admissions arguably provide the least contaminated indicator of demand since they represent the number of new cases sufficiently severe to require hospital treatment. Variations in first admission rates during periods of stable supply arguably provide better measures of demand than when the level of supply is changing. Repeat admissions probably rank between first admissions and the stock of inpatients as an indicator of demand.

Stock, outflows and supply side factors

The stock of inpatients, by contrast, tends to reflect not only the prevalence of long term sufferers but also a range of other factors including methods of treatment, and the availability of alternative accommodation. The stock of inpatients thus reflects total inflows and the total outflows.

The level of outflows can be seen as largely determined by the availability of places both inside and outside the hospital and the effectiveness of treatment in permitting discharge. Thus the stock of inpatients and the level of outflows can to some extent at least be seen as responding to supply-side factors. The distinction between live and dead discharges can provide insights into the degree to which inpatients have been cured or deemed capable of living in more community based settings. The mortality levels among inmates, which have been reviewed in terms of Standardised Mortality Ratios for each country, provide some indication of the health of the inmates and the quality of health care provided to them.

Economic theory and institutions

The second limitation of economics refers to the weakness of economic analysis of the development of institutions. As discussed in Chapter 1, economic theory as applied to history has focused on market-led developments. While this approach can shed light on the evolution of some market-based institutions, (McCloskey,1986 & 1990; Eggerstrom,1989; Williamson,1985), it provides no help in the analysis of non-market institutions such as the psychiatric services. This lack of a theory of the development of non-market institutions inhibits a thorough-going economic account

of the evolution of the psychiatric services. [1]

In methodological terms, some hypotheses are inherently less testable than others. For example, demand-side hypotheses, given the derived demand for psychiatric services discussed above, tend to lack specificity. Few detailed mechanisms are outlined for which data might be available, as was shown in the discussion of the pharmacological hypothesis in Chapter 8. While demand-side hypotheses can be usefully disaggregated by diagnosis, diagnosis alone provides only a partial indicator of the likelihood of admission (Wing, 1992). Similarly, supply-side hypotheses require detailed specifications to enable hypotheses to be tested. The few hypotheses concerning supply-induced demand that have been rigourously tested in the health economics literature have employed specially designed experiments such as the Rand (Manning et al., 1987) study, or large scale surveys (Tussing,1983). Clearly, the routinely available data on the use of psychiatric services are unlikely to be structured as to enable hypotheses to be fully tested. These issues are returned to in the concluding section.

A demand (epidemiological) perspective

This section compiles and reviews data on first admission rates by 'form' for the period before 1948 and by diagnosis for the post-1948 era for England & Wales[2]. Taking first admission rates as the best indicator of demand (or incidence in epidemiological terms), the implications of shifts in first admission rates by diagnosis are explored.

1857-1948

Although, as discussed in Chapter 3, standardised definitions of diagnoses only became common after 1948, the reports of the Lunacy Commissioners and the Board of Control provided data on both the 'forms' and the 'causes' of mental illness (or lunacy). The 'forms' of mental illness corresponded broadly to current concepts of

[1] The privately financed mad-houses of the eighteenth and early nineteenth centuries, whose existence can be seen as supporting demand- side hypotheses, may provide a more appropriate setting for a market- based account. In practice, however, data deficiencies would severely limit such an approach.

[2] The focus is on England & Wales due the quality of data available. Much less good data are available for Scotland, and Ireland is considered in relation to the third paradox.

diagnosis (melancholia, mania and senile dementia, for example), while 'causes' refer to what today would be called predisposing factors (life events - such as bereavement, broken heart, drunkenness).

Donnelly (1983) has suggested that the organic conditions (such as general paralysis of the insane, and idiocy) were the only clearly defined disease entities among the forms of insanity. The other 'forms', such as melancholia, mania and the various dementias, which are discussed below, were less well-defined. The critical test for committal had to do with whether the person was *non compos mentis*, rather than what form of the disease the person had. As a result, undue reliance should not be placed on any changes in the pattern of the 'forms'. Nonetheless, the survival of many of these 'forms' from the 1850s through to modern diagnosis suggests that trends should be examined, not disregarded.

Ideally data on first admission rates by form for the period 1857 to 1948 (when the ICD diagnoses were introduced) are required: only data on total admissions by 'form' are available up to 1898 when first admissions began to be distinguished in England & Wales[1] . Figure 9.1 (based on Table G.1, Appendix 5) shows first and total admission rates between 1857 and 1940 in greater detail, while Figure 9.2 disaggregates the first admission rate by 'form' (and Table G.1, Appendix 5) for the four periods for which data are available. First admission rates for 1952 are shown for comparison.

The data in Figure 9.1 show considerable variation in first admission rates from year to year. The first admission rate rose steadily if unevenly from 1857 to reach a peak of 58 per 100,00 in 1903 after which it fell steadily to between 50 and 52 in the period 1905-1914 when it rose again to a temporary peak in 1914 before falling again to 1930, after which it commenced to rise again. During this period, first admissions, which amounted to a steady 80% of total admissions, drove the total admission rate.

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[1] The average first admission rates are available for three periods: 1883 and 1884, 1899 to 1903 and 1909 to 1913. Averages have been taken of each of these periods to prevent the results being influenced by any one year.

FIGURE 9.1

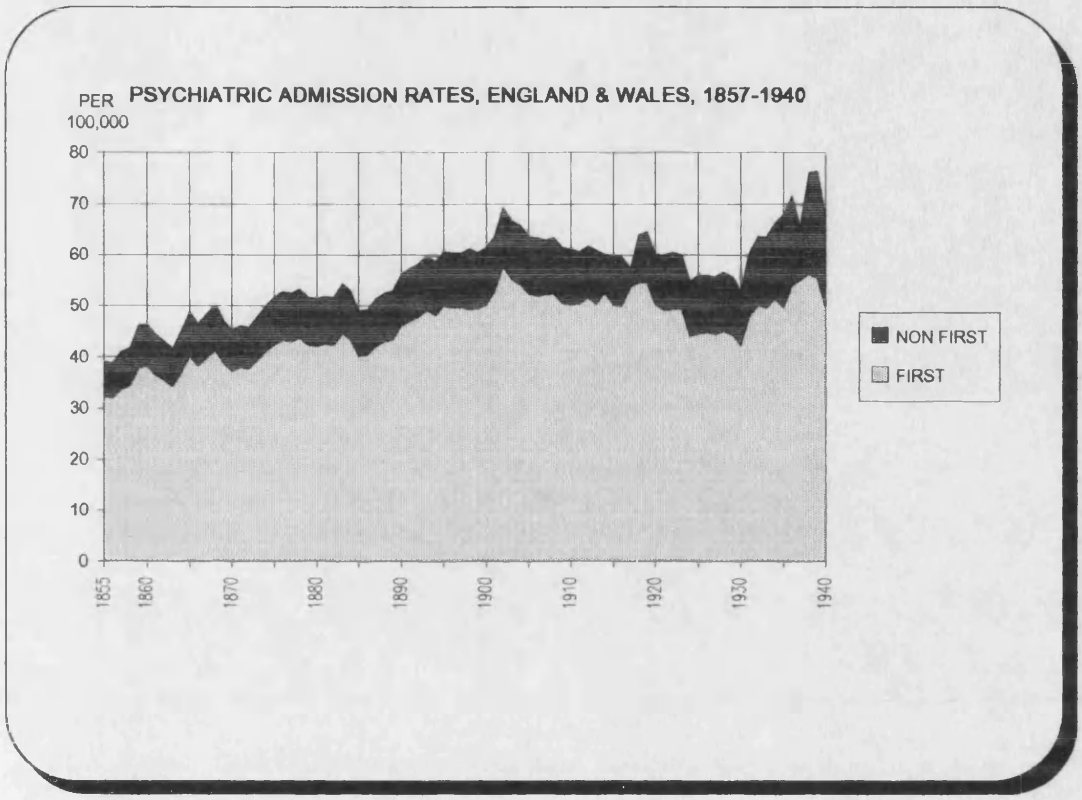
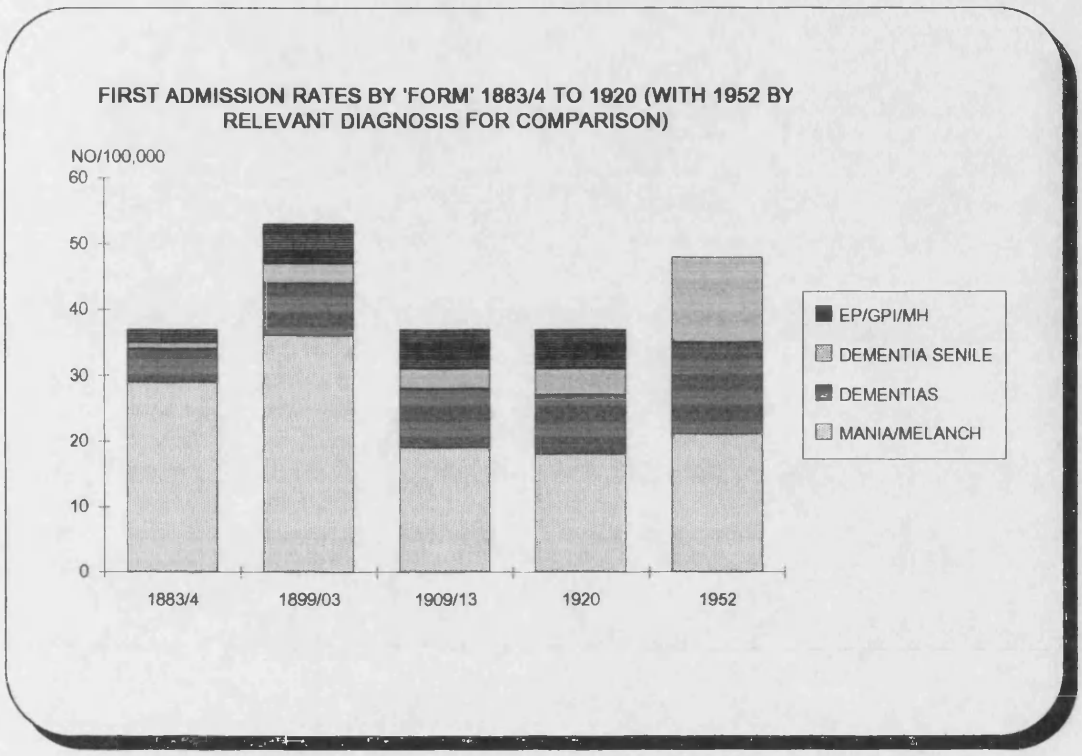


Figure 9.2 shows first admission rates by 'form' for the years for data are available. The (extrapolated) first admission rate rose from 34 per 100,000 persons in 1857 to 39 in 1883/4 before jumping to (a measured) 50 in 1899/1903, and then falling back to 42 in 1920. Each of the main forms associated with these changes are examined in greater detail below, particularly in relation to the apparent peak in the first admission rate around 1900, which constituted the core of Hare's (1983) epidemiological hypothesis.

FIGURE 9.2



Melancholia and mania

Mania and melancholia are considered jointly because these two forms were later merged in later diagnoses to form manic depression, later affective disorder. The combined first admission rate for melancholia and mania rose and fell; from 29 per 100,00 in 1883 to 36 in 1899/03 before falling to 19 in 1909/13 and 18 in 1920. Both mania and melancholia followed this pattern, with the rate for mania rising slightly from 19 per 100,000 in 1883/4 to 21 in 1899/03, before falling sharply to 9 in 1909/13 and 7 in 1920. The first admission rate for melancholia rose from 10 per 100,000 in 1883/4 to 15 in 1899/03, before falling back to 10 in 1909/13 and 11 in 1920. Of the 11 point increase in the first admission rate between 1883/4 and 1899/03, this group accounted for 7 points.

Non-senile dementias

The non-senile dementias comprise the three headings of confusional insanity, delusional insanity, and dementia. Such a group, which might provide a proxy for schizophrenia, had a first admission rate of 5 per 100,000 persons in 1883-4, 6 in

1899-03, 7 in 1909-13, and 13 in 1920. This group accounted for only one of the 11 point increase in the first admission rate between 1883/4 and 1899/03.

Senile Dementia

Senile dementia, the sole heading which survived between the era of 'forms' and that of diagnoses, showed a first admission rate of 1 per 100,000 in 1883-4, 3 in 1899-03 and 3 in each of 1909-13 and 1920. Thus senile dementia accounted for two of the 11 point increase in the first admission rate between 1883/4 and 1899/03.

Hare's Schizophrenia Hypothesis

These data indicate that melancholia accounted for much of the change in the first admission rate - rising from 10 per 100,000 in 1883-4 to 15 in 1898-03 before falling back to 10 in 1909-13 and 11 in 1920. By contrast, the contribution of the non-senile dementias to the apparent rise in first admission rates between 1883-4 and either 1898-03 or 1909-13 was small, as evidenced by the largely unchanged rate - 5 per 100,000 in 1883-4, 6 in 1898-03 and 7 in 1909-13[1].

Hare (1983) had suggested that the rise in (extrapolated) first admission rates for all diagnoses from 38 to 50 per 100,000 persons between 1850 and 1900 could have been due to schizophrenia. While the above review of the available data do not enable this hypothesis to be fully 'tested' given the caveats about 'forms', to the extent that the non-senile dementias can be linked to schizophrenia, the recorded increase in the first admission rate was due to manic depression rather than to schizophrenia.

1945-1986

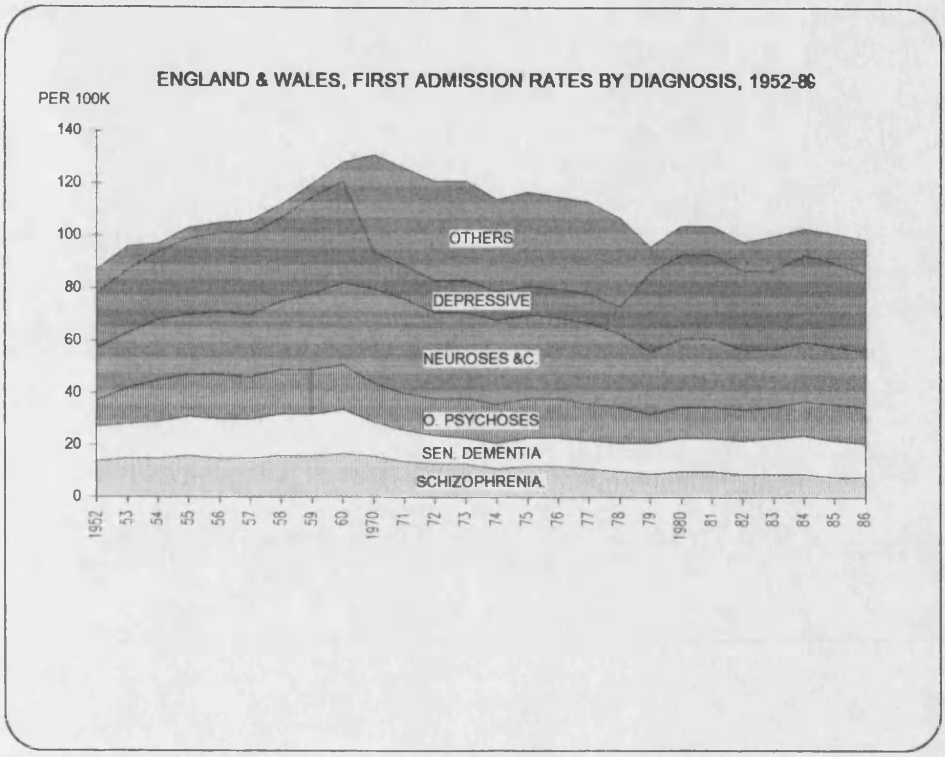
The only reliable data available on first admission rates by diagnosis in England & Wales cover the period 1952 to 1960 and 1970 to 1986, as discussed in Chapter 5 and Appendix 1. Figure 9.3 (and Table G.2, Appendix 5), shows the first admission

[1] Between 1909-13 and 1920, the first admission rate for the non-senile dementias rose from 7 to 13 per 100,000 persons, a significant increase but hardly an epidemic, particularly when the overall rate showed little change, in turn suggesting the possibility of a substitution between forms. The similarity between the 1920 rate of 13 per 100,000 persons and that for schizophrenia in 1952 of 14 lends credence to the linking of this group to the latter diagnosis, particularly since psychiatric epidemiologists tend to favour a view which posits a unchanged incidence of schizophrenia over recent decades.

rate for each of the main diagnoses. The first admission rate rose from 89 per 100,000 persons in 1952 to 128 in 1960, a rise of just under 50% compared with the two fold increase over the whole period, 1945 to 1952. Of the 9 diagnostic subheadings used prior to 1952 only one remained unchanged after that date - senile dementia. Three other such headings ceased to be recorded for the good reason that they no longer were required: insanity with epilepsy, general paralysis and congenital insanity[1]. A test of the plausibility of the linking of headings is supplied by comparing rates. The first admission rates for mania and melancholia in 1920 and manic depression in 1952 were similar - 18 and 21 respectively. The first admission rate for the non-senile dementias was 13 in 1920 and that for schizophrenia was 14 in 1952. Each of the main diagnoses is discussed briefly.

[1] Epilepsy and General Paralysis had both become better understood as physical illnesses, due to advances in treatment, and Congenital Insanity (mental handicap) was cared for in different institutions.

FIGURE 9.3



Note: data between 1960 and 1970 has been interpolated.

Schizophrenia

Figure 9.3 shows that the first admission rate for schizophrenia rose from 14 per 100,000 persons in 1952 to 17 by 1960 and 16 in 1970 before falling steadily to 8 by 1986. Only 3 out of the 39 point rise in the all-diagnosis first admission rate between 1952 and 1960 can be attributed to schizophrenia.

Schizophrenia has been relatively well studied, and although much remains to be known, many researchers attribute an important role to genetic factors (see Leff, 1991 for a useful review, also Craig & Boardman, 1991). Although considerable attention has been devoted to showing that the incidence and prevalence of schizophrenia is fairly constant in different societies, there is less agreement about its stability in historical terms. A number of commentators have suggested that schizophrenia is a disease which appeared only in the last two centuries, as evidenced by the lack of descriptions of the symptoms in literature before the 1700s (Hare, 1983; Torrey, 1980).

Schizophrenia is a particularly debilitating long term disease and inpatients with this diagnosis have dominated the resident places: 49% in 1963 and 44% in 1971 (see Table 9.1 below). Clearly schizophrenic inpatients have contributed to the ageing of the resident inpatient population.

Affective Disorders (formerly Manic Depression)

This diagnosis accounted for the bulk (over 40%) of the increase in first admission rates between 1952 and 1960, with the first admission rate rising from 21 per 100,000 in 1952 to 39 in 1960 and falling back to 30 in 1986.

From 1979 to 1986, the data in Figure 9.3 and Table G.2 combined 'Affective Disorders' with 'Depressive Disorders not elsewhere classified' to allow comparability with the earlier period. The ICD (8th revision) defined manic depression in such a way that raised the admission rate for 'Others', while the 9th revision in 1979 led to a new heading 'Depressive disorders not elsewhere classified', which dramatically reduced the rate for 'Others', indicating substitution effects.

While the affective disorders have been less studied, the consensus view among psychiatric epidemiologists favours social causation (Paykel 1991), with a strong role attributed to adverse life events. Although major environmental relief can be provided by hospital admission, studies suggest that the least level of removal from the community is preferable (Paykel, 1991). Drug treatments relieve symptoms while psychosocial treatments aid social and interpersonal functioning.

Patients with affective disorder made up 15% of resident inpatients in 1963 and 10% in 1971 (Table 9.1).

Senile Dementia

First admission rates[1] for senile dementia have shown little change over the period: 13 per 100,000 persons in 1952, 17 in 1960, 13 in 1970 and 13 in 1986. It is worth

[1] These rates have not been age standardised. Since the proportion of the population in the higher age groups has increased over the period, age standardisation would show a slight decline in the first admission rate rather than an unchanged rate between 1952 and 1986.

noting, however, that these admissions account for around 10% of all first admissions. Although current estimates put the prevalence of senile dementia at around 5% of the population aged over 65 (Hopkins et al., 1992), little is known about how that proportion (or the proportion in care) might have varied historically.

Senile Dementia can be seen as having much in common with schizophrenia in being relatively well understood and in having a pathological basis. Indeed, the early term for schizophrenia, 'dementia precox', implied that it was a precursor of senile dementia. However, given that senile dementia patients may be cared for in a variety of settings, the proportion in psychiatric hospitals may reflect the availability of other services or carers (Hopkins et al, 1992).

Although the clinical manifestations of senile dementia are well established, the lack of any curative medical intervention means that patients require long term care (Jolley & Jolley,1991), which tends to be provided in a variety of settings, ranging through care at home, nursing homes, acute and psychiatric hospitals.

In 1963 13% of resident inpatients were classified as suffering from senile dementia and 10% in 1971 (Table 9.1). The rise in the first admission rate for senile dementia between 1920 and 1952 from 4 to 13 per 100,000 suggests that much older patients were being admitted, which in turn helps account for the rise in the proportion aged over 60. As shown in Chapter 5, the proportion of male residents in England & Wales over 60 was 23% in 1951, 38% in 1959, 43% in 1971 and 49% in 1979. The equivalent figures for females were 37% in 1951, 56% in 1959, 65% in 1971 and 69% in 1979.

Personality Disorders (formerly Behaviour Character and Intelligence Disorders)

First admission rates for Personality Disorders have risen from 4 per 100,000 persons in 1952 to around 8 in 1960, 12 in 1970 and 9 in 1986. (Personality Disorders have been combined with Neuorses for ease of presentation in Figure 9.3.)

With regard to personality disorders, it has been suggested that

> 'mental health needs have to be seen in terms of reasonably definable boundaries: in the case of personality disorders for instance, the points where these merge into variations of normal personality traits may not be universally agreed' (Freeman, 1991, p 10).

Other Diagnoses

The first admission rates for the remaining diagnoses moved as summarised follows:

	1952	1960	1970	1986
Other psychoses	10	17	15	14
Neuroses	16	23	24	12
Personality	4	8	12	9
Alcohol	0	0	4	9
Drugs	0	0	1	2
Others	9	7	37	13
Total	39	55	93	59

This set of diagnoses, which are totalled above, made little contribution to the rise in the first admission rate between 1952 and 1960. Although the 1970 figure looks large, this was mainly due to the inclusion of a single large group under 'Others' in 1970, which later reverted to 'Depressive disorders not elsewhere classified' which as discussed above, later reverted to 'Depressive disorders not elsewhere classified'. With the exceptions of alcohol and drug related disorders, the indications for medical treatments for these diagnoses are poorly defined, with the literature tending to favour non-medical treatments (Tantam & Goldberg,1991).

Overall, of the 39 point rise in the first admission rate between 1952 and 1960 (from 89 to 128), 18 points, or almost 50%, were accounted for by manic depression / affective disorder, with no other diagnosis accounting for more than 7 points. Between 1960 and 1970, the first admission rate rose from 128 to 137 per 100,000 and thereafter fell steadily to 110 by 1986, with much of the decrease accounted for schizophrenia and 'other'.

The Stock of Inpatients by diagnosis

The relative frequency of the various diagnoses among the stock of inpatients is shown in Table 9.1. Of the three inpatient census dates, schizophrenia emerges as the

major diagnosis: 37% on 1954, 49% in 1963 and 44% in 1971. Manic Depression accounted for the second largest group in 1954 at 20% but this fell to 15% in 1963 and to 10% in 1971. Senile Dementia, which cannot be distinguished for 1954, accounted for 13% of inpatients in 1963 and 11% in 1971. The remainder was accounted for a spread across the range of diagnoses.

TABLE 9.1
RESIDENTS IN MENTAL HOSPITALS IN ENGLAND & WALES BY DIAGNOSIS, 1954, 1963 AND 1971.

	1954 %	1963 %	1971 %
Schizophrenia/Paranoia	37	49	44
Manic Depression	20	15	10
Senile Dementia	13	11	
Other Psychoses	9	8	11
Psychoneuroses	3	4	
Behaviour & Character		2	4
Mental Handicap		5	4
Other Psych.Conditions	34	2	11
Others		3	2
Total	100	100	100

Note: totals do not add to 100 due rounding.
Source: Census of Mental Hospitals, 1954, 1963 & 1971

Residents, Admissions and Diagnoses

These data enable understanding of the first paradox - that of a rising first admission rate and a declining stock of inpatients - to be taken a little further, in that different diagnoses were responsible for each. Manic depression and a set of new, less severe diagnoses, accounted for most of the increased first admission rate, but these admissions tended to be of short duration, as evidenced by the fact that schizophrenia continued to account for the bulk of inpatients.

This pattern is compatible with various hypotheses, both epidemiological and to do with treatment patterns. An epidemiological hypothesis might posit that the changes in service use were due to changes in the underlying disease, such as an epidemic of those diagnoses which required admission but did not generally require long term inpatient care. Alternatively, this pattern of service use could be due to the impact of changes in treatment, such as pharmacotherapy, which enabled inpatients to be discharged. An examination of the duration of stay of the stock of inpatients and the role of live as opposed to dead discharges may cast light on this question. However, it should be noted that for such a treatment orientated hypothesis to be plausible, it would have to explain not only the increase in discharges, but also the increase in first admissions.

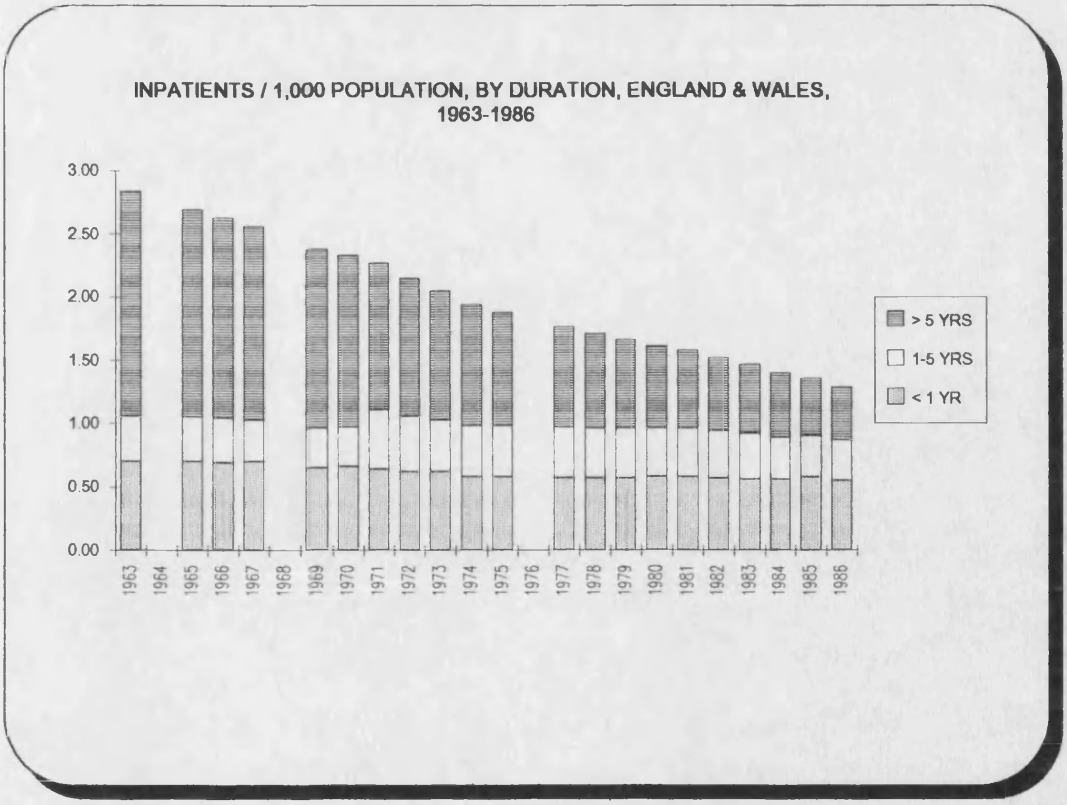
The following section takes these matters further by examining the changed stock of inpatients by duration of stay and discharges by live or dead.

The Outflow of Patients

Although the dramatic decline in the number of inpatients and in the ratio of inpatients to population has led to an intense debate over the degree to which decline was due to the pharmacological revolution, there has been remarkably little empirical investigation of the routine data sources. These sources, principally the Mental Health Enquiry from 1964 to 1986, allow the inpatients to be subdivided by duration as shown in Figure 9.4 (and Table G.4, Appendix 5).

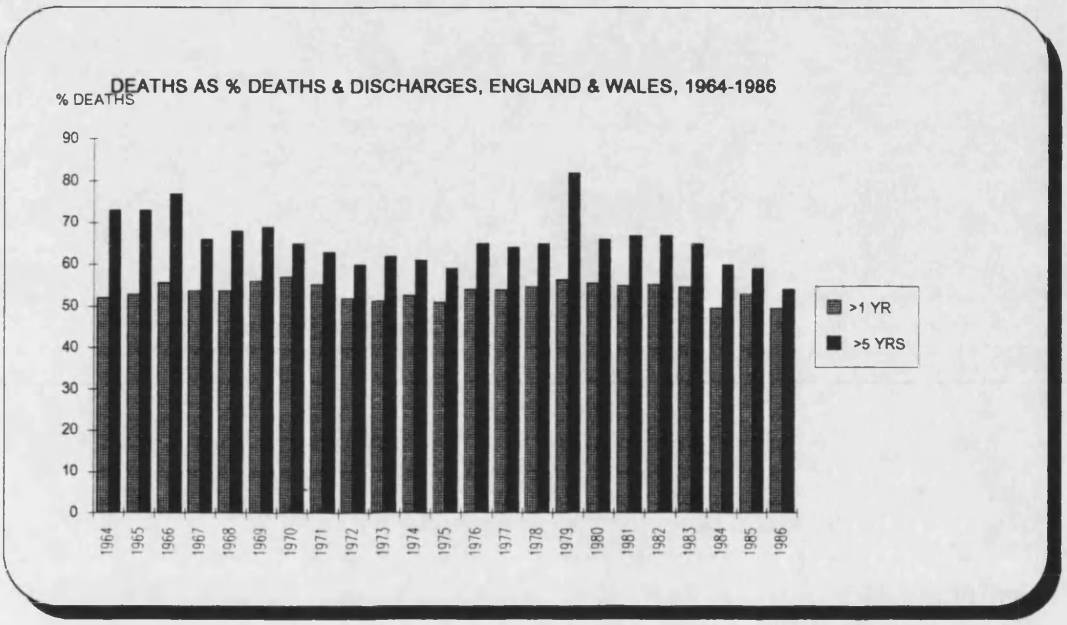
The decline in the number of patients per 100,000 population was concentrated on the group who had stayed for more than five year. Of the 1.55 point decline in the inpatient per 1,000 population ratio, no less than 1.46 or 80% were accounted for the group with duration of stay greater than 5 years. The ratio of inpatients per 1,000 population for both the 1-to-5-year group and the under-1-year remained remarkably stable at around 0.5 per 1,000 each.

FIGURE 9.4



Given that the decline in the number of resident inpatients was overwhelmingly concentrated on the long-stay group, what can the routine data tell about this group? The main division that can be made is between dead and live discharges, as in Figure 9.5 (and Table G.3) which shows deaths as a proportion of deaths and discharges.

FIGURE 9.5



In the group who had stayed more than one year, deaths accounted for just over half the discharges in each year between 1964 and 1986, with the proportion being 52% in 1963 and 50% in 1986. While there were sufficient variations on a year-to-year basis to prevent identification of a trend, the range was between 50% and 57%.

A more restricted focus would confine the analysis to the group who had been in hospital for more than 5 years. As shown in Figure 9.5 (and Table G.4), the proportion of deaths in total deaths and discharges fell from 73% in 1963 to 54% in 1986. Athough there were somewhat greater year-to-year variations, due to the smaller numbers involved, the impression is of a downward trend, but from a very high level.

Paradox 1 - Stocks and Flows

This review of the stock of activity trends by diagnosis and duration of stay suggests four points which help resolvethe paradox of the contrasting trends in stocks and flows:

first, as already discussed in Chapter 5, the population of inmates showed a sharp move towards the older age groups,

second, schizophrenia, one of the most disabling diagnoses with serious long-term disabilities accounted for just under half the stock of inpatients,

third, the decline in the inpatient to population ratio was concentrated on the long-stay group,

fourth, deaths accounted for some three quarters of the outflow from the long-stay (over 5 years) group in 1964, falling to 54% in 1986.

The overall conclusion to be drawn from these four key points is that trends in the long-stay group have had a major influence on the course of the psychiatric sector since the turning point in the mid-1950s. While recruitment to this group has almost entirely stopped, the level of disability has been such that deinstitutionalisation has not been implemented. This suggestion gains support from the fact that schizophrenia, one of the most disabling diagnoses with serious long-term disability, accounted for around half of the stock of inpatients.

Attrition by death has been more common than by live discharge. Little is known about the mortality of the relatively small number of long-stay inpatients who were discharged. The presence of this long-stay severely disabled group may have led to reluctance to move towards hospital closures. However, as the hospitals remained open and staffed as previously, unit costs rose to levels that could increasing finance domestic-type support even for the more disabled patients.

These trends in the decline in the total number of psychiatric inpatients suggest that the impact of the pharmacological revolution was not felt mainly on the discharge of inpatients. It seems clear that from 1964 deaths accounted for the bulk of the decline in the long-stay inpatient population. To the extent that the new drugs had an impact, it would more plausibly have been in preventing recruitment to the long-stay

group. Further exploration of this hypothesis, which would require non-routine data, is not attempted here.

The evidence of raised mortality levels among both the short and the long-stay psychiatric patients, combined with the role of deaths in the decline in the stock of inpatients, counts as one of the more potentially important insights of this study. Consideration might be given to the degree that this raised mortality might be preventible. Further, as plans are taken forward to close the psychiatric hospitals, the scope for using mortality as a monitoring tool deserves attention. Rather than move elderly patients in the supposedly humanitarian name of deinstitutionalisation, the crudest measure of their health - their mortality - might be monitored and measures to reduce that mortality explored.

The pattern of 'deinstitutionalisation' by death rather than by discharge may mark a difference between the experience of England & Wales (as well as Ireland, and probably Scotland, although the data are poor on the latter) and that of the United States. Although Scull's (1977) account of 'decarceration' purported to describe both the UK and the US, the plausibility of his account may be confined to the US.

Paradox 2 - the Failure of Costs to Decline

The pattern of decline in the total number of inpatients helps cast light on the second paradox, namely the apparent applicability of Wagner's Law to mental health service spending in the post-World War II period, not only in England & Wales, but also in Scotland and in Ireland. This section considers some of the factors which might help explain this state of affairs.

Firstly, from the point of view of the survival of the institutions, the fact that admissions continued to increase at dramatic rates even after 1955 when outflows began to exceed inflows meant that a rationale existed for these institutions. Side-by-side with increased admissions, there was relatively little success in discharging the long-stay patients, among whom death was more common than live discharge. In market terms, although the psychiatric hospitals were increasingly

catering for a different segments, it could still be argued that not only were they still required, but that more resources were justified to improve conditions.

Secondly, expectations inside and outside the mental hospitals rose. A series of scandals (Martin, 1983) characterised a different strand of policy, which saw the psychiatric services as underfunded. This strand, as discussed above received support from the Guillebaud Report (1956) which led to the 'mental millions' (Butler, 1986). As conditions improved inside the psychiatric hospitals, standards outside continued to rise, so that in relative terms, the mental hospitals looked relatively poor. At the same time the age structure of the inmates shifted sharply towards the older end of the spectrum, so that patients became (or appeared to become) or more dependent.

Thirdly, the interests of the staff working in these hospitals cannot be ignored. As shown in Chapter 8, the rise in unit costs was due primarily to the combination of increased staff numbers at a time when the number of inpatients was falling, leading to a dramatic rise in the inpatient to nurse ratio. Other factors played a part, including the move to incorporate mental hospital nurses into the general nursing profession after the mental hospitals were included in the NHS. Similarly, as psychiatry became more closely linked to mainstream medicine, and building on the success of the new drugs, the promise of cure could be used to justify continued spending. Further, the alternative of community orientated services remained until relatively recently a matter for belief rather than evidence. Despite the rhetoric of community care, remarkably few studies were conducted to explore the ramifications of alternative modes of treatment, and even fewer were focused on particular subgroups, whether by diagnosis, degree of disability or danger to self or others.

The failure of spending to adjust downwards in line with the number of (occupied) places in the mental hospitals has led to a curious trend in that the later that comparative studies were done, the higher inpatient unit costs had become and the more likely alternatives were to appear relatively cost effective, at least for the majority of patients. Vice versa, had many of the recent studies reviewed in Chapter 3 been carried out more than a decade ago, the lower unit costs then applying would

have made community orientated alternatives seem relatively less attractive in terms of cost effectiveness.

Paradox 3 - Ireland's Outlier Role

The similarity between Ireland and England & Wales is striking both for the similarities and the differences. The similarities relate to:

- virtually identical turning points in the stock of inpatients,
- similar rates of decline, after that turning point,
- the ageing of the stock of inpatients,
- the relatively high mortality of inpatients, as measured by their SMRs,
- the dramatic growth in admissions and outflows,
- the continued rise in expenditure and in unit costs.

Admission rate data by diagnosis, which are available via the MSRB[1], show a similar pattern of raised first admission rates with the less severe diagnoses accounting for the bulk of the increased admissions. Similarly, the decline in the inpatient to population ratio has been mainly due to deaths among the long-stay group .

The major difference between the two countries concerns the higher levels of activity which applied to Ireland, both in relation to:

- the stock of inpatients, which as shown in Chapters 7 and 8, rose rapidly in the period after 1850 to 1919 and which continued to rise after independence to around twice the level of England & Wales in the 1950s,
- admission rates, both first and total, which after having been very similar to those of England & Wales up to 1945, rose even more sharply thereafter.

These similarities could be taken as indicating both demand-side and supply-side factors. The overall similarity of the first admission rates, which it has been argued provide the least contaminated measure of demand, could support a demand-side hypothesis. The influence of emigration on the incidence and prevalence of

[1] O'Hare and Walsh of the Medico-Social Research Board (MSRB) have published annual summaries of admission and discharge data between 1964 and 1986.

psychiatric illness is also worth considering, as suggested by various UK studies (Freeman, 1986; Eagles, 1990). Emigration could affect treated incidence and prevalence both by selection effects (differential emigration by the healthy or the ill) and also by affecting the social and cultural environment (notably through Ireland's high celibacy levels (Kennedy & Bruton, 1974).

However, the relatively higher level of first admissions in the post-1945 period could be supply-led, as suggested by Keatinge (1987 - see discussion in Chapter 3). Such a view would receive support from the inaccuracies in the first admission data, as suggested by the Three County Case Register (Ni Nuallain, O'Hare & Walsh, 1984), which showed that the first admission rate for schizophrenia in Ireland was similar to that in England.

Support for the attribution of the differences in the inpatient/population ratio to supply-side factors might include the application of capitation payments at a higher level and for longer in Ireland than in England & Wales or in Scotland. As noted in discussion of the epidemiological hypothesis in Chapter 8, the introduction of capitation in 1874 may have had the effect of increasing an already relatively high growth rate in inpatients. As discussed in Chapter 4, capitation continued at a reduced rate in the Free State up to 1946. Thus, while the case for the influence of capitation on the stock of inpatients in Ireland has plausibility, it is difficult to provide empirical evidence, at least from the routine sources.

Demand-side factors could also be argued to contributed to the relatively high inpatient / population ratio, along similar lines to those suggested above in relation to first admissions. In Chapter 8 it was shown that Ireland had relatively levels of provision of all types of institutions, not all of which were funded by capitation. The relatively high levels of institutional provision may well have reflected weaknesses in the capacity of the social structure to provide care. Given the extraordinary demographic history of Ireland in the last two centuries, as epitomised by high levels of emigration, fertility and celibacy, such weaknesses in the capacity of the social structure do not seem unlikely.

Overall, then, while much more work could be done on the reasons associated with Ireland's outlier position in regard to the levels of provision and use of psychiatric services, sufficient factors exist on both the demand and supply sides to make it likely that both contributed to the Irish pattern.

Conclusions

This chapter has explored both demand and supply side hypotheses, based on the paradoxes thrown up by the previous chapters.

Hare's (1983) hypothesis regarding the role of schizophrenia has been questioned on the basis of the admittedly weak data on first admission rates by 'form'. To the extent that the non-senile dementias provide a proxy for schizophrenia, the latter showed little change.

Paradox 1, which concerned the differing trends in the stock and the inflow of patients, has been to shown to have largely involved different diagnoses for each. The increased admission rates were due to affective disorders and to the relatively less serious diagnoses, while the bulk of the stock of inpatients have suffered from the more serious ailments.

The pattern of decline in the inpatient population ratio showed that the pace of change was set by the long-stay group, with the beds for the under-1-year and 1-to-5-year groups showing relatively little change. The decline in the long-stay population was shown to be due more to death than to live discharges. The advent of new drug treatments appears to have had relatively little impact on the long-stay population.

Parodox 2 concerned the continued rise in expenditure during the period of decline in the size of the inpatient sector. One of the major constraints to reduced spending was the existence of an ageing residual group of inpatients who were difficult to re-locate, especially at the low unit costs that prevailed. Side-by-side with the long-stay group who proved difficult to shift, the hospitals could point to the continued rise in admission rates for the more minor mental disorders and the extension of the psychiatric lexicon to include new 'diseases" such as alcohol and drug abuse. Further, repeated scandals in the long-stay hospitals and the continual rise in standards in society contributed to a belief that although the mental hospitals should be closed, more should be spent on running them in the interim. This implicit

policy has led to the situation that unit costs have risen to levels where community orientated alternatives, even those requiring intensive staffing, have begun to seem relatively cost effective.

Ireland's outlier role constituted Paradox 3, which has been discussed in terms of both demand-side and supply-side factors. On the demand side, the similarities in the turning points in both the first admissions and in the stock of inpatients suggest common forces at work. The relatively higher level of first admissions could be influenced by Ireland's unique demographic history, which can be characterised by high emigration, fertility and celibacy. However, the recorded first admission rates may also be artefactual (at least for schizophrenia) in that case registers have cast doubt on their accuracy.

The relatively high stock of inpatients relative to population can plausibly be argued to have been affected by the higher levels of capitation funding which persisted for almost all of the period of growth, that is 1874 to 1946. However, the evidence of a relatively raised level of provision of all types of institutional care might be taken to indicate that the particular Irish social and demographic structure led to weaknesses in the degree to which institutional care was necessary. Put in these terms, the interaction of supply and demand factors may well be sufficient to account for Ireland's outlier position. The types of work which might take this understanding forward are discussed in the next chapter.

CHAPTER 10
CONCLUSIONS

The aims of this study as outlined in Chapter 1 were as follows:

a) to describe in quantitative terms the evolution of psychiatric services in England & Wales, Scotland and Ireland between 1845 and 1986,

b) to derive and test key hypotheses from the existing literature and to generate new hypotheses as appropriate,

c) to indicate, on the basis of the above analysis, the lines of the most satisfactory account of that history, and

d) to suggest further work that might extend understanding of these matters.

This final chapter reviews progress under headings a) to c) and in relation to d), some further work is suggested that would further understanding of these matters.

Description of Activity and Finance of Psychiatric Services

The aim of describing the activity and financing of the psychiatric services has been formally achieved, as shown by Chapter 6 on England & Wales, Chapter 7 on Scotland, and Chapter 8 on Ireland, with separate sections on the Republic of Ireland and N. Ireland. These chapters have been supported by Appendices 1 to 3 which reviewed the data available. In addition, the literature on the history of psychiatric provision has been surveyed in Chapters 2 and 3. Chapter 4 has drawn out themes which have not been fully dealt with in the literature, such as the legal and financial arrangements in each country. Chapter 8 tested the seven hypotheses derived from the literature review, which led to the identification of three paradoxes which Chapter 9 attempted to resolve.

A number of important points have emerged from this exercise, which are discussed further below:

- a gap in the literature regarding the quantitative aspects of activity and finances of psychiatric services, which has inhibited understanding of the relationships between activity and finance, and specifically,

- a lack of comparative studies, notably between the countries of the UK and Ireland, all of whose histories share both common and divergent aspects.

Lack of Quantitative Studies of Activity and Finance

As shown in Chapters 2 and 3, despite the expansion of interest in the history of the psychiatric services in recent years, no comprehensive account has been provided of the quantitative aspects, whether to do with activity or finance. The weakness of previous analyses of the activity data, particularly that relating to admissions in the period 1945 to 1960 is striking, not least because admissions rose by unprecedented amounts in those years. Partly because data were not available in the traditional sources, notably the reports of the Lunacy Commissioners and the Board of Control, and partly because some of the key texts showed little interest in quantitative aspects, successive scholars have passed over this period. Several examples of how the standard works have treated the quantitative aspects are worth citing.

Data Provision - a) Jones

Since Kathleen Jones' (1972) study is perhaps the seminal text, it is worth recalling the discussion of this work in Chapters 2 and Appendix 1. Jones confined her discussion of trends in service to use to an appendix, which made much of the discontinuities in the data series. Although she went so far as to assert that it was not possible to put together a long run data series, yet her assistance (and presumably approval) was acknowledged in a study by Culyer and Jacobs (1972) which compiled data on inpatient residents and admissions for the period 1920 to 1959. Jones' appendix is notable for its restricted time scale - only four of her thirteen tables deal with the period prior to 1955. She wrongly stated that first admission data were not available prior to 1964:

> 'Separate figures for first admissions, i.e. 'patients who have not previously received inpatient treatment in a psychiatric hospitals of psychiatric unit' were first given in 1964.' Jones, 1972, p.360).

In fact, data on first admissions had been published by the Lunacy Commissioners from 1898.

Culyer and Jacobs (1972) acknowledged helpful comments from Jones in compiling their study which compiled admission data from 1920 to 1960. Hare (1983) provided data on admissions from 1857. Only the present study, however, provides a comprehensive time series data on admissions for the period for which data are available, that is 1854 to1986 for all admissions and 1898-1986 for first admissions.

Data Provision - b) Scull

Scull (1977) purported to survey the interaction between prisons and psychiatric hospitals, on the basis that a process of 'decarceration' was occurring. With regard to his data for England & Wales, he produced only four tables as follows:

- *Average Daily Prison and Borstal population in England & Wales and Rate of Imprisonment 1951-72*, (Table 3.6, p. 56),
- *Convictions for Indictable Offenses, Prison Admissions (male) and Admissions as % of Convictions, England & Wales, 1960-1971* (Table 3.7, p.58),
- *Total Patients in Public Asylums in England & Wales, 1859-1930 and Rate/10,000 people* (Table 4.1, p. 65),
- *Resident Population of Mental Hospitals in England & Wales, 1951-1970* (Table 4.3, p.70).

Although in his 1983 afterword, Scull updated two tables (Tables 3.6 and 4.2, to 1981 and 1980 respectively), the restricted nature of his time series data is apparent. Scull's other major study (Scull, 1979) dealt only with the nineteenth century, with 10 tables spanning the period 1807-1890. Thus Scull's work left two gaps in the data; firstly, on the number of residents in the mental hospitals between around 1890 and 1951, and secondly, on admissions to mental hospitals after 1890.

Data Provision -c) Busfield

Busfield (1986), who covered a longer period than most of the other studies reviewed in Chapter 2, provided an example of how a reliance on secondary sources can blind the author to the major changes that occurred. The only empirical data cited by Busfield were secondary sources, primarily Jones and Scull. Although her account spanned the entire period from 1800 to 1985, her tables left a 60 year gap between 1890 and 1950. Her Tables 20 and 21, (Busfield, 1986, p.268 & 269) showed resident inpatients and

admissions up to 1890. Table 22 showed resident inpatients from 1951 (Busfield, 1986, p.289), and Table 23 (ibid, p.289) had first and total admissions from 1964. All four of these tables were secondary sources - three from Scull (1979), the last from Clare (1976). The latter table, which showed admissions in the period 1964 to 1972, included both erroneous data on first admissions between 1964 and 1969 as well as the corrected data for 1970, which showed a sharp fall on 1969 (see Mental Health Enquiry report, 1970, discussed in Appendix 1).

Data Provision -d) Butler

Butler's (1985) study, which covered the history of the psychiatric services up to 1980, lacked a single table on the activity or the finance. Although Butler provided useful information on the changing organisation of the psychiatric services during the 1939-44 War, and quoted in passing a Ministry of Health report that noted the doubling of admissions and discharges between 1939 and 1949 (Butler, 1985, p. 163), he paid no further attention to this dramatic rise in admissions.

Data provision - e) Culyer & Jacobs

Only one study has paid serious attention to both the activity and the finance data - namely that of Culyer & Jacobs (1972), an important article which is not referenced by any of the above authors! Although that study contained several minor inaccuracies, both in relation to the set of institutions covered and their relation to the financial data, the authors noted the two-to-three fold growth in admissions. However, due to their major concern with Wagner's Law, they confined themselves to the comment:

> 'The rise in admissions after 1941 seems fairly attributable to the change in the relationship between psychiatric and general medicine since there is no evidence that the war caused a material increase in psychoses while there was a pronounced move towards treatment of early or mild cases of disturbance.' (Culyer & Jacobs, 1972, p.47).

Data Provision - The Present Study

Given these widespread lacunae in the literature regarding quantitative aspects (both activity and finance) of the history of the psychiatric services, the present study has filled a major gap. The provision of such data has enabled a more empirical approach to be adopted to the key assumptions (or hypotheses) in the various schools which exist in the literature.

Hypothesis Testing

Partly because the literature on the history of the psychiatric services has been so weak on the quantitative aspects, little attempt has previously been made to evaluate key assumptions against the available data. As shown in Chapters 2 and 3, many of the key assumptions in the various schools can be expressed in the form of testable hypotheses. Three hypotheses were corroborated in Chapter 8:

- the epidemiological hypothesis, a demand led explanation which posited changes in first admission rates between 1850a and 1900 leading to increased provision of psychiatric services,
- Wagner's Law, a supply-side account, which suggested that public expenditure would continue to rise despite the fall in the number of inpatients after 1955, and
- the pharmacological hypothesis, which posited a major role for the new drugs introduced in the mid 1950s in explaining the run-down in the level of inpatients.

Four hypotheses were deemed to have been falsified:

- the institutionalisation hypothesis, according to which both the rise and the fall of the lunatic asylums were part of general trends in the overall levels of institutional provision in society,
- the cheap warehouse hypothesis, under which the lunatic asylums provided relatively cheap accommodation for the awkward,
- the relative cost hypothesis, according to which the run down of the asylums after 1955 was due to increasing unit costs, and

- the capitation funding hypothesis, which suggested that this method of funding led to increases in the level of psychiatric service use.

The present study, following debates in the economics and economic history literature, adopted a method which expressed key assumptions in the form of hypotheses which could be evaluated against the data on activity and expenditure. Given that the data concerned are administrative and largely historical, and thus subject to limited examination, the scope for hypothesis testing has been more constrained than might be the case with customised data.

The Three Paradoxes

Paradox 1, which concerned the differing trends in the stock and the inflow of patients, has been to shown to have largely involved different diagnoses for each. The increased admission rates have been shown to have been due to the relatively less serious diagnoses, while the bulk of the stock of inpatients have suffered from the more serious ailments.

The pattern of decline in the inpatient population ratio showed that the pace of change was set by the long stay group, with the beds for the under 1 year and 1 to 5 year groups showing relatively little change. The decline in the long stay population was shown to be due more to death than to live discharges. The advent of new drug treatments appears to have had relatively little impact on the long stay population.

Parodox 2 concerned the continued rise in expenditure during the period of decline in the size of the inpatient sector. One of the major constraints to reduced spending was the existence of an ageing residual group of inpatients who were difficult to re-locate, especially at the low unit costs that prevailed. Side by side with the long stay group, who proved difficult to shift, the hospitals could point to the continued rise in admission rates for the more minor mental disorders and the extension of the psychiatric lexicon to include new 'diseases" such as alcohol and drug abuse. Further, repeated scandals in the

long stay hospitals and the continual rise in standards in society contributed to a belief that although the mental hospitals should be closed, more should be spent on running them in the interim. This implicit policy has led to the situation that unit costs have risen to levels where community oriented alternatives, even those requiring intensive staffing, have begun to seem relatively cost effective.

Ireland's outlier role constituted Paradox 3, which has been discussed in terms of both demand-side and supply-side factors. On the demand side, the similarities in the turning points in both the first admissions and in the stock of inpatients suggest common forces at work. The relatively higher level of first admissions could be influenced by Ireland's unique demographic history, which can be characterised by high emigration, fertility and celibacy.

On the supply-side, the relatively high stock of inpatients relative to population can plausibly be argued to have been affected by the higher levels of capitation funding which persisted for almost all of the period of growth, that is 1874 to 1946. However, the evidence of a relatively raised level of provision of all types of institutional care might be taken to indicate that the particular Irish social and demographic structure led to weaknesses in the degree to which institutional care was necessary. Put in these terms, the interaction of supply and factors may well sufficient to account for Ireland's outlier position.

Personal Note, Bias and Expectations

Given the role that personal expectations and beliefs can have in research (McCormack,1990; Kuhn,1970; Root-Bernstein,1989) a personal note may be appropriate at this point. The failure to corroborate at least some of the supply side hypotheses was a surprise to the author, whose initial interest in the topic had been sparked by the plausibility of these hypotheses, stimulated by the following works:

* Finnane (1981) who had summarised the introduction of capitation funding from 1874 in Ireland,

* the high level of hospital bed provision, and particularly psychiatric beds, in Ireland (Raftery, 1983),
* the rhetoric and challenge of Scull's account, which if substantiated, would constitute an indictment of the psychiatric services, and
* the glaring lack of any economic input in recent work, such as that of Bynum, Porter & Shepherd (1985) which included detailed accounts of the more esoteric aspects of the history of the psychiatric services.

One of the merits of adopting an explicitly empirical approach is that one may be forced to consider other alternatives. This is precisely what has happened in this study, which in turn led to more detailed examination of the service use data to attempt to explain the three paradoxes. While that understanding cannot be said to be definitive on the basis of the analysis in Chapter 9, it does suggest that some of the interpretations which have been put on the experience of deinstitutionalisation in England & Wales, Scotland and Ireland lack empirical foundation. In particular, the dominance of the long-stay group in the decline of the inpatient population ratio and the reliance on deaths as opposed to live discharges suggests that the pattern of deinstitutionalisation in these countries has not been due to forcing inmates out of the institutions. This may in marked contrast to the experience of the US, which Scull has seen as applying equally to both countries.

The role of economics

Besides prompting an interest in the subject, economics has made a number of contributions to the present study :

First, economics has contributed a focus on the empirical data, both on levels of activity and of expenditures,

Secondly, the economic concepts of supply and demand have been used to classify the hypotheses, and in turn has led to a renewed emphasis on the role of demand factors,

Thirdly, the economic analysis of cost issues have been central in the falsification of several of the key hypotheses, particularly those dealing with the

costs of alternative care in the nineteenth century, and the role of the relative price effect in the twentieth century,

Fourthly, economic theory and practice has contributed to the methodology of hypothesis testing.

Epidemiology and Economics

The gap between economics and epidemiology in the literature is striking, particularly since that literature has been dominated by qualitative rather than quantitative accounts. Since both economics and epidemiology are pre-eminently quantitative, the scope for joint approaches would seem considerable. The few economic studies that have been carried out (Culyer & Jacobs, 1972, Taylor, 1989) have paid relatively little attention to epidemiological concerns, an attitude which has been reflected in the epidemiological studies (Hare, 1983). Although both disciplines use similar concepts (for examples stocks and flows), they do so in somewhat different ways. Cross disciplinary debate and joint working could contribute much to a better understanding of the history and the current workings of the psychiatric services.

The future

Two key points are worth considering in relation to future developments:

- first, between 50% and 70% of the old lunatic asylums in England & Wales are scheduled for closure, (Bennet & Freeman 1991)
- second, the NHS reforms of 1991 will put pressures on the psychiatric services in several directions.

Planned Closures

Although policy for 30 years in UK has favoured closing the mental hospitals, and while resident inpatient numbers have fallen sharply, few hospitals have closed. A similar picture has been outlined in relation to the US (Raftery, 1992). However, given the failure to reduce expenditure on inpatient services in line with the number of inpatients, the unit cost of inpatients services has risen sharply. The implications of such

a worsening of the costs of inpatient services relative to alternative services have received little attention.

As reviewed in Chapter 3, non-institutional alternative forms of treatment appear to be more cost effective for most mentally ill patients. Most of the studies (Raftery,1991; Burns, Beadsmore & Raftery, in press; Connolly & Marks 1991; Goldman and Skinner, 1990; Olfson, 1990; Kiesler & Sibulkin, 1987) suggest that for many patients, equal outcomes can be achieved at less cost in treatment regimes that minimise inpatient admissions and stays. The degree to which some inpatient care will be required for the severely and for the chronically mentally ill, however, remains a matter for debate (Hafner, 1987; Kings Fund, 1988).

A variety of alternative regimes have been experimented with; despite differences, they all share a community orientation with varying degrees of structured living for patients. What has received much less attention is how the relative cost advantages of these alternative regimes have been affected by the rising cost of inpatient care. With more staff than patients in the mental hospitals from the early 1980s, the cost of even intensively staffed community units has become less formidable relative to inpatient care. Put differently, the fulcrum of the economic balance of care has shifted. The NHS reforms may further tilt the balance of care towards ambulatory alternatives.

The NHS reforms provide a new set of incentives to achieve familiar policy objectives, with the latter more carefully defined to ensure continuity of care and treatment. The degree to which these incentives are sufficient to the task will provide a most interesting experiment.

Further Work

No matter whether one is attracted to either demand or supply side explanations, one can only speculate as to what research might be required to take understanding forward. The empirical data provided in this study will hopefully enable alternative hypotheses to

be generated and tested. What kind of research or date would be helpful in testing further hypotheses?

Any further research would need to raise questions about how to generate additional data for the most recent period, roughly from 1930 to 1970. Key research topics might include:

- the reasons for the non-recruitment to new long-stay inpatients in the period since 1955,
- the reasons associated with the raised mortality among this group, including the degree to which it might be preventible, and means whereby it might be monitored if and when more long-stay inpatients are shifted out of the old mental hospitals,
- more detailed attention to the reasons associated with the dramatic rise in admissions in the period between 1945 and 1970 for first admissions and between 1945 and 1986 for total admissions,
- similar attention might be paid to the factors associated with the equally dramatic rises in inpatient costs per week since around 1960, and the degree to which the greatly increased input of nursing hours per inpatient has led to improvements in quality,
- research at individual hospital level could be helpful, particularly in identifying factors associated with the variations in admission and resident to population rates,
- qualitative research with those in psychiatric practice at the time might help identify some of the factors associated with the above topics.

Such research could lead to restatement of supply-side hypotheses, such as the role of psychiatrists which had greatly expanded in the 1939-44 War, and their perception on the less serious forms of mental illnesses, such as neuroses (Blacker, 1946). In addition, the impact of the psychotropic drugs on clinical practice requires further attention. Alternatively, or perhaps in parallel, demand-side hypotheses might be refined, such as those to do with the dramatic rises in first admission rates for a range of diagnoses

which were developed after 1945. As discussed in Chapter 9, relatively little is known about the epidemiology of these disorders.

The new world of contracting for health services, including mental health services, may lead to more rapid and well-founded changes than hitherto. However, the possibility also exists that some groups, notably the long-stay inpatients, may be heavily penalised or even killed if shifted out of the old lunatic asylums without appropriate care and treatment. Such an outcome would be a sad finale to what might well be seen as one of the more philanthropic exercises in public spending over more than a century and a half.

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APPENDIX 1

DATA SOURCES ON MENTAL HEALTH SERVICES ACTIVITY AND SPENDING IN ENGLAND & WALES: 1850 TO 1985

Introduction

This appendix surveys the data for England & Wales on activity levels and on expenditure on "lunacy" (including mental illness and mental handicap) with the aim of compiling data sets which meet the purposes set out in Chapter 1; namely, the empirical description of the main trends in activity and spending and the testing of the various hypotheses derived in Chapters 2 and 3. Successive sections discuss the various countries, along with the numerous tables (94 in all).

This appendix, besides discussing the data sources for England & Wales, also provides, in section 1, a review of the appropriate data headings and data sources for each country. Section 2 considers the data for England & Wales. Appendix 2 deals with Scotland, and Appendix 3 with Ireland up to 1920, the Free State (later Republic of Ireland) and N. Ireland, respectively between 1920 and 1985 .

Overview

The detailed exploration and presentation of the data is mainly a contribution to socio-economic history. Although a number of useful works of economic history exist, none have focused solely on the psychiatric services; and the main studies which have provided data on aspects of psychiatric services (see Jones 1972; HMSO, 1957; Mitchell & Deane, 1962 & 1972; Culyer & Jacobs, 1972; Taylor 1989) produced series which were neither consistent with each other nor comprehensive in terms of the full period for which data were available. As discussed in Chapter 4, since each country developed different patterns of services within different legal frameworks, accounting definitions, and financing and taxation systems, each must be discussed separately. This section provides an overview of the headings under which data are required, and succeeding sections deal with each country.

Data Headings

It follows from the objectives of describing the mental health services and testing the hypotheses discussed in Chapters 2 and 3 that the focus must be on the widest possible range of services, spanning both public and private facilities and distinguishing between mental illness and mental handicap.

With respect to activity, the emphasis, it is argued, must be on the following headings:

a) the number of resident inpatients by type of institution, by sex, legal status and in proportion to population,
b) admissions, both first and total, expressed as rates,
c) contacts with other psychiatric services, such as outpatients,
d) discharges and deaths,
e) the relative mortality of inmates of psychiatric institutions, adjusted for age and sex.

The main expenditure headings of interest must include:

f) current (non-capital) expenditure
g) unit costs
h) capital expenditure, loan charges and debt
i) revenue sources

Most of these expenditure series must be converted to constant prices if trends are to be identified. In general, the GDP price deflator has been employed in the analysis that follows, although the implications of various price indices are explored in Chapter 8.

The rationale for each of these headings is briefly discussed before looking at the data available for each by country.

a) Residents

The emphasis on the number of resident inpatients (as opposed to other measures such as beds, whether available or staffed, or places) must first be clarified. Data on the number of inpatients resident in the psychiatric hospitals on a particular day, usually 31 December or 1 January, arguably provide a better measure of the capacity than beds (whether available, staffed or otherwise) which measure potential capacity. Further, data on the number of residents date back to the earliest days of

the lunatic asylums while that on (available) beds originates from the 1950s and only for the UK countries. The provision of data relating to the end of the year implies the choice of taking those data as relating to either of the two adjoining years. Some series show average numbers resident during the year. All of the these variants, however, lie close to each other. The number resident at a particular date is taken as the preferred series in this study, mainly because of the availability of data over the longest time period.

Ideally, data on residents would include breakdowns by sex, age, legal status and diagnosis. As discussed below, the availability of such a full dataset varies by country.

In terms of hypothesis testing, one might expect the influence of changes in funding methods, such as capitation payments, or in methods of treatment, to show up both in the stock (numbers resident) and in the flows (admissions and discharges) of inpatients.

Admissions

While data on the total level of admissions have been collected from the earliest days of 'asylumdom' (to use Mellet's (1982) term), usually by sex, the distinction between first and repeat admissions has posed recurrent problems. Although of little importance for administrative purposes, such a distinction is essential if first admissions are to be taken as an index of treated incidence, which in turn has often been taken as a proxy for the true incidence of the more serious diagnoses. However, without a well-maintained central register, psychiatric patients who were admitted to different hospitals might well be repeatedly classified as first admissions. As discussed in Chapter 3, concern with this problem led to the development of case registers in the 1960s and 1970s. Consequently, the approach adopted here involves subjecting data on first admissions to particular scrutiny, cross-checking them against total admissions for any sudden changes in the relationship between the two.

Leaving

Data on the total number leaving the various institutions provide outflow data which can be set against inflows (total admissions). The difference between these gross flows will show up in the net change in the stock of resident inpatients, and may provide a starting point from which to examine changes in the numbers of residents.

Data on persons leaving have traditionally separated out live discharges from dead. Ideally, data would be provided on the mental health status of live dischargees, such as recovered, improved or unimproved. Some such classification was used up to 1959 in most countries, but not thereafter.

Although data on deaths of inmates have traditionally been provided because of the custodial status of the mental institutions, the focus has been on individual causes of deaths rather than with these institutions' mortality rate relative to the population. Such comparisons, by means of measures such as Standardised Mortality Ratios (SMRs), which are commonly used in epidemiology and which have recently been applied to institutions (OPCS, 1987), have not before been been estimated over time for the psychiatric hospitals. While such a measure could be misleading for an institution with short-stay patients, the dominance of long-stay patients in the mental hospitals over most of the period justifies such an approach. In addition, in some later years deaths have been distinguished by duration of stay, enabling cross-checking on the influence of duration. Such ratios, which require data on the age profile of inmates by sex, provide a proxy measure of the relative 'healthiness' of the inmates in mental institutions over time.

Other Psychiatric Services

Contacts with other psychiatric services besides inpatient beds might usefully be provided, such as outpatient and day patient attendances, or residence in hostels or other homes for the mentally ill. Given the degree of substitution between inpatient and ambulatory services in recent decades, the inclusion of the latter would clearly be desirable, although typically data on these disparate services are patchy.

Figure 1.1

Review of Data Sources for Activity data by Country.

	England & Wales	Scotland	Ireland 32 Cos	Ireland N.Ireland	Ireland Rep. Of Ireland
Residents/ Admissions Discharges/ Deaths	Lunacy Commissioners /Board of Control 1845-1959	General Board of Lunacy/ Board of Control 1857-1963	Inspectors of Lunacy 1845-1919	Inspector of Lunacy 1923-29 Home Dept. 1930-48	Inspector Mental Hospitals 1923-62
	Ministry /Dept Health 1948-1986	Ministry / Dept. Health 1948-1986		NHS 1948-1986	Statistical Abstract 1923-72 SIRHS 1976 - 86
	General Registry Office 1950-60				
	Inpatient Census of Residents & Activity 1954,1963,1970	Smith& Carstairs			MSRB Census 1963,1971 & 1981, MSRB Activities 1965-83
Outpatient/ Daypatient Attendances	HPSS 1970-86	SHS		HPSSNI	SIRHS 1984 to 87
Residence in Hostels/ Homes for Mentally Ill	LAHH	SHS		HPSSNI	SIRHS

Notes: HPSS = Health and Personal Social Services Statistics (annual, HMSO)
HPSSNI = Health and Personal Social Services Statistics (HMSO)
SHS = Scottish Health Statistics HMSO)
MSRB = Medico-Social Research Board (Dublin)
SIRHS = Statistical Information Relevant to the Health Services (annual, Dept. of Health, Dublin)
LAHH - Local authority Hostels and Homes (Department of Health, 1989)
Smith and Carstairs = Patients under Psychiatric Care in Hospital, Scottish Health Service Studies, No.1. (HMSO, 1966).

Current Expenditure

A data series for current (non-capital) or revenue expenditure should ideally cover both public and private sectors as well as distinguish mental illness and mental handicap. Further desirable disaggregations might include breakdowns by diagnosis and by type of service. To enable comparisons over time, the data must usually be expressed in constant prices, by means of appropriate price deflators. The degree to which current spending adjusted to the drop in resident inpatients would cast light on the plausibility of Wagner's Law, one of the hypotheses derived in Chapter 2.

The differences between using general economy-wide price deflators and those which are specific to the mental health services would enable the impact of relative prices to be assessed. The impact of relative costs, including relative prices, one of the hypotheses derived from the literature review in Chapter 2, is explored in Chapter 8.

Unit Costs

Unit cost data, showing the cost per inpatient (per year, week or day), relate current expenditure to the number of resident inpatients. Trends in unit costs, adjusted for inflation, capture the degree to which expenditure and activity moved in tandem. Compared to the unit costs in other institutions, such as the workhouses, it should be possible to ascertain whether the public Lunatic Asylums provided a cheaper alternative - another hypothesis raised in Chapter 2. Unit costs might also be disaggregated to show the changing balance of inputs, such as between food and labour, for example.

Capital Expenditure and Indebtedness.

Data on capital spending provide insights into the level of investment in, and upkeep of, the mental hospitals. Indebtedness data, based on the loans taken out to finance the erection of asylums, provide a guide to the burden faced by those charged with administering the finances of these hospitals. Loan charges, which serviced the debt, might usefully be expressed as a proportion of non-capital expenditure.

Revenue Sources

Given that the financing of mental health services moved from reliance on local to central funding, clarification of the sources of revenue seems essential. The period of joint local/central funding, when the latter was by means of capitation funding, would seem to merit special attention, given the potential impact of capitation funding on activity. Capitation funding was the subject of a further hypothesis identified in Chapter 2 and explored further in Chapter 8.

Figure A.2 provides an overview of the range of data on activity in each country that has been compiled under each of the above headings.

FIGURE A.2

EXPENDITURE DATA: SUMMARY OF SOURCES

	England/ Wales	Scotland	Ireland		
			32 Cos	N.Ireland	Rep. of Ireland
CURRENT EXPENDITURE					
Baseline	Mitchell & Deane (1880-1948)	Mitchell & Deane (1893-1948)			
Current Expenditure & Unit Costs	Poor Law & Lunacy Commissioners (1857-29)	Board of Lunacy (1857-38)	Inspspector of Lunacy (1857-19)	Inspector of Lunacy 1923-9 Home Dept. (1929-48)	Inspector of Mental Hospitals. (1923-62) Statistical Abstract
	NHS Accounts (1950-68)	NHS Accounts (1950-68)	NHS Acounts (1950-68)		Estimates Volumes
	HPSS (1970-86)	Scottish Health Stats. (1959-86)	HPSSNI (1970-86)		SIRHS (1976-1990)
REVENUE SOURCES					
Central /Local Contributions	LGB/Min. Health (1875-30)	Board of Lunacy (1875-30)	Insp. of Lunacy (1875-19)	Home Dept (1923-47)	Insp. of Mental Hosp. (1922-30)
CAPITAL	(as Current Exp.)				
Capital Exp.	(1884-48)	(1900-48)	n.a	(1922-48)	n.a.

Notes: LGB =Local Government Board (HMSO, various years),
HPSS = Health & Personal Social Service Statistics, (HMSO, various years).
HPSSNI = Health and Personal Social Services Statistics (HMSO)
SHS = Scottish Health Statistics HMSO)
MSRB = Medico-Social Research Board (Dublin)
SIRHS = Statistical Information Relevant to the Health Services (annual, Dept. of Health, Dublin)
n.a. = not available.

Baselines

Both the activity and the finance data require cross-referencing and checking against the major relevant works. On the activity side, these include Jones (1972), Mitchell & Deane (1962 & 1968), Culyer and Jacobs, (1972); Hare (1983); Taylor (1989) as well as the various Royal Commissions (HMSO (1926 & 1957). Remarkably little attention has been paid to the data on activity in the mental hospitals over the full period for which data are available.While some useful attempts have been made, none of these have covered the full period from around 1850 to 1986. The difficulties involved with compiling such data, which have been stressed by Jones (1972) are discussed in more detail below.

The most important source of historical data on public expenditure by type, including "lunacy", was made by Mitchell and Deane in their *Abstract of British Historical Statistics* (Mitchell & Deane, 1968; see also Mitchell 1988), which covered England and Wales, Scotland as well as Ireland up to 1920. These landmarks of quantitative history provide both benchmarks for further work as well as warnings about the inadequacies of data, particularly at local government level prior to 1883. In the present study, the Mitchell-and-Deane series is taken as a baseline for England & Wales. However, as discussed below, the Mitchell-and-Deane series is not consistently defined over time and it amalgamated mental illness and mental handicap (formerly mental deficiency) under "lunacy". Further, the contents of the Mitchell-and-Deane series varied by country.

Section 2

England and Wales

Introduction

Jones (1972) has cast doubt on whether long-term series on service use can usefully be compiled, due to the various definitional changes under which data were collected, resulting from the major Lunacy and Mental Health Acts, such as those of 1890, 1930, and 1959. Jones' (1972) appendix on data sources provided only limited information with a restricted focus on data post-1948. However, her involvement with Culyer and Jacobs (1972), who provided a long-run (1919-59) data series on residents and admissions as well as finance, indicates that, with due caution, long-run series can be compiled.

Jones' caveats, which relate to the data for England & Wales, are considered in more detail in discussing each of the headings of interest. Each of the main activity headings is reviewed detail below.

Data Sources on Activity

The routine sources for much of the basic data on activity, (such as numbers resident, admissions, discharges and deaths) can be readily summarised, as follows:

-Lunacy Commissioners Annual Reports, which were published between 1845 and 1913,
-Annual Reports of the Board of Control which replaced the Lunacy Commissioners, and which were published from 1913 to 1959,
-the Mental Health Enquiry, (HMSO, 1964 to 1986), administered by the Department of Health (formerly DHSS, formerly Ministry of Health)
-Health & Personal Social Service Statistics, published by the Department of Health from 1970 to 1991,
-General Registry Office (GRO) which produced valuable data on mental health services between 1949 and 1960, for a slightly different set of hospitals than those covered by the Board of Control.
-various Mental Health Censuses (HMSO, 1954, 1963, 1970).

The reports of the Lunacy Commissioners and the Board of Control provide the longest series on residents, admissions as well as discharges and deaths, covering the period from 1853 to 1959. These data cover the full range of institutions as defined under the Lunacy Laws, both public and private.

In general, the picture after 1959 becomes more complicated, and the various series have to be employed with some care. Each is discussed in more detail below.

Residents

Data were published by the Lunacy Commissioners / Board of Control between 1854 and 1959 on the number of residents by type of mental institution. These data are shown in Table A.1, which provides the number of inpatients resident at the end of each year by the following institutions:

* County and Borough Asylums,
* Workhouses,
* Prisons (including a small number in military hospitals),
* Private Hospitals and Licensed Houses, as well as those patients who were
* Minded Privately ('residing with relatives or others').

In addition, various data series showed the number who were cared for in institutions for the mentally deficient (later mentally handicapped).

The total number of lunatics in care (including those Minded Privately) rose sharply from under 40,000 in 1860 to just under 110,000 in 1900 and remained in the range 130,000 to 160,000 between 1930 and 1959, with peaks in 1939 (158,700) and 1955 (152,100).

The Mentally Handicapped

After separate institutions for mentally deficient inpatients were established under the 1913 Act, data on these were published by the Board of Control from 1921. As shown in Table A.1, a dramatic rise occurred, from around 10,000 in 1921 to 25,000 by 1930, and 60,000 by 1950. Thereafter growth continued but a slower rate, reaching a peak of 65,000 in 1956 and declining to 64,000 by 1959.

Since separate institutions for the mentally handicapped did not come to prominence until 1921, many of the more severely disabled who were so classified were treated and cared for elsewhere. The degree to which they were catered for in the mental hospitals could affect the numbers presented under the various headings in Table A.1 for the period prior to the 1920s.

Fortunately, the Census of Population in 1871 and in 1911 (HMSO, various years) provided data on the number of mentally handicapped persons who were catered for in institutions for the mentally ill. These data indicate the number deemed "Idiots and Imbeciles" in care in 1871 was relatively small, amounting to some 5% of all lunatics in care, or between one third and one quarter of workhouse lunatics. In 1871, of the 29,452 Idiots and Imbeciles so enumerated, 3,456 were in the Metropolitan Asylum Board Special Asylums, accounting for around one quarter of total workhouse inmates in Table A.1. (Census, 1871, General Report, HMSO, 1874, p. lxiii). By 1911, more of this group were in institutions - of the 24,694 Imbeciles enumerated, 7,040 were in workhouses and 11,804 in special asylums, making up most of the workhouse total of 18,728 for that year (1911 Census of Population, General Report, HMSO, 1913, p.241). This group was catered for in identifiable

institutions, notably the special asylums constructed by the Metropolitan Asylum Board (MAB) in the London area after 1870, which were classified under Workhouses, as in Table A.1, by the Lunacy Commissioners and Board of Control.

The bulk of mentally deficient/handicapped inpatients thus appear to have been in the MAB asylums, which gradually became completely separate as mental deficiency and insanity were distinguished under the 1913 Mental Deficiency Act.

Residents 1948-1986

Data for the years after 1948 were complicated by a number of factors, notably:

* the advent of the NHS in 1948, and
* the 1959 Mental Health Act.

NHS

Although the NHS took over the bulk of the mental institutions, some remained outside (non-designated), such as voluntary hospitals and licensed houses. In 1957 the non-designated institutions, comprising 4 hospitals and 22 licensed houses under voluntary or private management, provided 2,400 beds in total or 1.6% of all places (Annual Report of the Board of Control, 1958). In addition, some General Hospitals and particularly Teaching Hospitals had began to provide psychiatric services. While the former were covered by the Board of Control, the latter were not.

Although Jones (1972) made much of these complications, specifically of the existence of three different data sources (those of the Board of Control, the General Registry Office and the Ministry Health), as shown in Table A.2, each series showed a similar number of resident inpatients. Table A.2 compares the various data sources for the period 1948-1986, in order to assist the choice of series. Column 1 shows the Board of Control series to 1959, column 2, Jones' data for 1961-3, column 3 the MHE data from 1964 to 1986, column 4, the Ministry of Health estimates, and column 5, the GRO series. Clearly the differences between these series were small, less than 5%.

1959 Mental Health Act

The 1959 Mental Health Act, by repealing the previous legislation, abolished both the concept of "certified" patients and also the Board of Control. Further, the GRO series was discontinued. Instead, following on the recommendations of the Royal Commission of 1954-7 (HMSO,1957), a single source, the Mental Health Enquiry (MHE) was developed to provide data on the activities of the mental health sector. Unfortunately, this new unified source did not commence publication until 1964, leaving a gap between 1961 and 1964. In addition, data were no longer collected on the private sector. Jones (1972), however, has provided data on the total number of resident inpatients for these years, based on Department of Health estimates. There was also an official attempt to re-estimate resident inpatient totals between 1954 and 1970, as shown in column 4 in Table A.2 (MHE, 1969).

Given the small differences between the various series, the series with greatest continuity is that of the Lunacy Commissioners / Board of Control to 1959, the MHE series from 1964 to 1986 with Jones' estimates filling the years 1960 to 1963.

The adverse effects of excluding the private hospitals were mitigated by the fact that by 1960, the public mental hospitals had become by far the most dominant institution, accounting for over 95% of resident inpatients in England and Wales. Patients in the private sector had shrunk to just over 2,000 or less than 2% of the total in care by 1960. No data on the numbers of patients in the private hospitals and homes are available between 1960 and 1977. The totals for these two years are however broadly similar: 2,038 in 1960 and 2,000 in 1977. In order to allow for this sector, the data for 1960-76 has been interpolated at 2,000 in Table A.3. It was only in the mid-1970s that the policies of deinstitutionalisation led to a revival in the private sector and to the provision of data on its size. From 1977, data were provided by several sources (Laing & Buisson, 1989; Local Authority Hostels and Homes, Department of Health, 1989).

The data for England and Wales were published in aggregate form up to 1970 after which they were published separately for each country. A dataset, comprising the Board of Control data to 1959, Jones for the period 1961-63, and the Mental Health

Enquiry totals from 1964 to 1986, is shown in Table A.3, with England and Wales shown separately and combined from 1970, including data on the number in prisons and in private hospitals.

In general, then, there appears to be no major difficulty in assembling a long-term data series on the numbers of resident inpatients in the various types of care. The slightly different data series lead to insignificant differences, particularly when expressed as ratios per 1,000 persons as in Table A.7 below. The preferred series for residents is based on the following:

- the Lunacy Commissioners/Board of Control to 1959
- Jones 1961-63(1972)
- MHE 1964-1986
- with private hospitals interpolated between 1961 and 1976.

Sex

The proportions of each sex among the inmates is shown in Table A.4 at ten yearly intervals. Females have long outnumbered males among resident inpatients, with a 55%/45% split apparent for the period 1860 to 1900, rising to 58%/42% in 1942, 1958 and 1980. This imbalance, however, needs to be set against the larger proportion of females in the general population, particularly in the older age groups due to their greater longevity.

Public & Private

The number and proportion of psychiatric patients classed by whether their institutional care was provided[1] by the public or private sector are distinguished in Table A.5. Publicly provided patients dominated; 86% in 1860, rising to 91% by 1900 and 97% by 1959, 1970 and 1980 but falling back to 90% by 1986. Privately financed care made up the bulk of the remainder, with the share of criminal lunatics below 1% since 1880. Although the proportion of places provided outside the public mental hospitals has expanded so that its share reached 9% by 1986, many of these places are publicly financed in that they have been established by the public

[1] A distinction must be made between public provision and public finance. While the former dominated provision, and catered mainly for publicly financed patients, some privately financed inpatients were also admitted to the public hospitals. The magnitude of their fees is discussed below.

authorities to care for inpatients who have been deinstitutionalised. Many of these patients rely on public finance through the social security system. Very few data are available on these issues.

Legal Status

The legal status of residents between 1932 and 1959 is shown in Table A.6. Up to the 1930 Mental Treatment Act, all those in publicly provided care were certified lunatics. From 1930, two new categories of inpatients were introduced: 'Voluntary' and 'Temporary', as well as 'Certified' (involuntary). As Table A.5 shows, the proportion of patients falling under these new categories was small until the mid-1950s when the proportion who were certified began to fall rapidly, from 75% in 1954 to 40% in 1959. 'Voluntary' rather than 'Temporary' became the category of preference, with the latter never accounting for as much as 1%.

After 1959, when the Mental Health Act abolished certification of lunatics, the proportion who were detained involuntarily fell to 5% in 1963 and has remained at around this level since, with 8% of inpatients being detained involuntarily in 1989/90 (Health Service Indicators, Department of Health, 1991).

Ages of Residents

In the voluminous data published by the Lunacy Commissioners and the Board of Control, very little attention was paid to the age profile of inmates. However, the Census of Population provides the requisite data, which showed that the age profile of resident inpatients had shifted dramatically towards the older age groups, so that over half were elderly by 1979. Table A.7 shows that under 20% of males were aged over 60 up to 1951, after which the proportion began to rise: 38% in 1959, 43% in 1971 and 49% by 1979. A similar pattern was apparent with females with the proportion over 60 remaining under 25% to 1921, then rising to 28% in 1931, 37% in 1951, and rising steadily to 69% by 1979. Data on the age profile of residents by sex are not available after 1979.

Ratio of Inpatients to Population

The ratio of inpatients to population (expressed as inpatients per 1,000 population) provides a population-adjusted measure of the stock of patients in care. As shown in Table A.8 for the period 1850 to 1986, several ratios can be distinguished: one for all those in County and Borough Asylums,another for all those in psychiatric institutions, as well as one for the mentally handicapped patients in institutional care. The ratio for all psychiatric institutions, which is more relevant for the purpose of this study, can be broadly described as having three phases as well as a number of peaks. Phase 1 spanned 1854 to 1894 when the number of patients in mental care, although increasing each year, remained below 2.0 per 1,000 persons. In Phase 2, from 1894 to 1975, between 2 and 4 persons per 1,000 were in care, with peaks in 1914, 1939 and 1954. Phase 3, which had less than 2 per 1,000 persons in care, dates from 1975, with a downward trend which left the ratio at around 1.5 in 1986.

Inpatients by Diagnosis

The data on inpatient residents by diagnosis for 1954, 1963 and 1971, summarised in Table A.9, show the dominance of one diagnosis among the resident inpatients - schizophrenia / paranoia. This group accounted for 37% of all resident inpatients in 1954, 49% in 1963, and 44% in 1971. Other important diagnoses included manic depression, which accounted for 20% of residents in 1954, 15% in 1963 and 10% in 1971. Senile dementia was the diagnosis of 13% of resident inpatients in 1963 and 11% in 1971. The other most important diagnoses were 'Other Psychoses' and 'Other Psychiatric Conditions', with each of the other diagnoses accounting for less than 5% of inpatients.

Admissions

The data on admissions present the same problems as for inpatient residents with one added complication: the data for first admissions in the new unified Mental Health Enquiry were clearly wrong for the period 1964-69. As with residents, the Lunacy Commissioners / Board of Control data are outlined first for the period 1854-1959, followed by those between 1952 and 1986.

Admissions 1854-1959

Data on total admissions to the range of institutions providing psychiatric care (except workhouses) were provided by the Lunacy Commissioners / Board of Control from 1854 to 1959 and on first admissions from 1898 to 1939, along with estimates of the ratio of first to total admissions between 1939 and 1959. As shown in Table A.10, these data show a gentle upward trend from 1854 to 1900, stabilising between 1900 and 1945 for both total and first admissions. Data were published for the war years 1914 to 1918 and the 1939-44 War interrupted the series only to fairly small degree, with data being provided by the Board of Control for the mental hospitals but not for the other institutions such as the former Workhouses, or the Private Hospitals and Licensed Houses, whose combined share had dropped below 10% of all places.

Total admissions to the range of psychiatric hospitals (all mental institutions except Workhouses) more than doubled between 1860 and 1900; from 9,000 per annum in 1860 to 13,000 by 1880, 20,000 by 1900. Total admissions remained at around this level to 1940; with 22,000 admissions in each of 1920 and 1940. First admissions rose from 16,000 in 1900 to 19,000 by 1920, and 21,000 by 1940. Since first admissions accounted for over 80% of all admissions from 1900, it seems reasonable to assume, along with Hare (1983) that the pattern of first admissions in the period prior to 1900 mirrored that of total admissions.

Admissions 1945-1986

Although admissions remained fairly steady up to 1940, thereafter the total rose sharply, posing problems for the methods of data collection.

The advent of the NHS led to parallel series of data being collected between 1948 and 1960. In 1960 the Ministry of Health took over the Mental Health Enquiry which had been developed by the General Registry Office (GRO) with data published from 1949 to 1960 (GRO, various years).Two problems present themselves: first, the differences between the various series from 1949 to 1960, and

second, the unlikely high proportion of total admissions attributed in the MHE to first admissions between 1964 and 1969.

Data on admissions were collected by three agencies from 1949:

* the Board of Control which covered patients under the various Acts, and thus excluded the non-designated institutions, such as the teaching hospitals,
* the Ministry of Health data
* the General Registry Office (GRO) which collected comprehensive data on the main psychiatric institutions.

Although Jones (1972) stressed the differences between the three series, the Ministry of Health data were identical to those of the Board of Control for most years. There seems little to choose between the two substantive series: with less than 5% between them in terms of total admissions, as shown in Table A.10. However, the GRO series has two advantages: it identifies first admissions and it provides a breakdown by diagnosis. For these reasons, the GRO data have been preferred in the analysis which follows.

The provision of separate data for Wales after 1970 must also be taken into account: these data, shown in Table A.11 have been added to the English data to provide a single series for England and Wales up to 1986.

Mistakes in Counting First Admissions

The Board of Control was abolished in 1959 and the Ministry of Health took over the GRO series from 1960 leading to a single series, the Mental Health enquiry (MHE) from 1964, but with a gap between 1960 and 1963. This new single series showed a sharp rise in first admissions in 1964 compared to 1959, as shown in Table A.11. First admissions were shown as rising from 55,000 in 1959 to 76,000 in 1964 (up 30%) and to 89,000 in 1969 (up a further 18%). The 1970 total showed a sharp decline to 60,000, down some 30% on the 1969 total. Either an epidemic was occurring or the data were wrong.

That the data were wrong was somewhat grudgingly recognised by the MHE (MHE,1970). The wording of the question concerning previous admissions was changed in 1970. Subsequent reports warn against comparing the data for 1964-69 with that for 1970 onwards, but without explaining why in any detail. The 1970 report (MHE, 1970) commented on the drop in first admissions in the following terms:

> 'Admission Question Changes:
> From 1970, the question on HMR1 (psych i/p) used to determine whether or not an admission was a first admission was made simpler than that used in the record cards SBH 15 and 16 from 1964 to 1969. *There is reason to believe that this has resulted in a more accurate coding of the relevant information. It has also revealed a lower proportion of first admissions than in earlier years.'* (emphasis added. Inpatient Statistics from the Mental Health Enquiry for the year 1970, HMSO, 1971, p.12.)

The data for first admissions for the years 1964 to 1969 can be readily estimated using the interpolated share of first to total admissions which fell from 49% in 1960 to 37% by 1970. The re-estimated data on first admissions are shown in Table A.11, indicating a peak in first admissions for all diagnoses in 1963.

Diagnoses

Very little work has been done on the pattern of admissions by diagnosis, with the exception of Der et al (1990) who examined first admission rates between 1970 and 1986. The first and repeat admission rates for the range of diagnoses are discussed in Chapter 9, with the relevant tables in Appendix 4.

Outpatients

The available data for first and total attendances, collected from 1961 to 1986, are shown in Table A.12. As with many of the other datasets, the data for England and Wales have had to be aggregated after 1970. An overall upward trend is apparent, but less so for first attendances than for all attendances. First attendances increased from 172,000 in 1961 to a peak of 230,000 in 1969 after which they fell back slowly to trough of 180,000 in 1979, before rising again to reach 201,000 in 1985. Total attendances rose from 1.272 million in 1961 to 1.896 in 1985, with an increase

apparent for all but three out of the 25 years. Total attendances thus rose by 49% over the period or by just under 1.5% per annum.

Leaving (Deaths & Discharges)

Data on those leaving the mental institutions (deaths and discharges) were published by the Lunacy Commissioners/ Board of Control from 1845 to 1959 and by the MHE from 1964 to 1986, subject to the same complications discussed above relating to different data sources after 1945. The Lunacy Commissioners/Board of Control data are shown in Table A.13, which included data on the state of health (recovered, not recovered) as well as the numbers who died. Data on discharges by sex were not published for some periods, notably between 1918 and 1959. Data on those leaving in the years 1964 to 1986 are shown in Table A.14., based on the Mental Health Enquiry (HMSO, various years).

Data on deaths are also available separately, classified by sex up to 1959 based on the same sources as for Tables A.13 and A.14, after which the breakdown by sex was discontinued. Although the Lunacy Commissioners and the Board of Control compared death rates of resident inpatients with that of the general population, no attempt appears to have been made to adjust the mortality rates for age.

Data on deaths by sex can be combined with the age profile of residents by sex to estimate Standardised Mortality Ratios (SMRs). The SMR is the ratio of the number of actual to expected deaths, expressed to a base of 100. Expected deaths are calculated by combining the national death rates by age group with the numbers in those age groups in the population under consideration, in this case, resident inpatients in the mental hospitals. Values above 100 indicate that the number of deaths in that particular group is higher than might be expected if the national mortality pattern applied.

Death rates by age and sex for England & Wales for each year from 1838 to 1981 are provided in Mitchell and Deane (1968) and OPCS (1987). The age profiles by sex from the Census of Population in Table A.7 have been applied to the the number of resident inpatients in 1871, 1881, 1921 and 1931 to estimate SMRs. Data on the age profile of inmates were employed for 1858, 1893, 1901, 1905 based on the Lunacy

Commissioners, for 1951 based on the General Registery Office, and for 1971 and 1981 based on the Mental Health Enquiry.

The resulting SMRs are high: above 300 for males in all years, (with a range of 301 to 506) and somewhat lower for females (range 238 to 398). These data fail to suggest a downward trend over time: the ratios for 1979 were higher than for any year since 1905 for both males and females.

The possibility that these high rates were due to random fluctuations is conventionally explored using confidence intervals, based on the appropriate distribution, in this case, the Poisson distribution (see Bland, 1987). The 95% Confidence intervals, as shown in Table A.15, are of the order of plus or minus less than 10% of the estimated SMRs, indicating that the substantially raised values observed in each of the 12 years examined were not due to chance. Although mental illness has not usually been seen as incurring raised overall mortality levels, these raised SMRs for both sexes suggest that those who are sufficiently ill to be cared for in mental hospitals incurred increased mortality. The reasons for this raised mortality, which deserve further attention, are not pursued here.

Prescribing Data

The only data available on prescriptions of psychotropic drugs refer to GP prescriptions from 1961 to 1986 (HPSS, various years). These data are of limited value for several reasons:

* they date only from 1961 even though the key role of the advances in psychotropic medication occurred in the mid-1950s,
* the relate only to GP prescribing excluding drugs used in hospitals,
* data refer to prescriptions rather than to patients, with difficulties in standardising for quantity and strength of drugs and linking prescriptions to patients.

The available data on prescriptions of psychotropic drugs are summarised in Table A.16. which distinguishes three classes:

- anti-depressants

- hypnotics (with barbiturates shown separately up to 1974 and combined thereafter),
- tranquillisers.

The total number of prescriptions issued for psychotropic drugs rose from 26 million in 1961 to a peak of 45 million in 1974 after it fell to 31 million in 1986. Most of these changes were due to tranquillisers, the total of which rose from 6 million in 1961 to 21 million in 1976 before declining to 11 million in 1986. This pattern reflects the popularity and later distrust of benzodiazepines (Valium and Librium). The total number of antidepressants rose from around 1 million in 1961 to 6 million in 1970 and remained between 6 and 7 million to 1986. Barbiturates had been the most commonly prescribed drug in 1961 at 15 million, but this total had declined to 8 million by the time that this category was merged with hypnotics. The total number of hypnotics prescribed in 1975 was 14 million and this remained at around that level, falling to 13 million in 1986.

Expenditure

Current Public Expenditure Series

Very little attention has been devoted to the level of expenditure on mental health services, perhaps due to the multiplicity of institutions, the complex funding arrangements, and the necessity to adjust the annual data for inflation. Reliable data on price indexes and Gross Domestic Product date from 1870, thanks to the work of Feinstein (1972) with some other less detailed estimates for earlier years (Deane, 1968).

The data for the period from 1857 to 1948 are considered first, followed by those from 1948 to 1986.

1857-1948

Two main data sources exist for the period up to 1948:

* the Poor Law series from 1857 to 1936 on the maintenance of Pauper Lunatics in County and Borough Asylums, Registered Hospitals and Licensed Houses,
* the Local Authorities' expenditure series from 1883 to 1948, which covered the maintenance of pauper lunatics in the same range of institutions as the Poor Law series but also included spending on the upkeep of the County and Borough lunatic asylums.

Since the maintenance of pauper lunatics was narrowly defined in the Poor Law series to cover only direct patient costs, such as food, clothing and staff, the latter series which includes the overhead costs associated with the buildings is the more appropriate. The Poor Law series, however, provide the only available expenditure data for the period 1857 to 1883.

Both data series are shown in Table A.17. The second column shows the Poor Law series, from the Local Taxation Returns, 1857 to 1936. Column 3 shows the series 'Lunacy' taken from the Abstract of British Historical Statistics (Mitchell & Deane, 1968). More detailed data were provided in the Local Taxation Returns, Ministry of Health Annual Reports, and Local Government Financial Statistics (HMSO, various years). Columns 4, 5, 6 & 7 disaggregate the gross expenditure series reported by

Mitchell & Deane who combined mental illness and mental deficiency, as well as loan charges for each service. The Mitchell-and-Deane series is unsatisfactory because of aggregating these components.

The relationship between the expenditure of the Local Authorities on psychiatric services (excluding expenditure on mental deficiency and on loan charges), and the Poor Law series for the 25 year period, 1883 to 1908, was used as a basis to extrapolate the Poor Law series for the previous 25 years back to 1857 (final columns in Table A.17). The mean ratio between the two series for the period 1883 to 1908 was 1.25 (with a range of 1.18 to 1.43). The results of this extrapolation, shown in the final column, for the years 1857 to 1882, provide a series covering the period when capitation payments were introduced.

The more comprehensive Local Authority expenditure series from 1883 to 1948 covered two items:

* spending on the maintenance of pauper lunatics in County and Borough Asylums, registered hospitals and licensed houses, and
* spending on the upkeep of the County and Borough Lunatic asylums.

Three other relevant categories of expenditure were excluded:

* spending through the Poor Law on inpatients in Workhouses,
* spending on outdoor relief for lunatics 'residing with relatives or others', and
* lunatics whose care, whether provided in public or private institutions, was financed out of private sources.

Since the numbers in each of these groups are available, expenditure on each can be estimated on the basis of assumptions concerning the relevant unit costs. The following assumptions[1] have been made in grossing-up expenditure in the period 1860 to 1948:

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[1] The unit cost of inpatient care for lunatics (per day or week) in the Workhouse has usually been taken as 50% of that of the County and Borough asylums (see discussions in Chapters 4 & 8). The cost of outdoor relief in general can be taken as one sixth of indoor relief, using the data from 1880 to 1920 as reported in the Poor Law Returns (Local Taxation Returns; Local Government Board Annual Reports). This gives a unit cost relative to the County and Borough asylums of one twelfth or 8.5%. With regard to the private sector, since a growing proportion of those financed privately were cared for in the County and Borough asylums, the assumption of equal unit costs seems appropriate.

* workhouse inpatient unit costs = 50% of that of the range of other institutions[1],

* outdoor relief unit cost = 8.5% of the wider unit cost,

* private unit costs = those of the County and Borough asylums.

The results of this grossing-up are shown in Table A.19.

The grossing up factor for workhouse inpatients fell from 1.23 in 1859 to 1.09 in 1900 and 1.05 by 1939 and 1.04 in 1948. The (cumulative) grossing up factor for workhouse inpatients and outdoor relief fell from 1.27 in 1859 to 1.10 in 1900, 1.05 in 1939 and 1.05 in 1948. The grossing up factor for privately financed care (again cumulative, that is including expenditure on workhouse inpatients plus outdoor relief) fell from 1.53 in 1859 to 1.18 in 1900 and 1.18 in 1939 and 1.04 in 1948. These data have been interpolated to cover various data gaps, notably 1940 to 1945.

Although such a procedure is crude, the results are relatively insensitive to the assumptions made on unit costs, mainly because the number in each of the groups covered was fairly small and was falling. Thus any possible inexactitude is reduced for the later periods. For example, after 1900, the cumulative grossing up factor was below 20%, with the major component due to the privately financed group.

Public Current Expenditure: 1948 to the Present

From 1950, data on aggregate public spending on mental illness and mental handicap are provided by three sources:

* Accounts of the NHS, which were laid before Parliament annually between 1951 and 1968 and published in the British Parliamentary Papers (HMSO, various years).

* Health and Personal Social Services (HPSS, HMSO, 1972-1990, formerly Digest of Health Statistics, HMSO, 1970 & 1971), provided data from 1959 to 1986,

[1] The range of other institutions included County and Borough asylums, Registered Hospitals and Unlicenced Houses. The Local Authority series covered total expenditure on County and Borough asylums plus maintenance expenditure on pauper patients in the other institutions. Due to the dominance of the District Asylums, their unit costs have had the major influence.

* Hospital Costings Returns (later Health Service Costing Returns) (HMSO, various years) have published data over the period 1950-1 to 1986-7.

The NHS Accounts and the HPSS provide a continuous series, as shown in Table A.18. From 1971 the data for England & Wales, which were provided separately after 1970, have been combined to provide a continuous series. This series has been grossed-up to total expenditure using the number of private patients, assuming equal unit costs. Since the number of private inpatients was relatively low, the results are insensitive to the assumed levels of unit costs.

The sharp 80% jump in expenditure in the period 1973 to 1975 demands explanation. This sharp rise was due in part to the attribution of medical salaries to services, including psychiatric services for the first time (HPSS, 1975). Although this change led to a blip in the period 1973 to 1975, when expressed in constant 1985 prices using the GDP deflator, the increase is reduced to 24% (see Table A.19 below). An additional factor concerned the high inflation of these years, with consequent time lags in spending and distortions due to choice of price deflator.

Current (non-capital) expenditure between 1870 and 1986 in constant 1985 prices is shown in Table A.19, based on Tables A.17 and A.18, deflated by the GDP deflator (Feinstein, 1972). Three series are shown: public expenditure on lunacy, narrowly defined, a wider definition including expenditure on lunatics in workhouses, and finally one including private expenditure. Total expenditure rose rose by a factor of just under 20 from £50m. in 1870 to £951m. in 1980, or by almost 3% per annum.

Programme Budgeting Series

An important additional source of information on spending by type of service is provided by the programme budget expenditure series, published through the House of Commons Social Service Select Committee. This series provides the most detailed data on spending by service, including mental illness, under the following five headings:

* inpatients costs to the NHS,
* outpatients costs to the NHS,
* day patients costs to the NHS,
* residential costs to the Local Authorities
* day care services to the Local Authorities.

Data on expenditure under each of these headings are shown in Table A.20, in constant (1988/9) prices. Inpatient expenditure retained the predominant share in these years - 88% in 1978/9 and 85% in 1988/9.

Unit Costs.

Data on average cost per place has been long provided, partly because a variety of institutions charged for services provided to both the public and private sectors. In addition, the supervisory agencies (the Lunacy Commission, the Board of Control, the Ministry of Health) have been concerned with the quality of service as measured by the amounts spent, for example, on food. Comparisons of the average cost per patient can also provide a guide to the relative efficiency of the various institutions.

Data were provided by the County and Borough asylums on the average cost of maintaining inpatients. Two periods can be distinguished:

* 1872-1938, for which a consistent series is available
* 1950/1 to 1986/7, for which detailed data are available, but with no less than four breaks as new classifications were introduced.

Unit Costs: 1872-1938

The Lunacy Commissioners Reports provided a data series on the aggregate maintenance cost per inmate in the County and Borough Asylums from 1872 to 1938; (Lunacy Commissioners / Board of Control Reports, 1875 to 1930; Board of Control Hospital Costing Returns, 1933 to 1938). These data were used to set the charges to the Poor Law Authorities for the care and treatment of pauper lunatics, which after 1930 became of less practical importance as the Local Authorities assumed the combined role of funder and provider of mental health services.

The 10 headings in this series remained essentially unchanged, as can be seen in Table A.21 which shows the same headings for both 1875 and 1930 for the County asylums[1]. Average costs included all patient consumables, including clothing, as well as staff salaries and clothing, furniture, bedding, the garden and the farm[2]. The main change was the advent of Superannuation as a separate sub-heading from 1915.

The average cost of maintaining a patient in a County or Borough Lunatic Asylum [3] remained remarkably unchanged from 1875 to 1910, falling slightly from £0.51 per week in 1875 to £0.45 in each of 1885 and 1890 and rising slowly to £0.52 by 1910 and £0.56 in 1915. Thereafter, the cost rose sharply to rose to £1.14 in 1920 and remained almost unchanged at this level to 1930. The 1935 level showed a slight rise to £1.31 per week. In constant 1985 prices, unit cost showed less change (Table A.22), staying between £19 and £20 up to 1915, falling to £16 in 1920 and rising to £23 in 1925, £24 in 1930 and £31 in 1935.

The composition of spending showed considerable change, however, indicating that the asylums moved from being institutions which were provisions-intensive to ones where labour costs dominated. Provisions were the single largest item at

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[1] A distinction must be made between Borough and County Lunatic Asylums. Although the reports of the Lunacy Commissioners state that the Borough Asylums were more accurately costed, only a small minority of all patients were in these asylums. For that reason, the focus in Table A.21 is on unit costs in the County Asylums.

[2] The role of the farms and garden poses problems in that the cost of provisions excluded outputs from the farm (except where these were sold on the open market), but expenditure on farm inputs were included. Any unpaid farm labour by inmates would thus have the effect of reducing maintenance expenditure. Very few data are available on the extent to which inmates provided unpaid labour on asylum farms. If such labour was significant, then asylums with large farms would tend to have had relatively lower maintenance costs. There is no evidence that this was the case, as the range of unit costs published in the annual reports of the Lunacy Commissioners / Board of Control was narrow: all having maintenance costs which were between 8 and 10 shillings per week. The charges in the maintenance costs attributed to the farms and gardens heading provides some measure of the inputs to farms. These data, which are available for each asylum, show no obvious relationship to the maintenance costs (see for example, the Annual Report of the Lunacy Commissioners, 1875, p.272-3). Thus it seems any underestimation in the unit cost data is unlikely to be large.

[3] A similar set of unit costs for mental handicap are not available, since separate data for mental handicap did not become available until post 1920 and then only in summary form. No details of unit costs such as were provided for mental illness are available. However, Board of Control data for 1922-38 showed that unit costs in the Certified Institutions which catered for the mentally handicapped were almost identical to those of the mentally ill.

45% of unit cost in 1875 and 48% in 1880, as shown in Table A.21. This proportion fell steadily from then, to 32% by 1900, 29% in 1910, 26% in 1920 and 19% in 1930. Concomitantly, the share of wages and salaries (including superannuation) increased: from 21% in 1875 to 26% in 1890, 29% by 1900, 31% by 1910, 37% in 1920 and 46% in 1930. The movements in these two components accounted for most of the change in unit costs, with no other item accounting for more than 10%, with the exception of "necessities" which declined slightly from 11% in 1875 to 10% in 1930. Medical inputs, as measured by "Surgery / Dispensary", never accounted for more than a minute share of spending: 0.7% of unit costs in 1875 and 1.1% by 1930.

1950/1 to 1986/7

From 1950/1, the NHS Costing Returns (HMSO, various years) provide detailed data on the average cost of maintaining an inpatient in both mental illness and mental handicap hospitals. Although attempts were made to combine these data into a single series, the changes in the sub-headings made it difficult to do so with any confidence[1]. However, the crude overall unit costs, shown in Table A.22 in constant 1985 prices, rose sharply: from £37 per week in 1950 to £66 in 1960, £115 in 1970, £246 in 1980 and £276 in 1986. Over the period 1950 to 1985, then, unit costs rose by a factor of 7.

Capital Expenditure

The distinction between current and capital spending was not made until 1929 (Mitchell and Deane, 1968) although from 1884 expenditure financed out of loans was identified. Under Wynn's 1829 Lunacy Act the cost of erecting the county asylums was levied on the County Rate, marking the first recognition of the claims of lunatics to care and treatment at public expense (Watson- Grice, 1930). From this period, capital spending and gross indebtedness data were estimated

[1] These unit cost data are based on accruals, that is total expenditure incurred and income arising during the year, and are thus different from income and expenditure series outlined above which are based on cash flow during the year. The method by which the unit cost series was compiled changed four times from 1950. From 1950/1 to 1955/6 a simple system of cost headings was in operation. From 1958/66 the two systems continued side by side, one an improved version of the older simple system, the other a full costing system. During this period, most of the mental illness and mental handicap institutions remained with the improved version of the old simple system. From 1966/7 a single system based on full costing was introduced for all hospitals, but this series was changed again from 1974 when the NHS was reorganised.

annually, but were not widely reported. Data were also provided on the level of debt outstanding up to 1948 when the NHS in effect led to the incorporation of these debts into the national debt.

Mitchell and Deane's (1968) series on capital ('Expenditure out of loans' 1883-1929, and on 'Capital Works 1929-39') is shown in Table A.23), extended to 1949 using the Local Government Financial Statistics (HMSO, various years). As with current expenditure discussed above, Mitchell and Deane combined mental illness and mental deficiency. These are separated out in Table A.23. In addition, the amount of Loan Charges and Debt Outstanding in each year from 1884 to 1949 are shown. Gaps in each of these series occur, firstly during the 1914-18 War and secondly, and more seriously, in the period 1937-41.

Overall, expenditure out of loans, (taken as capital expenditure), remained small: £0.3m. in 1884 rising to a peak of £1.0m. by 1900 and falling to around £0.3m. for the years 1909 to 1913. Capital spending rose in the early war years but fell back in the 1920s to under £0.5m. Spending rose during the 1930s to over £1m. and to over £2m. by 1940 before declining sharply during the War years. Capital spending on mental handicap began in the early 1920 at a very low level, but by the 1930s was accounting for around 50% of the combined mental illness and mental handicap expenditure.

Capital indebtedness (Loans Outstanding) rose from £3.15m in 1884 to £6.3m by 1900 and continued to rise to a 1914 peak of just under £11m. Indebtedness fell during the 1920 to around £7m. and recovered slightly during the 1930 to another peak in 1936 of just over £10m. From then indebtedness declined to a figure of £6.7m by 1948.

These data, expressed in constant 1985 prices in Table A.24, show even greater variation, with capital expenditure varying between under £10m. p.a. to over £30m. Loan charges in constant prices are shown as declining throughout the period 1883 to 1948. Net indebtedness rose to a peak of over £400m. in the mid-1880s, after which it steadily declined, falling to under £100m. by 1946.

Revenue sources

As discussed in Chapter 4, three periods of funding can be distinguished:

a) fully local funding, 1957-1874,

b) combined local and central funding, 1874-1948

c) fully central funding, 1948 to 1990.

Data on the period of mixed funding between 1874 and 1930[1] are shown in Table A.25. The proportion funded by rates has been calculated as the difference between expenditure and identified income, whether due to the capitation grant or to fees[2]. The Imperial Grant initially made up 26% of revenue in 1876, rising to 45% in the period 1897 before falling to 24% in 1911, 15% by 1920 and 12% by 1930, the year when it was replaced by a block grant form central to local authorities.

Fees contributed only a small share of revenue in the earlier years: 2% of expenditure in 1894, and 4% by 1910. Between 1913 and 1920, however, the share of fees tripled so that fees amounted to substantial proportions of revenue; 21% in 1920, 20% in 1930, 23% in 1940 and 25% by 1948.

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[1] From 1930, Local Authorities continued to receive central government grants but they were no longer earmarked by purpose. Only aggregate data on the magnitude of the central subvention are available up to 1895 but from that year to 1913 more detailed data on the Lunatic Asylums were published by the Local Government Board.

[2] For the early years, 1875-1894, the only available division is that between Total Expenditure and Imperial Grants. From 1894, however, data are available on the magnitude of fees from private patients in the District and Borough Lunatic Asylums. Such fees were payable to Local Authorities (in whole or in part) by relatives of those deemed in need of inpatient care but who possessed some means of paying. As discussed in Chapter 4, the Boards of Guardians (the Local Authorities from 1930) had an incentive to ensure that contributions from relatives left a charge of at least Four Shillings to be met by them because otherwise the Grant would not be paid. Data on Fees were published by the Local Government Financial Statistics up to 1948.

TABLE A.1
RESIDENTS INPATIENTS, MENTAL INSTITUTIONS BY TYPE, ENGLAND & WALES, 1853-1959.

Year	Country & Borough Asylums	Work Houses	Prison & Military	Private Hospitals & Licensed Houses	Minded Privately	Total Mentally Ill	Mentally Handicapped	Total Mental Ill & Handicapped
1850								
1								
2								
3	11,575							
4	12,972	5,713		6,228				
5	13,570	6,494		6,556				
6	13,876	7,039		6,812				
7	14,395	7,381		6,842	5,497			
8	15,120	8,081		6,893	5,497			
9	15,844	7,963	164	6,871	5,920	36,762		
1860	17,436	8,219	157	6,149	6,097	38,058		
1	18,592	8,543	174	6,100	6,238	39,647		
2	19,654	8,603	162	6,407	6,303	41,129		
3	20,573	9,208	145	6,634	6,558	43,118		
4	21,531	9,710	271	6,583	6,700	44,795		
5	22,285	9,756	485	6,655	6,769	45,950		
6	23,643	9,973	597	6,628	6,807	47,648		
7	24,590	10,307	630	6,698	6,861	49,086		
8	25,680	10,684	608	6,925	7,103	51,000		
9	26,867	11,181	670	7,148	7,311	53,177		
1870	27,980	11,358	660	7,273	7,442	54,713		
1	28,979	12,159	799	7,078	7,723	56,738		
2	29,641	13,608	869	6,651	7,856	58,625		
3	30,473	14,343	846	7,141	7,493	60,296		
4	31,371	15,018	878	7,485	7,275	62,027		
5	32,529	15,376	859	7,732	7,297	63,793		
6	34,154	15,509	862	7,426	6,965	64,916		
7	35,523	16,038	852	7,453	6,770	66,636		
8	37,763	16,263	842	6,980	6,688	68,536		
9	38,871	16,005	825	7,482	6,702	69,885		
1880	40,088	16,464	811	7,380	6,448	71,191		
1	41,355	16,811	798	7,574	6,575	73,113		
2	42,691	16,976	807	7,804	6,564	74,842		
3	44,065	17,330	839	7,826	6,705	76,765		
4	45,850	17,375	849	7,925	6,527	78,526		
5	47,749	17,282	838	7,494	6,341	79,704		
6	48,139	17,200	846	7,658	6,313	80,156		
7	48,842	17,381	810	7,597	6,211	80,841		
8	50,180	17,602	836	7,729	6,252	82,599		
9	51,694	17,509	907	7,858	6,389	84,357		
1890	52,937	17,825	890	8,158	6,237	86,047		
1	54,451	16,990	902	8,199	6,253	86,795		
2	55,509	16,898	895	8,393	6,153	87,848		
3	57,518	16,878	880	8,403	6,143	89,822		
4	60,361	16,869	862	7,838	6,137	92,067		
5	61,908	16,898	876	8,102	6,297	94,081		
6	63,957	16,945	849	8,361	6,334	96,446		
7	66,716	17,121	861	8,425	6,242	99,365		
8	69,133	17,120	890	8,472	6,357	101,972		
9	71,795	17,428	892	8,571	6,375	105,061		
1900	74,004	17,460	901	7,958	6,288	106,611		
1	75,916	17,115	901	7,928	6,091	107,951		
2	78,260	17,182	901	8,319	6,033	110,695		
3	82,009	17,104	901	8,878	6,005	114,897		
4	84,549	17,787	901	7,872	6,021	117,130		
5	87,091	17,806	901	7,878	6,083	119,759		
6	89,342	17,806	901	7,762	6,146	121,957		
7	91,260	17,904	981	7,854	5,989	123,988		
8	93,582	18,063	1,013	7,388	6,038	126,084		
9	95,927	18,396	1,014	5,411	6,043	126,791		
1910	97,580	18,268	1,021	5,577	6,232	128,678		
1	99,742	18,728	1,062	5,457	6,069	131,058		
2	101,430	19,162	1,074	5,830	5,989	133,485		
3	103,842	19,330	1,105	5,919	6,011	136,207		
4	105,504	19,559	1,162	6,153	5,854	138,232		
5	107,382	20,205	1,129	6,205	5,731	140,652		
6	104,674	19,932	1,145	5,995	5,442	137,188		
7	102,062	19,733	1,188	5,864	5,182	134,029		
8	95,811	18,319	1,142	5,879	4,923	126,074		
9	89,158	16,090	1,113	5,969	4,626	116,956		
1920	89,632	16,090	857	5,856	4,380	116,815		
1	93,648	16,445	869	5,480	4,143	120,585	9,576	130,161
2	97,360	16,606	839	5,071	4,037	123,913	11,345	135,258
3	100,079	16,489	963	4,961	3,969	126,461	13,123	139,584
4	103,892	16,589	956	5,107	3,961	130,505	14,961	145,466
5	105,399	16,446	970	5,018	3,905	131,738	16,611	148,349
6	107,836	16,446	955	4,925	3,895	134,057	18,335	152,392
7	110,701	16,241	963	4,880	4,010	136,795	19,892	156,687
8	112,726	16,021	991	4,786	3,943	138,467	21,333	159,800
9	115,690	15,787	994	4,812	3,960	141,243	23,014	164,257
1930	117,249	15,557	979	4,826	3,928	142,539	24,860	167,399
1	119,659	14,928	992	4,711	4,044	144,334	27,504	171,838

Year	Country & Borough Asylums	Work Houses	Prison & Military	Private Hospitals & Licensed Houses	Minded Privately	Total Mentally Ill	Mentally Handicapped	Total Mental Ill & Handicapped
2	121,503	14,530	827	5,713	4,123	146,696	31,000	177,696
3	122,855	14,960	842	5,704	4,414	148,775	33,714	182,489
4	124,207	15,066	830	5,592	4,471	150,166	36,638	186,804
5	126,318	14,944	809	5,646	4,373	152,090	39,215	191,305
6	128,042	15,062	787	5,658	4,222	153,771	41,923	195,694
7	129,975	15,102	768	5,681	3,996	155,522	44,555	200,077
8	132,173	14,872	769	5,657	3,882	157,353	46,879	204,232
9	133,827	14,634	779	5,648	3,835	158,723	49,101	207,824
1940	132,963	13,875	778	5,811	3,751	157,178	50,346	207,524
1	132,167	13,346	788	5,611	3,248	155,160	50,909	206,069
2	129,597	12,482	785	5,536	2,712	151,112	51,514	202,626
3	127,629	11,274	790	5,444	2,459	147,596	52,935	200,531
4	127,614	11,161	791	5,570	2,421	147,557	53,893	201,450
5	127,290	10,550	804	5,339	2,285	146,268	54,826	201,094
6	127,470	10,110	828	5,398	2,221	146,027	55,531	201,558
7	138,233		826	5,255	2,130	146,444	56,370	202,814
8	137,848		830	4,967	2,127	145,772	57,580	203,352
9	140,831		867	4,008	73	145,779	59,559	205,338
1950	142,363		875	3,980	70	147,288	60,114	207,402
1	142,500		881	4,091	74	147,546	60,821	208,367
2	143,196		898	3,908	69	148,071	61,511	209,582
3	144,583		897	3,809	64	149,353	62,704	212,057
4	146,643		906	3,771	58	151,378	63,745	215,123
5	148,080		918	3,086	60	152,144	64,171	216,315
6	146,867		929	3,008	52	150,856	64,674	215,530
7	145,593		917	2,922	48	149,480	64,011	213,491
8	143,596		914	2,405	47	146,962	63,858	210,820
9	138,124		913	2,603	40	141,680	63,577	205,257

Notes: Criminal and Military have been combined due to small numbers, particularly the military.
Military data missing 1931-59.
Military plus criminal missing 1901-6:- 1900 values assumed for this period.
Workhouse totals missing 1906 and 1920 - previous years values assumed for this period.
Private comprises Registered Hospitals and Licenced Houses.
Minded Privately refers to patients minded in domestic settings,
and here includes a small number of Chancery lunatics.

Sources: Lunacy Commissioners Annual Reports, 1854-1912
Board of Control Annual Reports, 1913-1959.

TABLE A.2
RESIDENT INPATIENTS, MENTAL INSTITUTIONS,
COMPARISON OF VARIOUS SOURCES
ENGLAND & WALES , 1941-86

Year	Board of Control	Jones (1961-1963)	Mental Health Enquiry (est.) (from 1964)	Ministry of Health	GRO
1	155,160				
2	151,112				
3	147,596				
4	147,557				
5	146,268				
6	146,027				
7	146,444				
8	145,772				
9	145,779				142,083
1950	147,288				142,500
1	147,546				143,196
2	148,071				144,503
3	149,353				146,643
4	151,378			152,197	148,080
5	152,144			150,867	147,657
6	150,856			149,593	145,593
7	149,480			147,220	143,220
8	146,962			146,815	142,815
9	141,680			143,083	139,083
1960		136,176		140,162	136,162
1		138,410		137,814	
2		135,695		135,610	
3		135,695		132,895	
4			136,402	131,559	
5			133,454	128,361	
6			130,995	126,258	
7			121,537	123,894	
8			124,991	120,367	
9			120,946	116,275	
1970			117,687		
1			114,991		
2			109,697		
3			105,243		
4			99,867		
5			97,231		
6			93,128		
7			89,215		
8			87,821		
9			85,934		
1980			83,323		
1			81,398		
2			79,066		
3			77,320		
4			74,993		
5			73,529		
6			72,155		

Sources: Column 1 from Table A.1.
Column 2 from Jones (1972)
Column 3 from Table A.1 Mental Health Enquiry (HMSO,Various Years)
Ministry of Health estimate in Column 4 from Mental Health Enquiry Report, 1969.
Column 5 - General Registry Office (GRO) Various Years

TABLE A.3
RESIDENT INPATIENTS, BY TYPE OF MENTAL INSTITUTION, ENGLAND & WALES, 1941-86.

Year	Co/Borough Asylums	NHS England	NHS Wales	NHS England & Wales	Poorhouses & Prisons	Private Hospitals	Minded Privately	Total Mentally Ill	Total Mentally Handicap	Total Mentally Ill&Hand.
1940	132,963				14,653	5,811	3,751	157,178	50,346	207,524
1	132,167				14,134	5,611	3,248	155,160	50,909	206,069
2	129,597				13,267	5,536	2,712	151,112	51,514	202,626
3	127,629				12,064	5,444	2,459	147,596	52,935	200,531
4	127,614				11,952	5,570	2,421	147,557	53,893	201,450
5	127,290				11,354	5,339	2,285	146,268	54,826	201,094
6	127,470				10,938	5,398	2,221	146,027	55,531	201,558
7	138,233				826	5,255	2,130	146,444	56,370	202,814
8	137,848				830	4967	2,127	145,772	57,580	203,352
9	140,831				867	4,008	73	145,779	59,559	205,338
1950	142,363				875	3,980	70	147,288	60,114	207,402
1	142,500				881	4,091	74	147,546	60,821	208,367
2	143,196				898	3,908	69	148,071	61,511	209,582
3	144,583				897	3,809	64	149,353	62,704	212,057
4	146,643				906	3,771	58	151,378	63,745	215,123
5	148,080				918	3,086	60	152,144	64,171	216,315
6	146,867				929	3,008	52	150,856	64,674	215,530
7	145,593				917	2,922	48	149,480	64,011	213,491
8	143,596				914	2,405	47	146,962	63,858	210,820
9	138,124				913	2,603	40	141,680	63,577	205,257
1960	133,216				885	2,038	37	136,176	62,000	198,176
1	135,610				885	2,000		138,495	61,164	199,659
2	132,895				885	2,000		135,780	61,471	197,251
3	132,895				885	2,000		135,780	64,622	200,402
4	132,300				786	2,000		135,086	61,132	196,218
5	129,100				778	2,000		131,878	61,702	193,580
6	127,000				770	2,000		129,770	61,849	191,619
7	124,700				817	2,000		127,517	62,083	189,600
8	121,200				807	2,000		124,007	61,913	185,920
9	117,200				798	2,000		119,998	62,196	182,194
1970		107,800	6,330	114,130	800	2,000		117,817	59,287	177,104
1		104,600	6,149	110,749	820	2,000		114,382	58,336	172,718
2		99,500	5,902	105,402	823	2,000		109,029	56,902	165,931
3		95,200	5,689	100,889	840	2,000		104,583	55,710	160,293
4		90,151	5,414	95,565	846	2,000		97,565	54,448	152,013
5		87,821	5,200	93,021	835	2,000		95,021	53,379	148,400
6		83,939	5,008	88,947	837	2,000		90,947	52,468	143,415
7		80,487	4,764	85,251	813	1,864		87,115	51,355	138,470
8		79,165	4,729	83,894	777	1,894		85,788	50,159	135,947
9		77,297	4,627	81,924	787	2,015		83,939	48,907	132,846
1980		74,800	4,444	79,244	780	2,142		81,386	47,792	129,178
1		73,170	4,374	77,544	769	2,063		79,607	46,241	125,848
2		70,880	4,283	75,163	803	2,157		77,320	44,738	122,058
3		69,030	4,236	73,266	811	2,367		75,633	43,152	118,785
4		66,050	4,139	70,189	799	3,171		73,360	41,201	114,561
5		63,970	4,135	68,105	794	3,797		71,902		
6		60,300	3,991	64,291		6,170		70,461		

Sources: Board of Control 1940-59,1961-1964 data from Jones (1972), 1964-86 from Mental Health Enquiry, DHSS Digest of Health Statistics 1970-72,Health & Personal Social Services Statistics England, Health & Personal Social Services Statistics Wales, 1973-86 Laing's Healthcare for data on private patients 1977-85
Note: Private patient numbers have been interpolated at 2,000 1960-76.
Board of Control data on residents from 1950 relate to January of each year.
Workhouse and prisons have been combined 1940-46, data refer to special hospitals thereafter
Data for special hospitals missing 1961-3: 1960 values have been assumed.

TABLE A.4
PROPORTIONS MALE AND FEMALE; ALL MENTAL INSTITUTIONS
ENGLAND & WALES

Year	Male	Female	Total	Male %	Female %	Total %
1860	17,332	20,726	38,058	45.5	54.5	100
1870	25,132	29,581	54,713	45.9	54.1	100
1880	32,164	39,027	71,191	45.2	54.8	100
1890	38,959	47,108	86,067	45.3	54.7	100
1900	48,536	58,075	106,611	45.5	54.5	100
1910	60,528	70,025	130,553	46.4	53.6	100
1920	50,429	66,767	116,703	43.2	57.2	100
1930	62,864	79,523	142,387	44.2	55.8	100
1940	69,355	87,823	157,178	44.1	55.9	100
1950	63,129	84,159	147,288	42.9	57.1	100
1959	58,433	77,743	136,176	42.9	57.1	100
1970	47,654	14,441	62,095	43.4	56.6	100
1980	34,547	47,377	81,924	42.2	57.8	100

Sources: Annual Reports of Lunacy Commissioners (1860-1910), Board of Control (1920-1959), Mental Health Enquiry (1970 & 1980).

TABLE A.5
PROPORTIONS INPATIENTS IN PUBLIC AND PRIVATE MENTAL INSTITUTIONS; ENGLAND & WALES

	All Lunatics				As Percentages			
Year	Public	Private	Criminal	Total	Public	Private	Criminal	Total
1860	32,589	4,732	737	38,058	85.6	12.4	1.9	100
1870	48,132	5,915	666	54,713	88	10.8	1.2	100
1880	63,090	7,385	716	71,191	88.6	10.4	1	100
1890	77,257	8,095	725	86,067	89.8	9.4	0.8	100
1900	97,028	8,813	770	106,611	91	8.3	0.7	100
1910	118,901	10,616	1,036	130,553	91.1	8.1	0.8	100
1920	102,567	13,286	911	116,703	87.9	11.4	0.8	100
1930	126,941	14,537	909	142,387	89.2	10.2	0.6	100
1940	141,730	14,609	839	157,178	90.2	9.3	0.5	100
1950	140,706	5,572	1,010	147,288	95.5	3.8	0.7	100
1959	132,183	2,898	1,095	136,176	97.1	2.1	0.8	100
1970	109,749	2,000	800	112,549	97.1	2.1	0.8	100
1980	81,924	2,142	780	84,146	97.4	2.5	0.9	100
1986	64,291	6,170	794	71,255	90.2	8.7	1.1	100

Sources: Annual Reports of Lunacy Commissioners (1860-1910), Board of Control (1920-1959), Mental Health Enquiry (1980 & 1986).

TABLE A.6
RESIDDENT INPATIENTS BY LEGAL STATUS 1932-59
MENTAL INSTITUTIONS, ENGLAND & WALES

	Persons				Percentages		
Year	Voluntary	Temporary	Certified	Total	Voluntary	Temporary	Certified
1932	1,880	235	144,581	146,696	1.3	0.2	98.6
3	2,529	210	146,036	148,775	1.7	0.1	98.2
4	3,194	226	146,846	150,266	2.1	0.2	97.7
5	4,258	343	147,488	152,089	2.8	0.2	97.0
6	5,731	539	147,501	153,771	3.7	0.4	95.9
7	7,166	565	147,791	155,522	4.6	0.4	95.0
8	8,768	555	148,030	157,353	5.6	0.4	94.1
9	10,297	630	147,796	158,723	6.5	0.4	93.1
40	10,518	484	146,176	157,178	6.7	0.3	93.0
1	11,154	400	143,606	155,160	7.2	0.3	92.6
2	11,960	396	138,756	151,112	7.9	0.3	91.8
3	12,339	327	134,930	147,596	8.4	0.2	91.4
4	13,898	349	133,310	147,557	9.4	0.2	90.3
5	14,631	374	131,263	146,268	10.0	0.3	89.7
6	15,565	415	130,047	146,027	10.7	0.3	89.1
7	17,208	457	128,779	146,444	11.8	0.3	87.9
8	18,585	436	126,751	145,772	12.7	0.3	87.0
9	21,788	527	123,464	145,779	14.9	0.4	84.7
50	24,657	395	122,236	147,288	16.7	0.3	83.0
51Dec	26,848	361	120,337	147,546	18.2	0.2	81.6
51Jan	29,147	348	118,576	148,071	19.7	0.2	80.1
2	31,405	332	117,616	149,353	21.0	0.2	78.8
3	34,261	364	116,753	151,378	22.6	0.2	77.1
4	37,364	343	114,437	152,144	24.6	0.2	75.2
5	40,068	481	110,307	150,856	26.6	0.3	73.1
6	45,069	397	104,014	149,480	30.2	0.3	69.6
7	54,553	333	92,076	146,962	37.1	0.2	62.7
8	62,704	351	78,625	141,680	44.3	0.2	55.5
9	82,968	147	56,061	139,176	59.6	0.1	40.3

Source: Annual Reports of Lunacy Commissioners & Board of Control.

TABLE A.7
ALL LUNATIC INSTITUTIONS, AGE PROFILE OF INMATES
ENGLAND & WALES, VARIOUS YEARS

Year	1858	1871	1881	1891	1901	1905	1911	1921	1931	1951	1959	1971	1979
Males	%	%	%	%	%	%	%	%	%	%	%	%	%
<20	4	3	2	5	5	5	5	11	10	10	1	2	3
20-40	40	39	39	37	36	36	36	31	33	30	19	17	17
40-60	36	41	39	41	41	41	41	40	36	37	42	38	32
60+	20	17	20	17	18	19	19	19	20	23	38	43	49
	100	100	100	100	100	100	100	100	100	100	100	100	100
Females	%	%	%	%	%	%	%	%	%	%	%	%	%
<20	3	2	2	3	3	3	3	7	6	5	1	1	2
20-40	33	33	32	33	31	30	30	27	28	21	10	10	10
40-60	42	43	41	43	43	43	43	42	39	37	32	24	20
60+	22	21	25	21	23	24	24	25	28	37	56	65	69
	100	100	99	100	100	100	100	100	100	100	100	100	100

Sources: Census of Population, 1871/81/91/1901/1911/1921/1931/1951/59
Mental Health Enquiry 1971 & 1979.

Note:Percentages may not add to one hundred due to rounding.

TABLE A.8
TREATED PREVALENCE OF MENTAL ILLNESS AND MENTAL HANDICAP: ENGLAND & WALES, PATIENTS PER 1,000 POPULATION

	Mentally Ill		Mentally Handicapped
Year	County/ Borough Asylums	All Institutions	
1850			
1			
2			
3	0.63	0.93	
4	0.70	1.34	
5	0.72	1.41	
6	0.73	1.46	
7	0.75	1.77	
8	0.78	1.83	
9	0.80	1.87	
1860	0.88	1.93	
1	0.92	1.99	
2	0.96	2.04	
3	1.00	2.11	
4	1.03	2.16	
5	1.05	2.17	
6	1.10	2.23	
7	1.13	2.26	
8	1.17	2.32	
9	1.21	2.39	
1870	1.24	2.43	
1	1.27	2.49	
2	1.28	2.54	
3	1.30	2.58	
4	1.32	2.61	
5	1.35	2.65	
6	1.40	2.66	
7	1.44	2.70	
8	1.51	2.74	
9	1.53	2.75	
1880	1.56	2.77	
1	1.59	2.81	
2	1.62	2.84	
3	1.65	2.88	
4	1.70	2.92	
5	1.75	2.93	
6	1.75	2.91	
7	1.76	2.91	
8	1.78	2.94	
9	1.82	2.96	
1890	1.84	2.99	
1	1.87	2.98	
2	1.89	2.99	
3	1.93	3.02	
4	2.01	3.06	
5	2.03	3.09	
6	2.08	3.13	
7	2.14	3.19	
8	2.19	3.24	
9	2.25	3.30	
1900	2.29	3.31	
1	2.33	3.31	
2	2.38	3.36	
3	2.46	3.45	
4	2.51	3.48	
5	2.56	3.53	
6	2.60	3.55	
7	2.63	3.57	
8	2.67	3.60	
9	2.71	3.58	
1910	2.73	3.59	
1	2.76	3.63	
2	2.79	3.67	
3	2.84	3.72	
4	2.85	3.73	
5	3.04	3.98	
6	3.02	3.96	
7	2.98	3.92	
8	2.82	3.70	
9	2.52	3.29	
1920	2.41	3.13	
1	2.47	3.17	0.25
2	2.55	3.24	0.30
3	2.60	3.28	0.34
4	2.68	3.36	0.39
5	2.71	3.38	0.43
6	2.76	3.42	0.47
7	2.82	3.48	0.51
8	2.86	3.50	0.54
9	2.92	3.56	0.58

	Mentally Ill		Mentally Handicapped
Year	County/ Borough Asylums	All Institutions	
1930	2.95	3.58	0.62
1	2.99	3.61	0.69
2	3.02	3.65	0.77
3	3.04	3.69	0.84
4	3.07	3.71	0.91
5	3.11	3.74	0.96
6	3.14	3.77	1.03
7	3.17	3.79	1.09
8	3.19	3.80	1.13
9	3.21	3.81	1.18
1940	3.18	3.75	1.20
1	3.17	3.72	1.22
2	3.09	3.61	1.23
3	3.02	3.49	1.25
4	3.01	3.48	1.27
5	2.99	3.43	1.29
6	2.99	3.42	1.30
7	3.21	3.40	1.31
8	3.17	3.35	1.32
9	3.22	3.33	1.36
1950	3.23	3.35	1.37
1	3.25	3.37	1.39
2	3.26	3.37	1.40
3	3.28	3.39	1.42
4	3.31	3.42	1.44
5	3.30	3.39	1.43
6	3.26	3.35	1.44
7	3.19	3.28	1.40
8	3.17	3.24	1.41
9	3.07	3.15	1.41
1960	2.96	3.02	1.38
1	2.99	3.05	1.35
2	2.91	2.97	1.35
3	2.86	2.92	1.39
4	2.87	2.95	1.32
5	2.75	2.84	1.31
6	2.70	2.78	1.31
7	2.65	2.75	1.32
8	2.59	2.67	1.32
9	2.49	2.57	1.32
1970	2.43	2.49	1.26
1	2.34	2.40	1.23
2	2.28	2.34	1.23
3	2.17	2.23	1.20
4	2.06	2.12	1.18
5	2.01	2.07	1.15
6	1.92	1.98	1.13
7	1.84	1.90	1.11
8	1.81	1.87	1.08
9	1.77	1.83	1.06
1980	1.71	1.77	1.03
1	1.65	1.71	0.99
2	1.60	1.67	0.95
3	1.56	1.63	0.92
4	1.50	1.58	0.88
5	1.45	1.55	
6	1.37	1.50	

Sources: Tables A.1, A3 for resident patients. Home population from 1854-1966 from Mitchell and Deane (1968), subsequent years from Population Trends (HMSO, various years)

TABLE A.9
RESIDENTS IN MENTAL HOSPITALS IN ENGLAND & WALES BY DIAGNOSIS, 1954, 1963 AND 1971.

Year	1954	1963	1971
	%	%	%
Schizophrenia/Paranoia	37	49	44
Manic Depression	20	15	10
Senile Dementia }		13	11
Other Psychoses }	9	8	11
Psychoneuroses		3	4
Behaviour & Character }		2	4
Mental Handicap }		5	4
Other Psych.Conditions }	34	2	11
Others }		3	2
Total	100	100	100

Note: totals do not add to 100 due rounding.
Source: Census of Mental Hospitals, 1954, 1963 & 1971

TABLE A.10
ADMISSIONS TO COUNTY & BOROUGH ASYLUMS,
REGISTERED HOSPS, LICENCED HOUSES AND SINGLE CHARGES, ENGLAND/WALES 1854-1959.

	Total Admissions LC/BOC			First Admissions LC/BOC			Total Admissions GRO			First Admission GRO		
Year	Male	Female	Persons	Male	Female	Persons	Male	Female	Total	Male	Female	Total
1854	3,768	3,871	7,639									
5	3,686	3,680	7,366									
6	3,763	3,643	7,406									
7	3,895	4,000	7,895									
8	4,041	4,105	8,146									
9	4,528	4,576	9,104									
1860	4,504	4,739	9,243									
1	4,460	4,495	8,955									
2	4,486	4,317	8,803									
3	4,273	4,315	8,588									
4	4,825	4,542	9,367									
5	5,321	5,020	10,341									
6	4,993	4,978	9,971									
7	5,266	5,223	10,489									
8	5,579	5,461	11,040									
9	5,283	5,189	10,472									
1870	5,045	5,174	10,219									
1	5,301	5,227	10,528									
2	5,255	5,349	10,604									
3	5,535	5,677	11,212									
4	5,963	5,949	11,912									
5	6,210	6,232	12,442									
6	6,366	6,491	12,857									
7	6,516	6,453	12,969									
8	6,657	6,686	13,343									
9	6,342	6,759	13,101									
1880	6,364	6,876	13,240									
1	6,653	6,851	13,504									
2	6,665	6,956	13,621									
3	7,013	7,454	14,467									
4	7,044	7,268	14,312									
5	6,426	6,928	13,354									
6	6,651	6,912	13,563									
7	7,032	7,263	14,295									
8	7,157	7,617	14,774									
9	7,182	7,865	15,047									
1890	7,734	8,463	16,197									
1	8,077	8,606	16,683									
2	8,409	8,719	17,128									
3	8,604	9,219	17,823									
4	8,551	9,127	17,678									
5	9,006	9,507	18,513									
6	9,063	9,569	18,632									
7	9,175	9,673	18,848									
8	9,383	9,931	19,314	7,816	7,698	15,514						
9	9,360	9,929	19,289	7,835	7,917	15,752						
1900	9,681	10,156	19,837	8,075	8,117	16,192						
1	10,158	10,611	20,769	8,663	8,573	17,236						
2	11,217	11,634	22,851	9,578	9,414	18,992						
3	11,015	11,202	22,217	9,340	9,023	18,363						
4	10,823	11,319	22,142	9,232	9,000	18,232						
5	10,493	11,129	21,622	8,878	8,918	17,796						
6	10,390	11,422	21,812	8,705	9,123	17,828						
7	10,599	11,261	21,860	9,044	9,072	18,116						
8	10,630	11,614	22,244	9,022	9,324	18,346						
9	10,437	11,327	21,764	8,862	9,000	17,862						
1910	10,304	11,557	21,861	8,755	9,207	17,962						
1	10,468	11,438	21,906	8,897	9,294	18,191						
2	10,716	11,716	22,432	9,179	9,559	18,738						
3	10,597	11,706	22,303	9,035	9,372	18,407						
4	10,305	11,923	22,228	9,705	9,702	19,407						
5	10,002	11,171	21,173	8,632	9,078	17,710						
6	9,834	10,867	20,701	8,452	8,850	17,302						
7	8,989	10,643	19,632	9,660	8,702	18,362						
8	10,078	11,687	21,765	8,835	9,726	18,561						
9	10,831	12,060	22,891	9,440	9,888	19,328						
1920	10,370	12,003	22,373			18,659						
1	10,412	12,328	22,740			18,584						
2	10,353	12,772	23,125			18,844						
3	10,310	12,744	23,054	8,679	10,255	18,934						
4	9,451	11,852	21,303	7,840	9,246	17,086						
5	9,695	12,089	21,784	8,029	9,316	17,345						
6	9,867	12,057	21,924	8,153	9,364	17,517						
7	9,893	12,000	21,893	8,151	9,317	17,468						
8	10,002	12,375	22,377	8,231	9,535	17,766						
9	9,924	12,130	22,054	8,125	9,423	17,548						
1930	9,381	11,689	21,070	7,727	9,124	16,851						
1	10,898	13,314	24,212	8,862	10,303	19,165						
2	11,304	14,256	25,560	9,104	11,000	20,104						
3	11,439	14,220	25,659	9,137	10,839	19,976						
4	11,696	15,123	26,819	9,261	11,464	20,725						

	Total Admissions LC/BOC			First Admissions LC/BOC			Total Admissions GRO			First Admission GRO		
Year	Male	Female	Persons	Male	Female	Persons	Male	Female	Total	Male	Female	Total
5	12,176	15,473	27,649	8,565	11,603	20,168						
6	12,739	16,503	29,242	9,750	12,251	22,001						
7	11,636	15,256	26,892	9,903	12,556	22,459						
8	13,724	17,684	31,408	10,272	12,881	23,153						
9	13,828	17,882	31,710	10,228	12,697	22,925						
1940	12,272	16,055	28,327	9,201	11,556	20,757						
1	11,419	15,502	26,921	8,514	11,268	19,782						
2	11,391	16,261	27,652	8,624	11,930	20,554						
3	12,721	17,719	30,440	9,354	12,926	22,280						
4	12,686	18,455	31,141	9,059	13,319	22,378						
5	13,360	20,131	33,491			24,281						
6	16,785	24,218	41,003	12,173	17,116	29,289						
7			44,356			31,083						
8			51,227			36,028						
9			59,204			40,551	23,148	31,773	54,921			
1950			60,266				23,467	32,389	55,856			
1			63,953				24,412	34,875	59,287	16,193	22,496	38,689
2			66,773				25,955	36,303	62,258	16,604	22,591	39,195
3			72,069				28,278	39,144	67,422	18,234	24,556	42,790
4			76,650				29,751	41,948	71,699	18,326	24,851	43,177
5			83,284				32,369	46,217	78,586	19,400	26,502	45,902
6			88,542				34,263	49,731	83,994	19,868	27,545	47,413
7			93,306				36,830	52,113	88,943	20,664	27,602	48,266
8			95,968				37,018	54,540	91,558	20,151	28,425	48,576
9			98,243				41,878	63,864	105,742	22,414	32,633	55,047
1960							45,900	68,652	114,552	23,966	34,595	58,561

Sources: Annual Reports of Lunacy Commissioners, Board of Control., General Registry Office

Notes: GRO series available only after 1949.
First Admission rates 1854-1898 have been extrapolated on basis of proportion of first/total admissions 1898-1903.
LC/BOC = Lunacy Commissioners / Board of Control. GRO = General Registery Office

TABLE A.11
ADMISSIONS AND ADMISSION RATES, ENGLAND & WALES, 1960-1986

	Total Admissions					First Admissions				Rates per 100,000		
Year	Male	Female	Persons	Wales Persons	Total	Male	Female	Persons	Wales Persons	Total	First MHE	First Interpolated
1960			125,000									
1			138,700		138,700					300		146
2			146,400		146,400					314		148
3			160,400							342		157
4	64,321	94,540	158,861		158,861	31,247	44,947	76,194		336	161	150
5	64,732	94,720	159,452		159,452	32,580	47,986	80,566		335	169	146
6	67,392	96,588	163,980		163,980	33,749	48,556	82,305		343	172	144
7	68,140	100,298	168,438		168,438	34,741	51,039	85,780		350	178	143
8	69,959	102,526	172,485		172,485	36,199	52,822	89,021		357	184	141
9	71,496	103,213	174,709		174,709	36,911	53,020	89,931		360	185	138
1970	72,098	104,065	176,163		176,163	27,173	38,379	65,552		362	134	
1	72,287	103,741	176,028		176,028	26,329	37,234	63,563		358	128	
2	71,599	103,553	175,152	9,979	185,131	24,620	35,498	60,118	3,720	377	130	
3	71,238	102,933	174,171	10,406	184,577	24,175	34,275	58,450	3,842	373	126	
4	69,427	101,400	170,827	10,469	181,296	23,107	33,033	56,140	3,845	366	121	
5	71,008	104,103	175,111	10,970	186,081	23,680	33,696	57,376	4,123	376	124	
6	72,369	106,472	178,841	11,421	190,262	23,627	33,467	57,092	4,074	385	124	
7			175,400	11,210	186,610			56,600	4,060	377	123	
8			171,900	11,364	183,264			51,500	3,868	371	112	
9			169,300	11,222	180,522			49,200	3,564	365	107	
1980			180,200	11,852	192,052			53,000	3,638	387	114	
1	74,963	110,551	185,514	12,078	197,592	22,075	30,546	52,621	3,713	398	113	
2	75,207	108,386	183,593	11,962	195,555	21,611	28,507	50,118	4,006	394	109	
3	77,850	110,668	188,518	12,717	201,235	21,739	28,699	50,438	4,044	405	110	
4	80,322	111,936	192,258	13,107	205,365	30,412	30,412	60,824	4,022	413	130	
5	83,566	116,429	199,995	14,186	214,181	29,870	29,870	59,740	4,100	429	128	
6	83,865	113,386	197,251	13,414	210,665	28,715	28,715	57,430	3,580	422	122	

Sources:
Mental Health Enquiry, various years. Data for Wales 1972 on from Health & Personal Social Service Statistics for Wales.Data from 1961-63 from Jones (1972, p359), based on Annual Reports of the Ministry of Health.
The published reports suggest a 1961 total of 139,697 compared to Jones' 138,716.
The 1964 report states" In 1960 there was an increase of 8,810 to 114,552. It is estimated that the in 1961 admissions were nearly 11,000 more than in 1960, but the rate of increase during 1961 to 1963 was considerably less. Preliminary figures for 1964 and 1965 suggest very littleincrease in admissions in the latter year".
(Annual Report of Ministry of Health, HMSO, 1964, p.154)
The 1960 figure of 125,000 has been interpolated using the 1959 and 1961 data.

Note: Interpolated first admission rates s for England & Wales based on interpolated ratio of first to total admissions between 1959 and 1970 using the GROdata to 1959 admissions and the corrected MHE data from 1970.

TABLE A.12
PSYCHIATRIC OUTPATIENTS: FIRST AND ALL ATTENDANCES, ENGLAND & WALES, 1961-86

	England & Wales	
Year	New (000)s	All (000)s
1961	172	1,272
2	183	1,380
3	193	1,413
4	196	1,430
5	204	1,446
6	210	1,455
7	223	1,513
8	226	1,533
9	230	1,545
1970	227	1,588
1	212	1,615
2	211	1,643
3	209	1,663
4	202	1,643
5	188	1,611
6	196	1,686
7	192	1,716
8	187	1,751
9	180	1,708
1980	186	1,773
1	188	1,811
2	188	1,828
3	192	1,853
4	198	1,873
5	201	1,896

Sources: Digest of Health Statistics 1970,1971
Health and Personal Social Service Statistics for England and for Wales1972-1986.

TABLE A.13

DISCHARGES AND DEATHS FROM MENTAL INSTITUTIONS:, ENGLAND AND WALES, 1859-1960

	Discharged/ Recovered			Not Recovered			Died		
Year	Males	Females	Persons	Males	Females	Persons	Males	Females	Persons
4	1,100	1,335	2,435	605	577	1,182	1,219	966	2,185
5	1,122	1,423	2,545	602	608	1,210	1,195	872	2,067
6	1,162	1,320	2,482	668	749	1,417	1,031	822	1,853
7	1,114	1,377	2,491	689	736	1,425	1,096	830	1,926
8	1,181	1,500	2,681	696	775	1,471	1,143	946	2,089
9			3,270			2,850			2,332
1860			2,954			2,671			2,757
1			3,182			2,110			2,657
2			3,342			1,963			2,637
3			3,150			1,958			2,747
4			3,256			1,950			3,174
5			3,290			2,515			3,161
6			3,439			2,229			3,337
7			3,581			2,327			3,377
8			3,707			2,617			3,367
9			3,801			2,304			3,825
1870			3,968			2,853			3,805
1	1,843	2,307	4,150	2,080	2,149	4,229	2,139	1,644	3,783
2	1,887	2,358	4,245	1,425	1,682	3,107	2,004	1,507	3,511
3	1,797	2,347	4,144	1,570	1,694	3,264	2,279	1,705	3,984
4	2,138	2,690	4,828	1,346	1,391	2,737	2,350	1,816	4,166
5	2,242	2,666	4,908	1,551	1,862	3,413	2,587	1,949	4,536
6	2,300	2,803	5,103	1,616	1,776	3,392	2,443	1,906	4,349
7	2,176	2,662	4,838	2,227	2,565	4,792	2,515	1,902	4,417
8	2,398	2,932	5,330	1,775	1,595	3,370	2,656	2,001	4,657
9	2,363	2,943	5,306	1,751	1,536	3,287	2,721	2,268	4,989
1880	2,359	2,976	5,335	1,835	2,028	3,863	2,458	1,987	4,445
1	2,319	3,046	5,365	1,503	1,387	2,890	2,642	2,012	4,654
2	2,359	3,010	5,369	2,031	1,958	3,989	2,669	2,068	4,737
3	2,440	3,131	5,571	1,593	1,688	3,281	2,875	2,199	5,074
4	2,490	3,283	5,773	2,210	2,781	4,991	2,924	2,364	5,288
5	2,451	3,157	5,608	1,537	1,624	3,161	2,758	2,506	5,264
6	2,365	3,218	5,583	1,584	1,658	3,242	3,099	2,568	5,667
7	2,386	3,127	5,513	1,598	1,724	3,322	2,973	2,566	5,539
8	2,441	3,279	5,720	1,821	1,932	3,753	3,175	2,555	5,730
9	2,555	3,286	5,841	1,983	2,284	4,267	3,254	2,650	5,904
1890	2,689	3,561	6,250	2,199	2,552	4,751	3,456	2,905	6,361
1	3,028	3,818	6,846	2,013	2,332	4,345	3,531	2,881	6,412
2	2,934	3,736	6,670	2,190	2,341	4,531	3,419	3,001	6,420
3	3,015	3,838	6,853	2,216	2,430	4,646	3,541	3,068	6,609
4	2,998	4,128	7,126	1,936	2,196	4,132	3,570	2,909	6,479
5	3,095	3,974	7,069	2,298	2,329	4,627	3,922	3,230	7,152
6	3,305	3,873	7,178	2,177	2,302	4,479	3,657	3,091	6,748
7	3,233	3,996	7,229	2,234	2,765	4,999	4,003	3,278	7,281
8	3,128	3,993	7,121	2,320	2,401	4,721	4,042	3,508	7,550
9	3,385	4,187	7,572	2,678	3,048	5,726	4,350	3,761	8,111
1900	3,384	4,227	7,611	2,180	2,502	4,682	4,335	3,993	8,328
1	3,553	4,188	7,741	2,644	3,557	6,201	4,350	3,934	8,284
2	3,806	4,451	8,257	3,234	3,843	7,077	4,833	4,433	9,266
3	3,693	4,606	8,299	3,563	4,141	7,704	4,800	4,433	9,233
4	3,574	4,545	8,119	2,875	3,345	6,220	4,898	4,387	9,285
5	3,787	4,583	8,370	2,961	3,170	6,131	4,952	4,498	9,450
6	3,558	4,582	8,140	2,752	2,984	5,736	5,033	4,615	9,648
7	3,480	4,540	8,020	2,931	3,345	6,276	5,101	4,789	9,890
8	3,488	4,383	7,871	2,605	3,219	5,824	5,010	4,682	9,692
9	3,353	4,478	7,831	2,806	3,155	5,961	5,270	4,868	10,138
1910	3,178	4,323	7,501	2,171	2,711	4,882	5,158	4,619	9,777
1	3,027	4,299	7,326	3,271	3,874	7,145	5,187	4,863	10,050
2	3,116	4,229	7,345	2,625	3,037	5,662	5,477	4,876	10,353
3	3,189	4,107	7,296	3,080	4,078	7,158	5,395	5,222	10,617
4	3,234	4,253	7,487	2,870	3,088	5,958	5,845	5,387	11,232
5	3,083	4,099	7,182	8,206	9,339	17,545	6,789	6,600	13,389
6	2,832	4,007	6,839	3,258	4,583	7,841	7,129	6,479	13,608
7	2,411	3,739	6,150	1,807	2,244	4,051	10,038	7,910	17,948
8	2,294	3,613	5,907	3,164	4,496	7,660	10,641	8,874	19,515
9			7,286			6,000			11,217
1920			7,206			5,000			10,000
1			7,394			3,495			8,543
2			7,467			3,587			9,391
3			7,295			3,467			8,355
4			7,426			4,094			8,408
5			6,936			4,000			8,400
6			6,983			3,739			8,411
7			6,811			3,834			9,311
8			6,901			3,758			8,769
9			6,997			3,751			9,799
1930			6,938			3,553			8,313
1			7,650			5,696			9,159
2			8,153			6,379			9,745
3			8,520			6,600			9,408
4			8,622			7,361			8,721
5			9,076			7,901			9,086

	Discharged/ Recovered			Not Recovered			Died		
Year	Males	Females	Persons	Males	Females	Persons	Males	Females	Persons
6			9,361			8,727			9,327
7			9,544			9,252			9,685
8			10,377			10,320			9,157
9			10,568			11,569			10,231
1940			9,226			8,597			12,618
1			8,656			8,340			11,636
2			9,279			9,735			10,882
3			10,395			10,492			9,615
4			11,231			11,303			9,446
5			11,271			13,220			9,371
6			13,857			16,761			10,102
7			15,243			18,833			10,595
8			16,445			23,737			8,738
9			16,524			29,007			11,813
1950									
1			15,860			34,307			13,008
2			16,552			36,577			12,163
3			17,074			40,636			12,031
4			18,956			43,894			12,488
5			20,089			51,103			13,151
6			20,237			56,244			13,341
7			19,643			63,135			12,987
8			17,722			66,257			13,187

Sources: Annual Reports of Lunacy Commissioners & Board of Control to 1959.
Note: no data for 1950. Data exclude former poor law hospitals, general & non-designated hospitals

TABLE A.14
DEATHS & DISCHARGES, MENTAL HOSPITALS & UNITS, ENGLAND & WALES, 1964-1986

	Deaths & Discharges			England Only	
Year	England	Wales	England & Wales	Live Discharges	Deaths
1964	172,441	6,413	178,854		
5	175,468	6,413	181,881		
6	175,733	11,102	186,835		
7	176,902	10,377	187,279		
8	180,266	10,219	190,485		
9	178,500	10,619	189,119		
1970	175,900	10,744	186,644		15,956
1	178,000	11,744	189,744		
2	182,200	11,435	193,635	177,990	
3	177,900	11,523	189,423	168,691	13,934
4	174,200	11,325	185,525	165,432	13,833
5	171,200	11,390	182,590	161,507	12,765
6	181,600	11,986	193,586	158,722	13,509
7	186,600	12,149	198,749	168,944	12,468
8	185,200	12,048	197,248	174,320	12,693
9	190,604	12,779	203,383	172,702	12,478
1980	195,215	13,111	208,326	178,266	12,656
1	201,053	14,207	215,260	183,303	12,280
2	200,253	13,478	213,731	188,653	12,498
3					12,338
4					11,912
5					12,400

Source:Mental Health Enquiry (HMSO,Various Years)

TABLE A.15
SMRS OF RESIDENT INPATIENTS, ENGLAND AND WALES, VARIOUS YEARS

				95% Confidence Intervals (+/-)			
Year	Male	Female	Persons	Male	Female	Persons	Sources ofData on Ages
1858	410	238	312	23	15	13	Lunacy Commission
1871	393	250	315	17	12	10	Census of Population
1881	472	309	385	18	13	11	Census of Population
1893	493	387	438	16	14	10	Lunacy Commission
1901	496	382	435	15	12	9	Lunacy Commission
1905	506	393	445	14	11	9	Lunacy Commission
1921	466	373	414	13	11	8	Census of Population
1931	301	244	268	9	7	5	Census of Population
1951	341	318	328	9	7	6	GRO
1960	331	323	326	12	13	9	GRO
1971	408	367	383	10	7	17	MHE
1979	462	398	422	13	9	7	MHE

Notes::
SMR = (ratio of actual to expected deaths) * 100
Confidence Interval, based on Poisson Distribution.
GRO=General Registry Office(HMSO)
MHE=Mental Health Enquiry (HMSO)

TABLE A.16
NUMBER OF PSYCHOTROPIC DRUG PRESCRIPTIONS BY GPS, ENGLAND & WALES, 1961-86

Year	Anti depressants Scripts (m)	Hypnotics (m)	Barbiturates (m)	Tranquillisers (m)	Total (m)
1960					
1	1.4	3.4	15.2	6.2	26.2
2	2.0	2.6	15.8	6.6	27.0
3	2.4	2.5	15.9	7.1	27.9
4	2.8	2.6	16.1	9.0	30.5
5	3.5	2.9	17.2	10.8	34.4
6	3.9	3.5	16.8	12.5	36.7
7	4.6	4.5	16.1	13.6	38.8
8	5.0	5.8	14.2	14.9	39.9
9	5.4	5.9	13.1	15.4	39.8
1970	6.0	6.6	12.2	16.0	40.8
1	6.6	7.1	10.9	17.1	41.7
2	6.9	7.8	9.8	18.1	42.6
3	7.2	8.1	8.8	19.2	43.3
4	7.7	8.9	7.9	20.1	44.6
5	7.0	13.9		20.9	41.8
6	7.0	13.8		21.2	42.0
7	6.7	14.0		20.8	41.5
8					
9					
1980	6.3	13.6		18.9	38.8
1					
2					
3	6.3	13.5		14.7	34.5
4	6.2	13.5		13.6	33.3
5					
6	6.6	13.2		11.2	31.0

Source: Health & Personal Social Services Statistics for England & Wales, various years.

TABLE A.17
PUBLIC EXPENDITURE ON MENTAL ILLNESS: ENGLAND & WALES, VARIOUS SOURCES,1857-1959 (All in £m. at Current Prices)

			Mental Illness			Mental Handicap			
Year	Poor Law Maintainance Expenditure £m.	Mitchell & Deane "Lunacy" Expenditure £m.	Expenditure (excl. Loan Charges) £m.	Loan Charges £m.	Including Loan Charges £m.	Expenditure (excl. Loan Charges) £m.	Loan Charges £m.	Ratio Net Expenditure on Mental Illness to Poor Law	Extrapolated Expenditure (based on Poor Law) (1.25*Col 1) £m.
7	0.38								0.47
8	0.40								0.50
9	0.41								0.52
1860	0.42								0.53
1	0.44								0.56
2	0.48								0.61
3	0.50								0.63
4	0.52								0.66
5	0.54								0.67
6	0.56								0.71
7	0.61								0.76
8	0.66	0.90							0.82
9	0.71								0.89
1870	0.72								0.90
1	0.75								0.93
2	0.74								0.93
3	0.78								0.98
4	0.83								1.04
5	0.86								1.07
6	0.88								1.10
7	0.91								1.14
8	0.96								1.20
9	0.99								1.23
1880	0.99	1.40	1.37		1.37				1.24
1	1.03	1.40	1.44		1.44				1.29
2	1.06	1.50	1.49		1.49				1.33
3	1.10	1.30	1.34		1.34			1.22	1.37
4	1.14	1.40	1.42		1.42			1.24	
5	1.19	1.50	1.47		1.47			1.24	
6	1.18	1.50	1.47		1.47			1.25	
7	1.16	1.40	1.43		1.43			1.24	
8	1.17	1.50	1.46		1.46			1.25	
9	1.19	1.50	1.49		1.49			1.26	
1890	1.22	1.50	1.51		1.51			1.23	
1	1.29	1.60	1.63		1.63			1.27	
2	1.33	1.70	1.72		1.72			1.29	
3	1.39	1.80	1.77		1.77			1.27	
4	1.47	1.80	1.83		1.83			1.25	
5	1.50	1.80	1.84		1.84			1.22	
6	1.56	1.90	1.91		1.91			1.23	
7	1.64	2.00	1.95		1.95			1.19	
8	1.69	2.10	2.07		2.07			1.22	
9	1.75	2.20	2.22		2.22			1.27	
1900	1.82	2.30	2.32		2.32			1.28	
1	1.87	2.50	2.58		2.58			1.38	
2	2.05	2.60	2.38		2.38			1.16	
3	2.20	3.30	2.78	0.52	3.30			1.27	
4	2.29	3.40	2.85	0.55	3.40			1.25	
5	2.32	3.40	2.85	0.56	3.41			1.23	
6	2.33	3.50	2.91	0.59	3.50			1.25	
7	2.34	3.60	2.91	0.63	3.54			1.24	
8	2.33	3.60	2.98	0.65	3.63			1.28	
9	2.41	3.70	3.06	0.67	3.73			1.27	
1910	2.47	3.80	3.09	0.72	3.80			1.25	
1	2.53	3.90	3.16	0.70	3.87			1.25	
2	2.56	4.00	3.27	0.68	3.95			1.28	
3	2.63	4.20	3.46	0.71	4.17			1.31	
4	2.88	4.30	3.58	0.72	4.31			1.24	
5	3.03	4.50	3.69	0.86	4.55			1.22	
6	3.04	4.80	3.90	0.88	4.77			1.28	
7	3.09	5.00	4.01	0.93	4.94	0.095	0.001	1.30	
8	3.27	5.30	4.27	0.86	5.13	0.129	0.003	1.31	
9	3.53	5.70	4.64	0.84	5.48	0.181	0.003	1.32	
1920	4.47	7.30	6.17	0.81	6.98	0.290	0.003	1.38	
1	5.85	9.30	7.91	0.81	8.72	0.549	0.003	1.35	
2	6.06	9.50	7.95	0.77	8.72	0.799	0.003	1.31	
3	5.43	8.90	7.38	0.78	8.16	0.757	0.007	1.36	
4	5.18	9.00	7.39	0.74	8.13	0.827	0.007	1.43	
5	5.38	9.00	7.40	0.69	8.09	0.932	0.009	1.37	
6	5.48	9.40	7.64	0.68	8.32	1.019	0.015	1.39	
7	5.73	9.60	7.81	0.69	8.50	1.113	0.022	1.36	
8	5.60	9.70	7.77	0.68	8.44	1.240	0.026	1.39	
9	5.80	9.90	7.92	0.67	8.59	1.317	0.034	1.37	
1930	6.09	10.60	8.41	0.64	9.05	1.457	0.043	1.38	
1	7.13	10.80	8.40	0.64	9.04	1.607	0.106	1.18	
2	7.00	10.80	8.14	0.64	8.78	1.832	0.153	1.16	
3	6.94	11.00	8.17	0.66	8.83	2.003	0.189	1.18	

			Mental Illness			Mental Handicap			
Year	Poor Law Maintainance Expenditure £m.	Mitchell & Deane "Lunacy" Expenditure £m.	Expenditure (excl.Loan Charges) £m.	Loan Charges £m.	Including Loan Charges £m.	Expenditure (excl. Loan Charges) £m.	Loan Charges £m.	Ratio Net Expenditure on Mental Illness to Poor Law	Extrapolated Expenditure (based on Poor Law) (1.25*Col 1) £m.
4	7.00	11.40	8.30	0.68	8.97	2.180	0.223	1.18	
5	7.28	11.80	8.54	0.71	9.25	2.343	0.250	1.17	
6	7.65	12.50	9.04	0.70	9.74	2.514	0.271	1.18	
7		13.20	9.46	0.78	10.23	2.697	0.304		
8		14.30	10.22	0.77	10.99	2.992	0.359		
9		15.00	10.61	0.80	11.41	3.164	0.411		
1940			10.65	0.84	11.49	3.374	0.479		
1			10.93	0.87	11.80	3.530	0.514		
2			11.49	0.89	12.37	3.653	0.596		
3			11.71	0.90	12.61	3.872	0.575		
4			12.16	0.92	13.08	4.192	0.612		
5			13.15	0.85	14.00	4.478	0.547		
6			13.85	0.75	14.60	4.820	0.465		
7			16.36	0.71	17.07	5.586	0.465		
8			19.00	0.69	19.69	6.414	0.453		

Sources:
1857-1936 Poor Law statistics: Annual Reports of Local Government Board./Ministry of Health,Local Government Financial Statistics.
1883-1939 - Mitchell & Deane (1968)
1883-1916: Local Taxation Returns
1917-1929 Ministry of Health: Annual Reports
1930-1948 Local Government Financial Statistics, England & Wales.

Notes: Mitchell & Deane series includes Mental Illness and Mental Handicap expenditure, plus Loan Charges.
Extrapolated expenditure 1857-1882 based on ratio of Local Authority expenditure to Poor Law expendiiture as shown in Column 11. The ratio for 1883 to 1892 was equal to 1.25 was applied to the Column 1 for the years 1857 to 1883.
The Mitchell & Deane data prior to 1883 includes expenditure out of loans and so lacks comparability.

TABLE A.18
NHS MENTAL HEALTH EXPENDITURE,H SERVICES, &
ESTIMATED TOTAL EXPENDITURE, ENGLAND & WALES,1951-86.

		Inpatient				
Year	NHS Expenditure on Mental Health £m.	Private	NHS	Private Total Mentally Ill ex.Criminal	Grossing Up Factor for Private £m.	Grossed Up Expenditure £m.
1951	28.3	5,412	141,105	146,517	1.04	29.3
2	31.5	5,322	141,724	147,046	1.00	32.6
3	32.9	5,096	143,239	148,335	1.00	34.0
4	35.1	5,012	145,328	150,340	1.00	36.3
5	38.8	4,392	146,678	151,070	1.00	40.0
6	40.3	4,291	145,457	149,748	1.00	41.5
7	46.0	4,086	144,288	148,374	1.00	47.2
8	49.0	3,705	142,143	145,848	1.00	50.2
9	53.0	3,152	137,423	140,575	1.00	54.2
1960	56.5	2,898	132,183	135,081	1.00	57.7
1	60.4	2,000	135,610	137,610	1.00	61.3
2	63.2	2,000	132,895	134,895	1.00	64.2
3	66.7	2,000	132,895	134,895	1.00	67.7
4	71.7	2,000	132,300	134,300	1.00	72.7
5	77.7	2,000	129,100	131,100	1.00	78.9
6	81.9	2,000	127,000	129,000	1.00	83.2
7	84.4	2,000	124,700	126,700	1.00	85.7
8	92.5	2,000	121,200	123,200	1.00	94.0
9	99.0	2,000	117,200	119,200	1.00	100.7
1970	113.2	2,000	114,130	116,130	1.00	115.1
1	132.9	2,000	110,749	112,749	1.00	135.2
2	151.4	2,000	105,402	107,402	1.00	154.2
3	176.2	2,000	100,889	102,889	1.00	179.6
4		2,000	95,565	97,565	1.00	
5	323.5	2,000	93,021	95,021	1.00	330.3
6	360.7	2,000	88,947	90,947	1.00	368.7
7	400.1	1,864	85,251	87,115	1.00	408.6
8	437.6	1,894	83,894	85,788	1.00	447.3
9	520.4	2,015	71,924	73,939	1.00	534.5
1980	667.7	2,142	79,244	81,386	1.00	685.2
1	746.2	2,063	77,544	79,607	1.00	765.5
2	788.7	2,157	75,163	77,320	1.00	810.7
3	822.2	2,367	73,266	75,633	1.00	847.9
4	866.9	3,171	70,189	73,360	1.00	904.4
5		3,797	68,105	71,902	1.10	
6		6,170	64,291	70,461	1.10	

Sources: Expenditure Data:NHS Accounts and Health and Personal Social Service Statistics.
Activity Data - as Table A.3

Notes: 1. For 1961-76, private totals interpolated at two thousand.
2.Expenditure data for 1975 includes allocation of medical costs to psychiatric services for first time.
3.No data published for 1974 due to NHS re-organization.
4.Grossing up factor based on proportion private to NHS Resident Inpatients.

TABLE A.19
CURRENT (NON CAPITAL) EXPENDITURE ON MENTAL HEALTH SERVICES
ENGLAND & WALES, 1870-1984
(CURRENT AND CONSTANT 1985 PRICES)

	Current Prices			Constant 1985 Prices		
Year	Public Current Expenditure £m.	Adjusted Public Expenditure £m.	Public & Private £m.	Public Current Expenditure £m.	Adjusted Public Expenditure £m.	Public & Private £m.
7	0.47					
8	0.50					
9	0.52	0.65	0.79			
1860	0.53	0.66	0.80			
1	0.56	0.70	0.84			
2	0.61	0.75	0.90			
3	0.63	0.78	0.93			
4	0.66	0.82	0.97			
5	0.67	0.83	0.98			
6	0.71	0.87	1.03			
7	0.76	0.94	1.10			
8	0.82	1.01	1.18			
9	0.89	1.09	1.27			
1870	0.90	1.09	1.28	35	42	50
1	0.93	1.12	1.33	35	42	50
2	0.93	1.13	1.35	33	40	48
3	0.98	1.19	1.43	33	41	49
4	1.04	1.27	1.52	37	45	54
5	1.07	1.31	1.57	40	48	58
6	1.10	1.33	1.59	42	50	60
7	1.14	1.38	1.64	44	53	63
8	1.20	1.44	1.70	47	57	67
9	1.23	1.46	1.73	51	60	71
1880	1.24	1.47	1.73	49	58	68
1	1.29	1.53	1.79	52	62	72
2	1.33	1.56	1.82	53	62	72
3	1.34	1.57	1.83	54	63	74
4	1.42	1.65	1.92	59	68	80
5	1.47	1.70	1.97	63	72	84
6	1.47	1.70	1.96	64	73	85
7	1.43	1.65	1.91	62	71	82
8	1.46	1.67	1.93	63	72	83
9	1.49	1.71	1.96	64	73	84
1890	1.51	1.72	1.97	63	72	82
1	1.63	1.84	2.11	68	77	89
2	1.72	1.93	2.21	72	81	93
3	1.77	1.97	2.25	75	83	95
4	1.83	2.04	2.32	78	87	99
5	1.84	2.04	2.31	80	88	100
6	1.91	2.11	2.38	83	92	104
7	1.95	2.15	2.42	84	93	104
8	2.07	2.27	2.55	89	97	109
9	2.22	2.43	2.72	93	102	115
1900	2.32	2.55	2.85	92	101	112
1	2.58	2.82	3.15	103	112	125
2	2.38	2.59	2.89	97	105	117
3	2.78	3.00	3.39	113	122	138
4	2.85	3.08	3.44	116	125	140
5	2.85	3.08	3.43	115	124	138
6	2.91	3.13	3.45	117	126	138
7	2.91	3.13	3.47	115	123	137
8	2.98	3.20	3.56	117	126	140
9	3.06	3.29	3.61	121	130	143
1910	3.09	3.31	3.64	122	131	143
1	3.16	3.39	3.73	123	132	145
2	3.27	3.51	3.86	123	132	145
3	3.46	3.70	4.07	129	139	152
4	3.58	3.84	4.21	133	143	156
5	3.69	3.97	4.35	124	133	146
6	3.90	4.19	4.60	114	123	135
7	4.01	4.32	4.75	93	100	110
8	4.27	4.61	5.15	84	90	101
9	4.64	4.98	5.72	77	83	95
1920	6.17	6.63	7.65	85	92	106
1	7.91	8.50	9.90	122	131	153
2	7.95	8.54	9.91	146	157	182
3	7.38	7.89	9.08	148	158	182
4	7.39	7.86	9.05	150	159	183
5	7.40	7.90	9.12	150	160	184
6	7.64	8.15	9.37	157	167	192
7	7.81	8.31	9.52	164	175	200
8	7.76	8.25	9.40	165	175	200
9	7.92	8.40	9.54	169	179	203
1930	8.41	8.90	10.08	180	191	216
1	8.40	9.01	10.10	184	198	222
2	8.14	8.70	9.81	185	198	223
3	8.17	8.75	9.84	188	202	227
4	8.30	8.88	9.96	193	206	231
5	8.54	9.12	10.22	197	210	235

	Current Prices			Constant 1985 Prices		
Year	Public Current Expenditure £m.	Adjusted Public Expenditure £m.	Public & Private £m.	Public Current Expenditure £m.	Adjusted Public Expenditure £m.	Public & Private £m.
6	9.04	9.64	10.78	207	221	247
7	9.46	10.08	11.27	209	223	249
8	10.22	10.87	12.13	219	233	260
9	10.61	11.27	12.54	218	232	258
1940	10.64	11.22	12.59	202	212	238
1	10.93	11.52	12.93	190	200	225
2	11.49	12.11	13.58	186	196	220
3	11.71	12.34	13.84	181	191	215
4	12.16	12.81	14.37	178	187	210
5	13.15	13.86	15.55	187	197	221
6	13.85	14.47	16.04	193	202	223
7	16.36	17.09	18.09	209	218	231
8	19.00	19.84	20.97	226	236	250
9	25.21	25.21	26.27	290	290	302
1950	26.55	26.55	27.60	305	305	317
1	28.25		29.38	301		313
2	31.47		32.73	309		321
3	32.92		33.90	313		323
4	35.10		36.16	328		338
5	38.83		40.00	350		360
6	40.34		41.55	342		352
7	45.96		47.34	374		385
8	48.99		50.46	380		391
9	53.02		54.08	405		413
1960	56.47		57.60	425		433
1	60.41		61.01	441		445
2	63.24		63.87	445		450
3	66.70		67.36	460		465
4	71.67		72.38	481		486
5	77.67		79.22	498		508
6	81.95		83.58	506		516
7	84.41		86.10	508		519
8	92.45		94.30	538		548
9	99.02		101.00	556		567
1970	113.19		115.45	593		604
1	132.87		135.53	624		636
2	151.39		154.41	647		660
3	176.22		179.74	699		713
4						
5	323.50		329.97	863		880
6	360.74		367.96	839		856
7	400.07		408.07	830		847
8	437.62		446.37	810		827
9	520.35		535.96	853		879
1980	667.68		687.71	923		951
1	746.17		768.55	936		964
2	788.67		812.33	926		953
3	822.20		846.87	914		941
4	866.94		901.61	912		948

Notes: 1. Deflated by GDP deflator, using data from Feinstein (1972), and with GDP deflator values post 1970 from National Income and Expenditure(HMSO).
2.No figures for 1974 due to NHS re-organization.

TABLE A.20
MENTAL ILLNESS EXPENDITURE: PROGRAMME BUDGETS, ENGLAND
(Millions of Pounds at 1988/9 prices)

	HCHS			PSS			Percentage Shares			
Year	Inpatients	Outpatients	Day Patients	Residents	Day Care	PSS Sub-Total	Inpatients %	Outpatients %	Day Patients %	Residents %
1978/9	1179.2	63.9	62.0	21.9	13.8	35.7	88	5	5	3
1979/80	1186.5	63.4	60.8	23.8	15.3	39.1	88	5	5	3
1980/1	1204.8	63.7	69.9	25.2	15.9	41.1	87	5	5	3
1981/2	1222.5	75.2	75.7	24.4	16.2	40.6	86	5	5	3
1982/3	1215.6	81.0	76.4	25.4	19.1	44.5	86	6	5	3
1983/4	1210.7	80.6	85.0	26.3	21.0	47.3	85	6	6	3
1984/5	1214.4	83.7	88.4	26.4	22.4	48.8	85	6	6	3
1985/6	1201.8	86.6	93.0	25.3	22.4	47.7	84	6	7	3
1986/7	1196.9	85.6	95.4	25.0	25.3	50.3	84	6	7	4
1987/8	1267.0	74.3	98.2	30.1	26.9	57.0	85	5	7	4
1988/9	1262.7	67.7	106.6							

Source: House of Commons Select Committee on Social Services, 1990(HMSO).

TABLE A.21
UNIT COSTS, COUNTY ASYLUMS ONLY: MAINTENANCE EXPENDITURE PER PATIENT PER WEEK (CURRENT PRICES), 1875-1930.

Year	1875	1880	1885	1890	1895	1900	1905	1910	1915	1920	1925	1930
Provisions	0.23	0.23	0.18	0.18	0.14	0.15	0.16	0.15	0.16	0.29	0.23	0.22
Clothing	0.04	0.04	0.04	0.03	0.03	0.03	0.03	0.03	0.03	0.07	0.06	0.05
Salaries/Wages	0.10	0.11	0.12	0.12	0.13	0.14	0.15	0.16	0.17	0.41	0.47	0.48
Pensions	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.03	0.04
Necessities	0.06	0.05	0.05	0.05	0.05	0.06	0.07	0.07	0.07	0.14	0.14	0.11
Surgery/Di spensary	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.01
Wines,Liquors and Spirits	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Charged to M A/C	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Furniture & Bedding	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.03	0.04	0.04
Garden & Farm	0.03	0.02	0.03	0.03	0.04	0.04	0.04	0.05	0.05	0.10	0.08	0.08
Miscellaneous	0.02	0.02	0.02	0.02	0.02	0.03	0.04	0.04	0.05	0.07	0.09	0.10
Gross Cost	0.51	0.49	0.45	0.45	0.45	0.48	0.52	0.52	0.56	1.14	1.15	1.13
Receipts for Sales	-0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.02	0.02	0.05	0.04	0.04
Net Total	0.49	0.48	0.44	0.43	0.44	0.47	0.50	0.50	0.54	1.09	1.11	1.09
% Gross Cost	%	%	%	%	%	%	%	%	%	%	%	%
Provisions	45.0	46.7	40.4	39.9	32.0	31.9	31.1	28.8	29.4	25.7	20.3	19.1
Clothing	8.2	7.6	8.0	7.1	7.4	6.8	5.8	5.5	5.1	5.9	5.0	4.7
Salaries/Wages	20.6	22.2	25.6	26.2	28.4	28.8	29.1	30.6	31.7	37.1	43.2	45.9
Necessities	10.8	9.3	10.3	11.5	12.1	12.6	13.2	13.1	12.2	12.3	11.9	9.9
Surgery/Dispensary	0.7	0.6	0.7	0.7	0.8	0.9	0.8	0.7	0.8	0.7	0.8	1.1
Wines,Liquors and Spirits	1.2	0.9	0.6	0.6	0.5	0.4	0.3	0.1	0.1	0.0	0.0	0.0
Charged to M A/C	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Furniture & Bedding	4.7	4.5	4.7	4.2	4.7	3.9	3.7	3.2	3.4	3.0	3.6	3.3
Garden & Farm	5.5	5.0	5.8	5.9	8.9	8.0	8.4	9.6	9.0	8.7	7.2	7.2
Miscellaneous	3.2	3.2	3.9	3.9	5.4	6.8	7.5	8.4	8.2	6.5	7.9	8.9

Source: Annual Reports of Lunacy Commissioners, Board of Control.
Note:M A/C=Maintainence Account

TABLE A.22
UNIT COSTS, PSYCHIATRIC HOSPITALS, CURRENT & CONSTANT PRICES, ENGLAND & WALES, 1875-1985.

Year	GDP Defl.	Cost per Week Constant Prices	Cost per Week Current Prices
1875	2.7	19	0.51
1880	2.5	19	0.49
1885	2.3	19	0.45
1890	2.4	19	0.45
1895	2.3	20	0.45
1900	2.5	19	0.48
1905	2.5	21	0.52
1910	2.5	21	0.52
1915	3.0	19	0.56
1920	7.2	16	1.14
1925	4.9	23	1.15
1930	4.7	24	1.13
1935	4.3	31	1.33
1940	5.3		
1945	7.0		
1950	8.7	37	3.25
1955	11.8	38	4.53
1960	13.3	66	8.80
1965	15.6	83	13.00
1970	19.1	115	21.96
1975	37.5	190	71.12
1980	72.3	246	177.66
1985	100.0	276	275.66

Notes
England & Wales To 1970, England Only 1975-85
Costs Refer To County Asylums To 1935

TABLE A.23
CAPITAL EXPENDITURE AND LOANS OUTSTANDING,MENTAL ILLNESS & HANDICAP 1884-1949
CURRENT PRICES

	Expenditure Out of Loans				Loan Charges			Loans Outstanding		
Year	Mental Illness £m.	Mental Deficiency £m.	Total £m.	Mitchell & Deane £m.	Mental Illness £m.	Mental Deficiency £m.	Total £m.	Mental Illness £m.	Mental Deficiency £m.	Total £m.
1884	0.30		0.30	0.30				3.15		3.15
5	0.26		0.26	0.30				3.33		3.33
6	0.23		0.23	0.20				3.41		3.41
7	0.35		0.35	0.30				3.59		3.59
8	0.24		0.24	0.20				3.63		3.63
9	0.18		0.18	0.20				3.61		3.61
1890	0.14		0.14	0.10				3.56		3.56
1	0.28		0.28	0.30				3.69		3.69
2	0.27		0.27	0.30				3.54		3.54
3	0.21		0.21	0.20				3.53		3.53
4	0.42		0.42	4.00				3.76		3.76
5	0.35		0.35	0.30				4.26		4.26
6	0.47		0.47	0.50				4.39		4.39
7	0.66		0.66	0.70				4.79		4.79
8	0.77		0.77	0.80				5.17		5.17
9	0.95		0.95	1.00				5.88		5.88
1900	1.00		1.00	1.00				6.32		6.32
1	1.00		1.00	1.00						
2	1.09		1.09	1.10				8.25		8.25
3	1.12		1.12	1.10				9.15		9.15
4	0.85		0.85	0.80				9.45		9.45
5	0.98		0.98	1.00	0.56			10.38		10.38
6	0.89		0.89	0.90	0.59			10.88		10.88
7	0.84		0.84	0.80	0.63			11.01		11.01
8	0.59		0.59	0.60	0.65			11.23		11.23
9	0.32		0.32	0.30	0.67			11.12		11.12
1910	0.25		0.25	0.30	0.72			10.95		10.95
1	0.32		0.32	0.30	0.70			10.89		10.89
2	0.30		0.30	0.30	0.68			10.95		10.95
3	0.34		0.34	0.30	0.71			10.89		10.89
4	0.50		0.50	0.50	0.72			10.92		10.92
5	0.61		0.61	0.60	0.85			10.98		10.98
6	0.42		0.42	0.40	0.88			10.98		10.98
7	0.42		0.42	0.10	0.93	0.00		10.98		10.98
8	0.05	0.00	0.05		0.86	0.00		10.34	0.03	10.37
9	0.02		0.02		0.84	0.00		10.03	0.03	10.07
1920	0.10	0.00	0.10	0.10	0.81	0.00		9.74	0.03	9.78
1	0.18	0.04	0.22	0.20	0.81	0.00		9.43	0.04	9.48
2	0.26	0.06	0.32	0.30	0.77	0.00		9.20	0.10	9.30
3	0.20	0.00	0.19	0.20	0.78	0.01		8.63	0.11	8.74
4	0.18	0.00	0.18	0.20	0.74	0.01		8.24	0.12	8.36
5	0.37	0.05	0.42	0.40	0.69	0.01		8.01	0.17	8.17
6	0.32	0.06	0.38	0.40	0.68	0.01		7.90	0.19	8.09
7	0.35	0.11	0.46	0.50	0.69	0.02		7.86	0.35	8.20
8	0.32	0.08	0.39	0.40	0.68	0.03		7.67	0.41	8.08
9	0.25	0.10	0.35	0.40	0.67	0.03		7.49	0.50	7.99
1930	0.46	0.40	0.86	0.90	0.64	0.04		7.43	0.67	8.10
1	0.54	0.56	1.10	1.10	0.64	0.11		8.30	1.55	9.84
2	0.68	0.41	1.08	1.10	0.64	0.15		8.45	1.95	10.40
3	1.14	0.38	1.52	1.50	0.66	0.19		9.25	2.52	11.78
4	0.93	0.51	1.44	1.40	0.67	0.22		9.32	2.90	12.23
5	0.69	0.49	1.18	1.20	0.71	0.25		9.71	3.16	12.88
6	0.96	0.41	1.38	1.40	0.70	0.27		10.02	3.53	13.55
7	1.15	0.69	1.84	1.80	0.78	0.30		8.64	4.01	12.65
8	1.48	1.01	2.49	2.20	0.77	0.36		9.02	4.71	13.72
9	1.47	1.15	2.62	2.30	0.80	0.41		9.45	5.41	14.86
1940	1.01	1.04	2.05		0.84	0.48		9.66	5.62	15.28
1	0.45	0.52	0.97		0.87	0.51		9.63	6.01	15.63
2	0.22	0.22	0.44		0.88	0.60		9.53	5.96	15.49
3	0.13	0.09	0.21		0.90	0.57		8.96	5.64	14.60
4	0.09	0.08	0.17		0.92	0.61		8.40	5.29	13.70
5	0.13	0.05	0.18		0.85	0.55		7.92	4.99	12.91
6	0.21	0.03	0.24		0.75	0.47		7.40	4.70	12.10
7	0.22	0.08	0.30		0.71	0.47		6.90	4.40	11.30
8	0.42	0.16	0.58		0.69	0.45		6.66	4.24	10.89
9	0.23	0.08	0.31							

Sources:1917 TO 1929: Ministry of Health Annual Reports
1930/1 TO 1949: Local Government Financial Statistics

Notes:1.Expenditure out of Loans taken as Capital Expenditure 1917-29
2. Capital expenditure - 1916 value used for 1917 and 1901 for 1900.

TABLE A.24
CAPITAL EXPENDITURE, LOAN CHARGES AND DEBT, MENTAL ILLNESS, MENTAL DEFICIENCY 1884-1948.
1985 prices

	Expenditure Out Of Loans			Loan Charges			Loans Outstanding		
Year	Mental Illness £m.	Mental Deficiency £m.	Total £m.	Mental Illness £m.	Mental Deficiency £m.	Total £m.	Mental Illness £m.	Mental Deficiency £m.	Total £m.
1884	12		12				131		131
5	11		11				142		142
6	10		10				147		147
7	15		15				155		155
8	11		11				157		157
9	8		8				154		154
1890	6		6				148		148
1	12		12				155		155
2	11		11				148		148
3	9		9				149		149
4	18		18				161		161
5	15		15				185		185
6	21		21				191		191
7	28		28				206		206
8	33		33				221		221
9	40		40				247		247
1900	39		39				249		249
1	40		40				249		249
2	44		44				334		334
3	46		46				372		372
4	34		34				384		384
5	40		40	23		23	419		419
6	36		36	24		24	437		437
7	33		33	25		25	434		434
8	23		23	26		26	442		442
9	13		13	26		26	440		440
1910	10		10	28		28	432		432
1	13		13	27		27	423		423
2	11		11	26		26	413		413
3	13		13	27		27	407		407
4	18		18	27		27	406		406
5	21		21	29		29	368		368
6	12		12	26		26	323		323
7	10		10	22	0	22	255		255
8	1		1	17	0	17	202	1	203
9	0		0	14	0	14	167	1	167
1920	1	0	1	11	0	11	135	0	135
1	3	1	3	13	0	13	146	1	146
2	5	1	6	14	0	14	169	2	171
3	4	0	4	16	0	16	173	2	175
4	4	0	4	15	0	15	167	2	170
5	8	1	9	14	0	14	162	3	165
6	7	1	8	14	0	14	162	4	166
7	7	2	10	15	0	15	165	7	172
8	7	2	8	14	1	15	163	9	172
9	5	2	7	14	1	15	160	11	170
1930	10	9	18	14	1	15	159	14	173
1	12	12	24	14	2	16	182	34	216
2	15	9	25	15	3	18	192	44	237
3	26	9	35	15	4	20	213	58	272
4	19	11	30	14	5	19	193	60	253
5	16	11	27	16	6	22	224	73	297
6	22	9	32	16	6	22	229	81	310
7	25	15	41	17	7	24	191	89	279
8	32	22	54	17	8	24	194	101	295
9	30	24	54	16	8	25	194	111	306
1940	19	20	39	16	9	25	183	106	289
1	8	9	17	15	9	24	167	104	272
2	4	4	7	14	10	24	154	97	251
3	2	1	3	14	9	23	139	87	226
4	1	1	3	13	9	22	123	77	200
5	2	1	3	12	8	20	112	71	183
6	3	0	3	10	6	17	103	65	169
7	3	1	4	9	6	15	88	56	144
8	5	2	7	8	5	14	79	50	130

Source: As Table A.23

TABLE A.25
LUNACY EXPENDITURE AND SOURCES OF REVENUE: ENGLAND & WALES, 1874-1948

	Expenditure			Revenue			Percentage Shares Revenue		
Year	Maintainence Expenditure £m.	Loan Charge £m.	Total Expenditure £m.	Fees £m.	Grant £m.	Rates £m.	Grant	Fees	Rates
3			1.19						
4			1.27						
5			1.43		0.17	1.26	12		88
6			1.30		0.34	0.97	26		74
7			1.23		0.34	0.89	28		72
8			1.29		0.38	0.91	30		70
9			1.36		0.38	0.98	28		72
1880			1.37		0.39	0.98	29		71
1			1.44		0.41	1.03	28		72
2			1.49		0.42	1.07	28		72
3			1.34		0.43	0.91	32		68
4			1.42		0.45	0.97	32		68
5			1.47		0.46	1.01	31		69
6			1.47		0.48	0.99	33		67
7			1.43		0.48	0.95	33		67
8			1.46		0.49	0.97	33		67
9			1.49		0.50	1.00	33		67
1890			1.51		0.59	0.92	39		61
1			1.63				39		61
2			1.72				39		61
3			1.77				39		61
4			1.83	0.04			39		61
5			1.84	0.05	0.79	1.00	43	3	54
6			1.91	0.05	0.59	1.27	31	3	67
7			1.95	0.06	0.88	1.02	45	3	52
8			2.07	0.06	0.67	1.34	32	3	65
9			2.22	0.06	0.69	1.46	31	3	66
1900			2.32	0.07	0.70	1.56	30	3	67
1			2.58	0.07	0.76	1.75	29	3	68
2			2.38	0.08	0.71	1.59	30	3	67
3			2.78	0.09	0.77	1.92	28	3	69
4			2.85	0.10	0.79	1.95	28	4	69
5	2.85	0.56	3.41	0.12	0.83	2.46	24	3	72
6	2.91	0.59	3.50	0.13	0.85	2.52	24	4	72
7	2.91	0.63	3.54	0.13	0.88	2.53	25	4	71
8	2.98	0.65	3.63	0.14	0.93	2.56	26	4	70
9	3.06	0.67	3.73	0.15					
1910	3.09	0.72	3.80	0.16					
1	3.16	0.70	3.87	0.18	0.94	2.75	24	5	71
2	3.27	0.68	3.95	0.19	0.96	2.81	24	5	71
3	3.46	0.71	4.17	0.21	0.94	3.02	23	5	73
4	3.58	0.72	4.31				23	5	73
5	3.69	0.86	4.55				23	5	73
6	3.90	0.88	4.77	0.71	1.03	3.04	22	15	64
7	4.01	0.93	4.94	0.78	1.07	3.09	22	16	62
8	4.27	0.86	5.13	0.84	1.02	3.27	20	16	64
9	4.64	0.84	5.48	0.94	1.01	3.53	18	17	64
1920	6.17	0.81	6.98	1.45	1.07	4.47	15	21	64
1	7.91	0.82	8.72	1.83	1.05	5.85	12	21	67
2	7.95	0.77	8.72	1.62	1.04	6.07	12	19	70
3	7.38	0.78	8.16	1.70	1.03	5.43	13	21	67
4	7.39	0.74	8.13	1.90	1.05	5.18	13	23	64
5	7.40	0.69	8.09	1.67	1.04	5.38	13	21	67
6	7.64	0.68	8.32	1.76	1.07	5.48	13	21	66
7	7.81	0.69	8.50	1.71	1.06	5.73	12	20	67
8	7.77	0.68	8.44	1.77	1.08	5.60	13	21	66
9	7.92	0.67	8.59	1.74	1.06	5.80	12	20	67
1930	8.41	0.64	9.05	1.85	1.12	6.09	12	20	67
1	8.40	0.64	9.04	1.91	0.01	7.13	0	21	79
2	8.14	0.64	8.78	1.77	0.01	7.00	0	20	80
3	8.17	0.66	8.83	1.88	0.01	6.95	0	21	79
4	8.30	0.68	8.97	1.96	0.01	7.00	0	22	78
5	8.54	0.71	9.25	1.96	0.01	7.28	0	21	79
6	9.04	0.70	9.74	2.08	0.01	7.65	0	21	79
7	9.46	0.78	10.23	2.20	0.01	8.02	0	22	78
8	10.22	0.77	10.99	2.32	0.01	8.66	0	21	79
9	10.61	0.80	11.41	2.41	0.01	8.99	0	21	79
1940	10.65	0.84	11.49	2.64	0.01	8.84	0	23	77
1	10.93	0.87	11.80	2.76	0.01	9.03	0	23	77
2	11.49	0.89	12.37	2.83	0.08	9.46	1	23	76
3	11.71	0.90	12.61	3.10	0.22	9.29	2	25	74
4	12.16	0.92	13.08	3.16	0.20	9.72	2	24	74
5	13.15	0.85	14.00	3.31	0.35	10.34	3	24	74
6	13.85	0.75	14.60	3.57	0.45	10.59	3	24	73
7	16.36	0.71	17.07	4.29	0.44	12.34	3	25	72
8	19.00	0.69	19.69	4.85	0.50	14.33	3	25	73
9	5.15	0.18	5.32	1.59	0.19	3.54			

Sources: Annual Reports of Lunacy Commissioners, Local Government Board (1871-1919),Local Authority Financial Statistics (1916-1948) and Ministry of Health (1919-1950).

Notes: Data in reports refer to Fees and to Imperial Grant (capitation). The difference between Total Expenditure (Col.4) and revenue from Fees and the Imperial Grant has been assumed to fall on Rates.

APPENDIX 2

SCOTLAND: DATA SOURCES

Introduction

This section follows the format of the previous section with a focus first on activity data followed by expenditure. The Scottish sources for both activity and finance are broadly similar to those for England & Wales, but with some specific complexities and some notable gaps. The annual reports of the General Board of Lunacy (the General Board of Control from 1913) provided the basic information on activity and on costs between 1858 and 1939. While gaps occur between 1940 and the early 1970s, the broad trends can be identified using a variety of sources.

ACTIVITY

Resident Inpatients

1857 to 1939

Data on the number of certified lunatics in the range of institutions covered by the Scottish lunacy laws were published in the annual reports of the Scottish Lunacy Board / Board of Control between 1857 and 1939 and intermittently in the 1950s[1]. These data are shown in Table B.1.

The range of institutions is similar to that in England & Wales, with the District and Royal Asylums mirroring the dominant role played by the County and Borough asylums south of the border. The Parochial asylums (lunatic wards attached to Workhouses) provided the next largest group of inpatient places, followed by the private hospitals. As with England & Wales, a proportion of certified lunatics were 'minded privately', that is by relatives or others. In Scotland, this practice was encouraged through public funding of 'boarded-out' patients, the origins of which were discussed in Chapter 4. These numbers are also shown in Table B.1. In addition Training schools provided several hundred separate places for the mentally deficient up to 1914, although the size of this sector shrunk sharply after World War 1.

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[1] After 1939 the Board of Control published annual reports only for the years 1954 to 1961 inclusive.

The above routine data referred only to 'certified lunatics'. In addition a small number of voluntary patients were admitted to Scottish mental hospitals, primarily to the District and Royal hospitals rather than to the private hospitals which remained small in Scotland. The General Board of Control noted the fact that the 'lunacy grant' applied only to certified pauper lunatics meant that local boards of lunacy were reluctant to fund voluntary admissions (Annual Report of the Board of Control, 1924). These data, which are included in Table B.1. indicate that boarded-out patients accounted for relatively few patients up to the 1914-18 War, after which their share in the total rose to 5% in 1930, 8% in 1939 and 14% in 1950.

1930 to 1987

From 1939 only disparate sources are available, as shown in Table B.2, with no Board of Control publications between 1940 and 1954, or after 1961. The Statistical Abstract (HMSO, various years) published data for certified lunatics ('Persons of Unsound Mind') for the period 1930 to 1959. As the proportion of voluntary patients was low (5% in 1930, 8% in 1939, 14% in 1950), their number has been interpolated for the years 1940-1950[1], as shown in the final column of Table B.2. From 1950 to 1969 the Department of Health published aggregate data on the number of inpatients in NHS psychiatric hospitals and units (column 9 in Table B.2). From 1974 to 1987, similar data were published in the Scottish Health Statistics (HMSO, 1970-1990), as shown in column 10, Table B.2.. Thus, with some interpolation for voluntary inpatients between the years 1940 to 1950, an overall series can be constructed. The preferred series is that based on the following components:

* 1930-1939 Board of Control data for certified and voluntary inpatients,
* 1940-1950, the Statistical Abstract data for certified patients, grossed up for voluntary inpatients,
* 1950-69: Department of Health and Board of Control data on all inpatients,
* 1970 and 1974-87: Scottish Health Statistics data similar to the Department of Health.

[1] Rather than interpolate linearly, it has been assumed that the number of voluntary patients stayed unchanged at 1,480 during the early part of the War and increased linearly from 1,480 in 1944 to 2,855 in 1950.

The discontinuities between the different component are small and relate to inclusion of institutions such as criminal lunatics (around 100) and those in private asylums (under 50). Overall, the total number of lunatics in care remained fairly stable, rising from 18,000 in 1857 to a peak of 21,400 in 1956 before declining to 18,300 in 1970 and 15,800 in 1980.

Mentally Deficient/Handicapped

Relatively few of the mentally deficient[1] (later Idiots & Imbeciles, later again 'mentally deficient') appear to have been cared for in the District and Royal asylums. Although this group was not distinguished in the reports of the General Board of Lunacy / General Board of Control until after the 1913 Mental Deficiency (Scotland) Act, which introduced similar provisions to those in England & Wales, the decennial Census of Population (HMSO, 1861 to 1911) provides relevant information. The numbers of Imbeciles and Lunatics were distinguished in each Census from 1861 to 1911, as follows:

	Imbeciles	Inmates of Institutions as % total	Lunatics	Inmates of Institutions as % total
1861	481	0	4,487	81
1871	4,621	0	6,792	n.a
1881	5,991	0	8,406	n.a.
1891	5,017	0	10,445	95
1901	6,623	0	13,668	97
1911	7,911	7	15,719	96

The number of Imbeciles (later Imbeciles and Feeble Minded) were recorded in the Census returns as under 500 in 1861, before rising sharply to 4,600 in 1871, and remaining at between 5,000 and 8,000 to 1911. The relatively low number in 1861 may reflect incomplete coverage in that year. Until 1911 no mentally deficient persons were recorded as being in institutional care, and in 1911, only 7% of all those classed as imbeciles were in institutional care. By contrast, over 80% of all the insane were in institutions in 1861, rising to over 95% by 1891[2].

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[1] As in the other chapters, these terms are used interchangeably, without any derogatory implications, according to the period under discussion.

[2] The Census of Population reports repeatedly pointed to different age distribution of the two groups, with the peak age for the imbeciles being much lower than for the insane, indicating that two separate groups were involved.

Sex

Data on the sex of inmates were published by the same sources as for Table B.1 and B.2. As shown in Table B.3, there was a fairly constant majority of female inmates: 54% in 1860, rising to 53% in each of 1880, 1890 and 1900. Although the female proportion fell below 50% in 1930 and 1935, it rose again to 54% in 1970, and 57% in 1980, and 58% in 1985.

Ages of Residents

As with England & Wales, although very few data were published by the Lunacy authorities on the ages of resident inpatients, the decennial Census of Population provides data for some years, as shown in Table B.4. These data indicate that the proportion of the resident population aged over 65 rose from low levels in the nineteenth century to dominant positions in the twentieth. For males, less than 10% were aged over 65 up to 1891, but the proportion rose to 26% in 1901, 31% by 1967 and 44% by 1981. The same trend was even more apparent for females, with the proportion aged over 65 rising from around 15% in 1881 and 1891 to 36% in 1901, 54% in 1967 and 68% in 1981.

Legal Status

Since voluntary admissions were permissible under the 1862 and 1866 Lunacy (Scotland) Amendment Acts (HMSO, 1946), there was no need for a Scottish version of the 1930 Mental Treatment Act in England & Wales. The number of voluntary admission remained small to around 1930. The proportion of residents who were certified, as shown in Table B.5, fell from 97% in 1938 to 88% in 1950, 74% in 1960.

Ratio of Inpatients to Population

The number of resident lunatic inpatients per 10,000 persons in the population, shown in Table B.6, distinguishes:

* the number of lunatics in institutions per 1,000 population,
* the ratio of psychiatrically ill to population, including those who were cared for outside institutions.

The latter ratio, which is the most relevant to the purposes of the present study, given the importance of boarding-out in Scotland, rose from 2.1 in 1860 to 3 per 1,000 by 1888, and remained above 3 for almost the next 100 years to 1980, with peaks of 4.0 in 1912-14, 4.2 in 1930-40, and 4.2 in 1952-55. By 1985, the ratio had fallen to 2.8.

Admissions

1857 to 1939

Data on admissions of certified patients were published annually by the General Board of Lunacy / General Board of Control between 1858 to 1938. The Board of Control reports provided data for the period 1954 to 1962. However, as discussed above, voluntary inpatients played a greater role in Scotland than in England & Wales. Smith & Carstairs (1966) and Ratcliff (1964) have each published series, based on unpublished Board of Control data. These data, which are slightly above those of the Board of Control data for the period of overlap, appear to include voluntary admissions. Voluntary admissions rose from 47% of all admissions in 1945 to 80% in 1959 (Ratcliff, 1964). The Smith & Carstairs series, which covers all admissions for the longest period, 1864 to 1964, has been taken as the preferred series.

The data on first admission are more patchy. From 1915 to 1938, first admissions of certified patients were identified in the annual reports of the General Board of Control. New additions to the Register have been taken as a close approximation to first admissions for the period 1890-1915[1]. This series is also shown in Table B.7, along with admission rates. The total number of admissions per 100,000 rose from 56 in 1870 to 76 in 1900, peaked at 87 in 1904 and fell back to 79 in 1930. The first admission rate rose from 51 in 1890 to 61 in 1900 and 50 in 1930.

[1] For the period of overlap, 1915 to 1938, the total for all additions to the Register and admissions to institutions were almost identical, lying within 1% of each other.

Admissions 1930-87

The Board of Control published no data on first admissions after 1939, and the several authors (Ratcliff,1964; Smith & Carstairs,1966) who examined admissions using unpublished Board of Control data, corroborated the lack of data on first admissions between 1938 and 1965. Scottish Health Statistics (HMSO, various years) published first admission data for 1965 and from 1970 to 1987 and total admissions from 1965. These various series, as are shown in Table B.8, suffer from several gaps in relation to to first admissions between 1938 and 1965.

Total admissions, based on Smith and Carstairs (1966) up to 1964 and Scottish Health Statistics thereafter, as shown in Table B.8, remained fairly stable at between 3,500 and 4,000 between 1930 and 1945, but then doubled between by 1955 (from 4,132 in 1945 to 9,268 in 1955). Admissions doubled again to 18,739 in 1964, the last year covered by Smith & Carstairs. Scottish Health Statistics showed total admissions at 20,967 in 1965 rising steadily to 28,411 in 1987. Thus over the period from 1938 to 1987, total admissions rose by a factor of around seven.

The pattern of increase in first admissions was similar to that for total admissions, with stability up to 1938 at just over 2,000 per annum and a five fold rise between 1938 and 1965 (2,033 to 9,423). After 1965, first admissions continued to rise much more gently, peaking at just under 11,000 in 1976, after which the trend reversed to give a 1987 total of 9,700.

Admission rates per 10,000 population are also shown in Table B.8, based on the above sources, indicating increases of the same orders of magnitude in both total and first admission rates between 1938 and early 1970s. The total admission rate rose from 79 in each of 1930 and 1945 to 181 in 1955, 247 in 1960, 421 in 1970 and 499 in 1980. The first admission rate rose from 50 in 1930 to 181 in 1965, 188 in 1970 and 192 in 1980.

Discharges & Deaths

Data on the numbers leaving the Scottish asylums were published by the same sources as those for admissions:

- General Board of Lunacy / Board of Control,
  for the periods 1858-1939 and 1953-59,
- Scottish Health Statistics, 1965 and 1970-89.

The data up to 1938, which were included in Table B.9, distinguished 'Recovered' and 'Not Recovered' and 'Deaths'. These indicate, as might be expected given that the stock of inpatients was increasing, that inflows exceeded outflows for most of the period. The data also indicate that death was an important classification among those leaving: around 20% in 1858, close to one third in 1900 and approaching half by 1938. As shown in Table B.4, the proportion of inmates who were elderly was increasing during these years. Death rates, however, must be standardised for the age structure to ascertain whether and to what degree they exceeded those that might be expected.

More occasional data are available on deaths and discharges between 1950 and 1987, as shown in Table B.9.

Standardised Mortality Ratios (SMRs)

The SMRs calculated as for England & Wales above are shown in Table B.10. The proportions by each age group in the Census of Population returns have been applied to the inmate totals recorded by the Lunacy Commissioners, to which national Scottish mortality rates have been applied to calculate expected deaths. The results for the period 1861 to 1901 show SMRs for persons of over 300 in all years, with the male ratio in excess of that for females in all years. The only data on deaths by sex after 1901 relate to 1967 and 1981, both of which provide SMRs close to 300, with little difference between the sexes for 1967, the only year for which data by sex are available.

The 95% confidence limits for these estimates were narrow - of the order of plus or minus less than 10% - indicating that these raised SMRs were most unlikely to have been due to chance.

Outpatient Attendances

Data on outpatient attendances were published in two sources: Scottish Health Statistics (HMSO, 1965-1989). As shown in Table B.11, both new and repeat attendances doubled between 1965 and 1989, with first attendances rising from 18,700 to 36,600 and repeat attendances from 90,600 to 212,200.

EXPENDITURE

Current Expenditure

Overall, fewer data exist for Scottish spending on mental health services than for England & Wales. The standard local government sources such as those employed for England & Wales and reported by Mitchell & Deane (1968) cover only a variable proportion of total spending. As for England & Wales, Poor Law data on the maintenance of pauper lunatics exist over a long period. Since the only available expenditure series before 1950 relates to Poor Law expenditure on the maintenance of pauper lunatics, grossing-up is required:

a) to estimate total non-capital expenditure as opposed to maintenance spending on pauper lunatics,

b) to cover all certified lunatics, both pauper and privately financed, and

c) to cover voluntary patients.

The Poor Law series for expenditure on pauper lunatics, along with the Mitchell and Deane series are shown in Table B.13. The series on maintenance of pauper lunatics, which was published in the annual reports of the Board of Lunacy, is shown in column 2, running from 1858 to 1938. Not only were the overheads of the lunatic asylums excluded from the series on psychiatric spending, but so too were loan charges. Spending on pauper lunatics in the workhouses was, however, included in Scotland, unlike England & Wales.

Although the Local Taxation Returns for Scotland, reproduced by Mitchell and Deane (1968), provided current expenditure series for Scotland from 1893 to 1947, that series showed major discontinuities. After a fitful start, it jumped by a factor of three in 1914-15, and again by some 30% in 1930. Although neither source explained these sudden shifts, the data reflected major changes in funding arrangements in those years. Responsibility for funding the treatment and care of pauper lunatics remained with the Poor Law authorities until the financial year 1914/5 after which it was shared equally between the Poor Law authorities and the Local Authorities. Co-responsibility lasted to 1930 when the Local Authorities

assumed full responsibility, which they maintained up to the advent of the NHS in 1948.

In addition to the above complications, the Mitchell-and-Deane series suffers the same problems as their series for England & Wales, namely the inclusion of loan charges for part of the period, and the aggregation of spending on mental illness and mental handicap services. Thus the Mitchell-and-Deane series is of little help in compiling a long term expenditure series.

The only available data between 1939 and 1948 is the Local Authority series which combines expenditure on mental illness and mental handicap, and also includes loan charges, making it difficult to use.

Grossing up for to the full costs of pauper lunatics

Expenditures other that on the maintenance of pauper lunatics were funded by specific annual assessments, in parallel to the poor rate. The extent of these annual assessments for buildings and repairs was published in the reports of the Commissioners in Lunacy between 1889 and 1930, enabling the relationship between the two sorts of spending to be explored. The additional costs made up an average of 25% of maintenance spending over the 41 years for which data are available, with considerable year to year variation as might be expected[1]. A 25% gross-up has been employed in, as shown in Table B.15, from 1858 to 1939.

Grossing up for non-paupers

The proportion of paupers among the total number of resident inmates, which were published annually, indicates that this group remained the dominant and fairly constant share: 84% in 1858, 85% in 1990 and 86% in 1935. Grossing up by these proportions involves assuming that unit costs were the same for publicly and privately[2] funded patients, which is reasonable given that almost privately financed patients were in District and Royal asylums [3].

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[1] "Providing expenditure" as a share of maintenance expenditure varied between 7% and 50% in these years. Providing expenditure included some 'lumpy' capital items, such as furnishing and periodic building and repair work. These items are not separately identified in the data. The 25% average gross up figure, however, is similar to that applied in England & Wales above, based on comparison of actual data for the period for which comparison was possible.

[2] The proportion of certified inpatients in private-run asylums was very small - 1.6% in 1880, 0.8% in 1900, 0.3% in 1920 and 0.2% in 1938, according to the Board of Control reports for those years.

Grossing up for voluntary inpatients

Finally, grossing up for voluntary patients, who were mainly cared for in the District & Royal asylums, can be done in a similar manner to that for non-pauper inpatients. Since only a small number of inpatients were voluntary, data have been collected only from 1916, when there 174 voluntary inpatients or 1.1%. This proportion grew to 4.8% in 1930 and 7% by 1938. These percentages have been combined the grossing-up for non-paupers' expenditure in Table B.15.

Mental Deficiency

While "Lunacy" expenditure in Scotland is identified from 1858, mental deficiency expenditure data only began to be published after the 1914-8 War. However, as discussed above, very few of the mentally deficient were institutionalised, so that the "Lunacy" series reflects spending on the mentally ill.

1948-1988.

For the post-NHS period, the data sources are similar to those for England & Wales and covered all inpatients in NHS facilities, regardless of legal status. The NHS Accounts, which were laid before the House of Commons each year and published in the British Parliamentary Papers, provide expenditure data on mental hospitals and mental deficiency institutions from 1950-69. These data are shown in Table B.14. Hospital Costing Returns (HMSO, 1969 to 1987) which provide expenditure data from 1968/9 to 1986/7 also shown in Table B.14, provide very similar totals.

The best single overall series for current spending on mental illness and mental deficiency/handicap would appear to be the grossed-up totals made up of Lunacy Commissioners/ Board of Control to 1938, with a gap to 1950 after which the NHS Accounts provide data from 1950 to 1969 and the Hospital Costing Returns series from 1969 to 1987.

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[1] Although fees were payable in respect of non-pauper inpatients in publicly provided hospitals, as shown below in Table B.18, these cannot be used to gross up as they did not reflect the maintenance cost, but were set at various levels related to the capitation payments and the means of those involved.

The resulting estimated current expenditures are shown in Table B.15 in both current and constant terms. The differences made by the various grossing up procedures are shown to be relatively small, and accounted mainly by the 25% adjustment for the additional costs of pauper lunatics. Total expenditure is shown as rising from £8m. in 1870 to £19m. in 1900, falling to £13m. in 1920 but then recovering to £27m. in 1930. The 1950 total was £43m., rising to £58m. in 1960, £89m. in 1970 and £128m. in 1980.

Unit Costs

Much less data are available on the composition of expenditure in Scotland than in England & Wales. Average maintenance costs are available by type of institution for the period 1885 to 1935 with the exception of 1915. A similar, slightly more inclusive, series was published from the mid-1950s in the NHS Hospital Costing Returns (HMSO, various years), and data for 1955/6 to 1985/6 are also shown in Table B.16. As for England & Wales, when expressed in constant 1985 prices, little change is apparent in unit costs between 1885 and 1935, which remained in a range of £19 to £22 per week but with a sharp rise to the 1955/6 level of £51, with continued increases to £116 in 1970 and £246 in 1980.

Capital Spending and Indebtedness

The available data on capital expenditure ('Expenditure out of Loans') from 1900 to 1948 are shown in Table B.17, Column 2, along with data on the 'Indebtedness of the Lunatic Asylums' from 1916 to 1948 (with gaps) are shown in Column 3. In constant 1985 prices, capital spending was very variable, with values ranging from zero in some years to £14m. in 1904 and £8m. in 1936. During the 1940s capital expenditure fell remained close to zero. Debt also varied, falling from £42m. in 1915 to £15m. in 1925 before increasing to £40m. in 1949 and £23m. in 1948.

Loan Charges

Unlike England and Wales, only sporadic data are available on expenditure on Loan Charges as shown in Table B.17.

Revenue

Data on the sources of income of the authorities responsible for public expenditure on lunacy are available from 1858 in the reports of the Board of Lunacy distinguishing revenue for the maintenance of paupers lunatic and fees from private patients. From 1875, these data show the share of Imperial (Four Shilling) grant. Both Fees and the Imperial grant are shown in nominal terms and as percentage shares in total revenue (taken as equal to total current expenditure) for the years 1858 to 1938 in Table B.18. As the Imperial grant was fixed at £116,000 from 1892 under the Local Government Act of 1890 and remained unchanged to 1938, its contribution to total expenditure declined steadily - from a peak of 46% in 1893 to 11% in 1938. Fees accounted for a relatively small share of revenue, never exceeding 7% between 1858 and 1938. However, since only those fees paid to the District as opposed to the Royal asylums would have been recorded in this series, the figure may underestimate the true contribution of fees. Since paupers made up 85% of all lunatics in care, fees might be expected to account for around 15% of all revenue.

Conclusions

Although gaps exist in some data series, notably in the period 1939 to around 1986, data on each of the main headings discussed in Appendix 1 can be assembled for Scotland.

TABLE B.1
LUNATICS/ / MENTALLY ILL INPATIENTS IN CARE, SCOTLAND, 1857-1960

Year	Royal District Asylums	Parochial Asylums & Poorhouse Wards	Criminal Lunatics	Private Asylums	Lunatics Cared For Privately	Training Schools	Total	Voluntary Inpatients
8	2,380	839	26	745	1,804	29	5,823	
9	2,496	797	29	821	1,901	28	6,072	
1860	2,632	866	33	852	1,868	22	6,273	
1	2,712	845	31	907	1,809	23	6,327	
2	2,820	838	29	921	1,762	28	6,398	
3	2,822	878	30	927	1,700	29	6,386	
4	2,919	910	32	872	1,658	31	6,422	
5	3,125	925	36	788	1,630	29	6,533	
6	3,207	1,008	46	812	1,589	48	6,710	
7	3,519	998	45	672	1,573	53	6,860	
8	3,874	1,007	45	501	1,549	79	7,055	
9	4,041	1,024	50	557	1,535	103	7,310	
1870	4,461	1,127	49	303	1,518	113	7,571	
1	4,524	1,174	51	338	1,519	123	7,729	
2	4,579	1,176	51	358	1,554	131	7,849	
3	4,665	1,226	54	342	1,564	131	7,982	
4	4,717	1,313	51	338	1,517	133	8,069	
5	5,002	1,333	49	226	1,472	143	8,225	
6	5,158	1,470	54	189	1,492	146	8,509	
7	5,236	1,689	57	205	1,522	153	8,862	
8	5,449	1,736	55	208	1,493	156	9,097	
9	5,652	1,796	57	202	1,508	171	9,386	
1880	5,798	1,905	61	158	1,523	179	9,624	
1	5,920	2,056	55	157	1,629	195	10,012	
2	6,187	2,068	62	156	1,684	198	10,355	
3	6,189	2,093	63	149	1,813	203	10,510	
4	6,239	2,117	53	163	1,939	228	10,739	
5	6,305	2,183	53	148	1,991	238	10,918	
6	6,297	2,281	62	139	2,178	230	11,187	
7	6,326	2,301	56	128	2,270	228	11,309	
8	6,440	2,339	52	148	2,402	228	11,609	
9	6,707	2,371	57	158	2,428	233	11,954	
1890	6,882	2,387	58	156	2,573	246	12,302	
1	7,116	2,399	57	152	2,613	258	12,595	
2	7,347	2,399	57	163	2,560	273	12,799	
3	7,488	2,446	55	157	2,634	278	13,058	
4	7,648	2,471	54	158	2,673	296	13,300	
5	7,957	2,590	54	152	2,790	309	13,852	
6	8,293	2,455	57	144	2,811	333	14,093	
7	8,812	2,357	62	138	2,780	352	14,501	
8	9,243	2,340	56	142	2,767	358	14,906	
9	10,440	1,578	48	136	2,825	372	15,399	
1900	10,696	1,584	52	121	2,828	382	15,663	
1	10,967	1,589	46	126	2,793	378	15,899	
2	11,289	1,665	46	130	2,761	397	16,288	
3	11,659	1,655	51	125	2,771	397	16,658	
4	11,845	1,660	53	125	2,785	426	16,894	
5	12,364	1,467	50	123	2,829	408	17,241	
6	12,457	1,490	51	121	2,878	453	17,450	
7	12,753	1,357	51	104	2,907	421	17,593	
8	13,099	1,311	49	97	2,907	445	17,908	
9	13,350	1,296	51	90	2,945	465	18,197	
1910	13,704	1,037	53	88	2,963	492	18,337	
1	13,939	1,036	56	90	2,994	521	18,636	
2	14,250	1,067	55	85	3,017	560	19,034	
3	14,380	1,069	50	82	3,021	580	19,182	
4	14,767	1,075	62	71	2,768		18,743	
5	14,925	1,056		72	2,702		18,755	
6	14,837	1,063		69	2,628		18,771	174
7	14,564	1,089		64	2,489		18,420	214
8	14,180	1,098	62	63	2,339		17,965	223
9	14,063	1,087	67	60	2,138		17,661	246
1920	14,303	1,014	67	56	2,238		17,965	287
1	14,654	1,005	70	56	2,124		18,257	348
2	14,975	1,016	71	56	1,994		18,526	414
3	15,184	1,043	70	54	1,901		18,704	452
4	15,286	1,105	69	52	1,863		18,862	487
5	15,322	1,090	73	47	1,808		18,876	536
6	15,564	1,087	71	45	1,776		19,140	597
7	15,680	1,090	68	45	1,718		19,322	721
8	15,941	1,128	70	43	1,667		19,664	815
9	16,173	1,121	73	44	1,622		19,942	909
1930	16,347	1,146	76	44	1,537		19,150	950

Source: Annual Reports of General Board of Lunacy / for Scotland/Board of Control for Scotland Various Years.

TABLE B.2
LUNATIC /MENTALLY ILL INPATIENTS BY CARE, SCOTLAND: 1931-1984

Year	Total Royal District Asylums	Voluntary (All Institutions)	Certified Royal & District Asylums	Parochial Asylums & Poor Houses	Criminal Lunatics	Private Hospitals	Lunatics Cared for Privately	Total	Depart. of Health 1950-1969	Scottish Health Statistics 1970 & 1974-78	Voluntary Inpatients All Institutions (to 1959)
1930	16,347	950	16,247	1,146	76	44	1,537	18,004			950
1	16,623	972	16,623	1,128	73	42	1,477	18,215			972
2	16,748	1,038	16,748	1,128	66	39	1,431	18,284			1,038
3	16,765	1,040	16,765	1,150	69	38	1,387	18,259			1,040
4	16,866	1,071	16,866	1,228	77	39	1,353	18,335			1,071
5	16,969	1,190	16,969	1,282	86	38	1,311	18,404			1,190
6	16,985	1,213	16,985	1,308	87	37	1,257	18,366			1,213
7	17,023	1,327	17,023	1,305	91	36	1,201	18,351			1,327
8	18,582	1,405	17,102	1,303	86	37	1,144	19,849			1,405
9	18,548	1,480	17,119	1,305	91	37	1,087	19,763			1,480
1940	18,469	1,480	16,989	1,303	95	37	1,039	19,640			1,480
1	18,241	1,480	16,761	1,300	92	37	984	19,354			1,480
2	18,316	1,480	16,836	1,048	94	37	917	19,364			1,480
3	18,061	1,480	16,581	1,054	93	37	863	19,054			1,480
4	17,889	1,480	16,409	1,043	87	37	802	18,815			1,480
5	17,987	1,709	16,278	1,006	86	37	747	18,857			1,709
6	18,135	1,938	16,197	972	85	37	705	18,962			1,938
7	19,142	2,168	16,974		84	37	660	19,923			2,168
8	19,375	2,397	16,875		85	37	604	20,101			2397
9	19,382	2,626	16,882		84	37	581	20,084			2626
1950	19,792	2,855	16,937		87	37	560	20,476	19,792		2,855
1	19,945	3,181	16,764		91	37	539	20,612	19,945		3,181
2	20,291	3,572	16,719		100	37	502	20,930	20,291		3,572
3	20,681	3,945	16,736		104	36	454	21,275	20,681		3,945
4	20,794	4,152	16,736		99	36	393	21,322	20,834		4,152
5	20,735	4,229	16,678		101	38	368	21,242			4,229
6	20,885	4,713	16,345		110	40	341	21,376			4,713
7	20,736	5,203	15,998		114	43	307	21,200	20,475		5,203
8	20,671	5,874	15,356		138	48	292	21,149	20,671		5,874
9	20,229	6,341	14,806		131	47	275	20,682	20,229		6341
1960	19,876	6,960			129	42	256	20,303	19,918		6960
1	19,635				134	37	241	20,047	19,672		
2									20,159		
3									19,714		
4									19,649		
5									19,592		
6									19,437		
7									19,189		
8									19,021		
9									18,961		
1970										18,279	
1											
2											
3											
4										17,578	
5										17,611	
6										17,286	
7										17,252	
8										16,041	
9										15,846	
1980										15,817	
1										15,940	
2										15,678	
3										15,631	
4										15,536	
5										14,264	
6										14,457	
1987										14,815	

Sources: 1930 to 1939 & 1954 to 1958 - Annual Reports of General Board of Control for Scotland;
1940 to 1949 -Statistical Abstract;1950 to 1969 - Department of Health Annual Reports;1970 and 1974 to 1987 -Scottish Health
All statistics data after 1961 exclude Carstairs Hospital for criminal patients.

Notes:
1. In Scotland, although Vountary patients were admitted to both public and private hospitals from the 1860s. The proportion of vouluntary patients was low- 5% in 1930, 7% in 1939, but rose sharply to 14% o6r 2,855 inpatients by 1950.
2. The numbers of voluntary inpatients during the period 1940-1949 has been interpolated, holding the 1940 total constant to 1944 and then by]inear interpolation, increasing the total in the public asylums by 229 p.a. to reach the 1950 total.
3. The number of patients in the single private asylum, (St Andrew's in Hawick) showed little change - 40 in 1939, 36 in 1953. The bulk of the voluntary inpatients, both private and Rate-aided, were catered for in the Royal and District mental hospitals. 4. A breakdown between those voluntary patients who were Rate-aided and those who were privately funded is available from 1933, indicating that the bulk of voluntary patients were privately funded -77% in 1933, and 68% in 1919.. After World War II, voluntary inpatients became more common in public mental hospitals - in 1955, of the 2530 voluntary inpatients were in public hospitals.
5. Data on total residents excluding Carstairs was not available for the years 1971-73 inclusive.
6. As the figures in various editions of Scottish Health Statistics conflict, the most recent estimates have been preferred.

TABLE B.3
MENTAL HOSPITAL INPATIENTS BY SEX, SCOTLAND, 1860-1985

Year	Male (%)	Female (%)	Total (%)
1860	46.5	53.5	100
1870	46.6	53.4	100
1880	46.4	53.6	100
1890	46.5	53.5	100
1900	46.9	53.1	100
1910	48.7	51.3	100
1920	49.5	50.5	100
1930	50.6	49.4	100
1935	50.9	49.1	100
1965	47.5	52.5	100
1970	46.1	53.9	100
1975	44.7	55.3	100
1980	43.3	56.7	100
1985	42.1	57.9	100

Sources: as Tables B.1, B.2 & B.3.

TABLE B.4
MENTAL HOSPITAL INPATIENTS BY AGE AND SEX, SCOTLAND, 1860-1985.
[ALL IN PERCENTAGE TERMS]

Year	1861		1871		1881		1891		1901		1967		1981	
Age	% M	% F	% M	% F	% M	% F	% M	% F	% M	% F	% M	% F	% M	% F
<25	8	6	9	7	8	5	6	5	2	1	3	2	4	3
25-34	24	19	22	18	22	15	21	16	5	4	7	5	16	9
35-44	28	25	27	23	27	23	26	23	19	14	14	8		
45-54	21	24	21	23	21	24	22	24	25	22	20	13	36	21
55-65	14	18	13	18	14	18	15	19	23	24	24	18		
65+	5	9	7	12	9	14	9	15	26	36	31	54	44	68
	100	100	100	100	100	100	100	100	100	100	100	100	100	100

Sources: Census of Population, 1861-1901, 1966 & 1981.

TABLE B.5
RESIDENT INPATIENTS BY LEGAL STATUS, SCOTLAND, 1930-62

	Certified	Voluntary Inpatients			Percentage Shares	
Year	All in Care	Rate-Aided	Privately Funded	All Voluntary	Certified %	Voluntary %
1930	18,004	213	737	950	95	5
1	18,215	218	754	972	95	5
2	18,284	233	805	1,038	95	5
3	18,259	235	805	1,040	95	5
4	18,335	250	821	1,071	94	6
5	18,404	303	887	1,190	94	6
6	18,366	322	891	1,213	94	6
7	18,351	373	954	1,327	93	7
8	19,849	416	989	1,405	93	7
9	19,763	459	1021	1,480	93	7
1940	19,640			1,480	93	7
1	19,354			1,480	93	7
2	19,364			1,480	93	7
3	19,054			1,480	93	7
4	18,815			1,480	93	7
5	18,857			1,709	92	8
6	18,962			1,938	91	9
7	19,923			2,168	90	10
8	20,101			2,397	89	11
9	20,084			2,626	88	12
1950	20,476			2,855	88	12
1	20,612			3,181	87	13
2	20,930			3,572	85	15
3	21,275			3,945	84	16
4	21,322			4,152	84	16
5	21,242			4,229	83	17
6	21,376			4,713	82	18
7	21,200			5,203	80	20
8	21,149			5,874	78	22
9	20,682			6,341	77	23
1960	20,303			6,960	74	26
1	12,958					
2	7,651					

Source: as Table B.2
Note: no data available on split between types of voluntary care 1940-1960.

TABLE B.6
MENTALLY ILL PER 1,000 POPULATION
SCOTLAND, 1860-1985

	Ratios per 1,000 persons		
Year	Mentally Ill in Institutional Care	Mentally Ill Outside Institutions	Total
1860	1.4	0.6	2.1
1	1.5	0.6	2.1
2	1.5	0.6	2.1
3	1.5	0.5	2.1
4	1.5	0.5	2.1
5	1.6	0.5	2.1
6	1.6	0.5	2.1
7	1.6	0.5	2.1
8	1.7	0.5	2.2
9	1.8	0.5	2.2
1870	1.8	0.5	2.3
1	1.9	0.5	2.3
2	1.9	0.5	2.3
3	1.9	0.5	2.3
4	1.9	0.4	2.3
5	1.9	0.4	2.4
6	2.0	0.4	2.4
7	2.1	0.4	2.5
8	2.1	0.4	2.5
9	2.2	0.4	2.6
1880	2.2	0.4	2.6
1	2.3	0.4	2.7
2	2.3	0.4	2.8
3	2.3	0.5	2.8
4	2.3	0.5	2.8
5	2.3	0.5	2.9
6	2.3	0.6	2.9
7	2.3	0.6	2.9
8	2.4	0.6	3.0
9	2.4	0.6	3.0
1890	2.4	0.6	3.1
1	2.5	0.7	3.1
2	2.5	0.6	3.2
3	2.6	0.6	3.2
4	2.6	0.6	3.2
5	2.7	0.7	3.3
6	2.7	0.7	3.4
7	2.8	0.7	3.4
8	2.8	0.6	3.5
9	2.9	0.7	3.5
1900	2.9	0.6	3.6
1	3.0	0.6	3.6
2	3.0	0.6	3.6
3	3.1	0.6	3.7
4	3.1	0.6	3.7
5	3.2	0.6	3.8
6	3.2	0.6	3.8
7	3.2	0.6	3.8
8	3.2	0.6	3.8
9	3.3	0.6	3.9
1910	3.3	0.6	3.9
1	3.3	0.6	3.9
2	3.4	0.6	4.0
3	3.4	0.6	4.0
4	3.4	0.6	4.0
5	3.4	0.6	4.0
6	3.4	0.6	3.9
7	3.3	0.5	3.8
8	3.2	0.5	3.7
9	3.2	0.4	3.7
1920	3.3	0.5	3.7
1	3.3	0.4	3.8
2	3.4	0.4	3.8
3	3.4	0.4	3.8
4	3.5	0.4	3.9
5	3.5	0.4	3.9
6	3.6	0.4	3.9
7	3.6	0.4	4.0
8	3.7	0.3	4.1
9	3.8	0.3	4.1
1930	3.8	0.3	4.2
1	3.9	0.3	4.2
2	3.9	0.3	4.2
3	3.9	0.3	4.2
4	3.9	0.3	4.2
5	4.0	0.3	4.2
6	4.0	0.3	4.2
7	4.0	0.2	4.2
8	4.0	0.2	4.2
9	4.0	0.2	4.2
1940	4.0	0.2	4.2

Year	Ratios per 1,000 persons		
	Mentally Ill in Institutional Care	Mentally Ill Outside Institutions	Total
1	3.8	0.2	4.0
2	3.8	0.2	3.9
3	3.7	0.2	3.9
4	3.7	0.2	3.8
5	3.7	0.1	3.8
6	3.7	0.1	3.9
7	3.7	0.1	3.9
8	3.7	0.1	3.9
9	3.7	0.1	3.9
1950	3.8	0.1	3.9
1	4.0	0.1	4.1
2	4.1	0.1	4.2
3	4.1	0.1	4.2
4	4.1	0.1	4.2
5	4.1	0.1	4.2
6	4.1	0.1	4.1
7	4.1	0.1	4.1
8	4.0	0.1	4.1
9	3.9		3.9
1960	3.8		3.8
1	3.8		3.8
2	3.8		3.8
3	3.9		3.9
4	3.8		3.8
5	3.8		3.8
6	3.8		3.8
7	3.7		3.7
8	3.7		3.7
9	3.7		3.7
1970	3.6		3.6
1			
2			
3			
4	3.4		3.4
5	3.4		3.4
6	3.3		3.3
7	3.3		3.3
8	3.1		3.1
9	3.0		3.0
1980	3.0		3.0
1	3.1		3.1
2	3.0		3.0
3	3.0		3.0
4	3.0		3.0
5	2.7		2.7
6	2.8		2.8

Sources: as Tables B.1 to B.3, plus population data from from Mitchell & Deane (1968) & Population Trends(HMSO).

Note:No data for 1971-1973.

TABLE B.7
ADMISSIONS TO PSYCHIATRIC HOSPITALS, SCOTLAND: 1858-1930
[ROYAL, DISTRICT, PRIVATE & PAROCHIAL ASYLUMS, LUNATIC WARDS OF POORHOUSES]

	Admissions (Excluding Transfers)						per 100,000	
Year	Male	Female	Persons	All Added to Register	Smith & Carstairs	New To Register Persons	All	First
1858	629	819	1,448					
9	677	745	1,422					
1860	654	788	1,442					
1	695	801	1,496					
2	641	733	1,374					
3	645	743	1,388					
4	702	719	1,421		1,531		49	
5	686	786	1,472		1,569		50	
6	772	795	1,567		1,690		53	
7	809	902	1,711		1,843		57	
8	810	906	1,716		1,808		56	
9	885	1,018	1,903		1,969		60	
1870	815	973	1,788		1,854		56	
1	874	962	1,836		1,927		58	
2	886	980	1,866		1,934		57	
3	951	1,158	2,109		2,215		65	
4	949	1,056	2,005		2,114		61	
5	1,019	1,172	2,191		2,389		69	
6	1,129	1,241	2,370		2,562		73	
7	1,122	1,273	2,395		2,540		72	
8	1,149	1,203	2,352		2,537		71	
9	1,155	1,123	2,278		2,384		66	
1880	1,116	1,318	2,434		2,632		72	
1	1,189	1,351	2,540		2,772		75	
2	1,090	1,300	2,390		2,549		68	
3	1,242	1,365	2,607		2,880		76	
4	1,250	1,328	2,578		2,790		73	
5	1,184	1,323	2,507		2,700		71	
6	1,191	1,249	2,440		2,564		67	
7	1,158	1,340	2,498		2,624		68	
8	1,187	1,427	2,614		2,742		70	
9	1,252	1,388	2,640		2,817		71	
1890	1,321	1,414	2,735	2,749	2,858	2,018	72	51
1	1,370	1,556	2,926	2,917	3,034	2,169	76	54
2	1,416	1,518	2,934	2,933	3,069	2,255	76	56
3	1,491	1,553	3,044	3,060	3,182	2,303	78	57
4	1,567	1,609	3,176	3,203	3,315	2,447	80	59
5	1,458	1,591	3,049	3,079	3,192	2,326	77	56
6	1,520	1,607	3,127	3,125	3,367	2,394	82	58
7	1,634	1,649	3,283	3,301	3,501	2,509	82	59
8	1,715	1,802	3,517	3,542	3,754	2,674	87	62
9	1,792	1,639	3,431	3,440	3,654	2,659	84	61
1900	1,704	1,738	3,442	3,454	3,338	2,697	76	61
1	1,771	1,729	3,500	3,481	3,690	2,688	83	61
2	1,791	1,870	3,661	3,660	3,863	2,845	86	64
3	1,834	1,793	3,627	3,616	3,808	2,777	85	62
4	1,828	1,826	3,654	3,658	3,948	2,801	87	62
5	1,712	1,753	3,465	3,449	3,668	2,692	80	59
6	1,772	1,620	3,392	3,370	3,496	2,566	76	56
7	1,798	1,820	3,618	3,617	3,861	2,795	84	61
8	1,740	1,783	3,523	3,512	3,756	2,788	81	60
9	1,639	1,610	3,249	3,271	3,482	2,559	74	55
1910	1,605	1,707	3,312	3,347	3,553	2,643	76	56
1	1,790	1,771	3,561	3,563	3,822	2,827	81	60
2	1,719	1,750	3,469	3,453	3,699	2,715	78	57
3	1,834	1,914	3,748		3,894	2,801	82	59
4			3,755		4,005	2,887	85	61
5			3,607	3,564	3,822	2,972	81	63
6			3,435	3,361	3,677	2,772	77	58
7				3,054	3,355	2,520	70	53
8				3,290	3,658	2,678	76	56
9				3,496	3,909	2,867	81	60
1920				3,921	4,061	2,925	84	61
1				3,964	4,236	2,837	87	58
2				3,940	4,255	2,840	87	58
3				3,576	3,833	2,512	78	51
4				3,176	3,693	2,544	76	52
5				3,131	3,685	2,512	76	52
6				2,993	3,694	2,395	76	49
7				3,107	3,890	2,495	80	51
8				3,254	4,111	2,627	85	54
9				3,111	3,986	2,526	82	52
1930				2,999	3,802	2,426	79	50

Sources: Annual Reports of General Board of Lunacy for Scotland/ General Board of Control for Scotland.Smith and Carstairs (1965).
Note: As the Register comprised only certified lunatics, voluntary admissions are excluded from the admission rates which rely on register data - namely total admission rates after 1916 and first admission rates from 1875.

TABLE B.8
ADMISSIONS TO MENTAL HOSPITALS, SCOTLAND: 1930-1987

	Total Admissions				First Admission		Admission Rates per 100,000	
Year	Department of Health	Scottish Health Statistics	Voluntary Admission	Smith & Carstairs	Register	Scottish Health Statistics	Total	First
1930			734	3,802	2,426		79	50
1			771	3,746	2,414		78	50
2			803	3,591	2,237		74	46
3			801	3,573	2,285		73	47
4			843	3,518	2,156		72	44
5			855	3,553	2,161		72	44
6			900	3,469	2,081		70	42
7			1,013	3,756	2,190		76	44
8			1,109	3,600	2,031		72	41
9				3,602			72	
1940				3,333			67	
1				3,194			63	
2				3,454			67	
3				3,663			71	
4				3,970			77	
5				4,132			79	
6				4,825			93	
7				5,141			99	
8				5,593			108	
9				6,426			124	
1950				6,627			127	
1				7,027			138	
2				7,573			148	
3				7,956			156	
4				8,531			167	
5				9,268			181	
6				10,147			198	
7				11,079			216	
8	11,407			11,428			222	
9	12,414			12,428			241	
1960	12,738			12,776			247	
1	13,585			13,599			262	
2	14,703			14,724			283	
3	18,948			18,739			360	
4	19,916						383	
5		20,967				9,423	403	181
6		20,290					389	
7		20,681					398	
8		21,874					421	
9		21,262					409	
1970		21,952				9,794	421	188
1		22,723					436	
2		24,899				10,686	477	205
3		25,136				10,572	482	203
4		25,271				10,564	485	202
5		25,787				10,831	494	208
6		26,120				10,923	502	210
7		25,155				10,495	483	202
8		24,861				10,153	478	195
9		24,810				10,333	477	199
1980		25,934				9,986	499	192
1		26,106				10,013	502	193
2		23,714				9,409	456	181
3		26,119				9,965	503	192
4		26,665				9,762	513	188
5		27,446				9,687	528	186
6		27,766				9,825	534	189
7		28,411				9,670	547	186

Sources.
Scottish Health Statistics from 1965 re all admissions and first from 1974
Board Of Control 1954-58
Dept Health total admissions 1958-1969 but not first. Jump in 1963 due to inclusion of psychiatric units.
First as % of total given by Scottish Health Statistics 1965-74 but estimates do not match for 1965 & 1970.

Notes
1.Only data post 1965 seem useful as psychiatric units are excluded before this date.They accounted for perhaps one sixth of all admissions in 1963 when they were included for the first time.Discharge data are even more jumpy with a delay in including the psychiatric units until 1964 and a second jump in 1972 on Department of Health data. Scottish Health Statistics data better on total and deaths from 1965
2.Total Admission Rates based on Smith & Carstairs to 1964,Scottish Health Statistics 1965-1987
3.First Admissions Rate based on "New to Register" 1930-1938 and Scottish Health Statistics 1965,1969 & 1971-1987.

TABLE B.9
DISCHARGES & DEATHS FROM SCOTTISH MENTAL INSTITUTIONS, 1858-1938

Year	Live Discharges Recovered	Not Recovered	Deaths	Total
8	623	236	370	1,229
9	604	191	360	1,155
1860	650	244	412	1,306
1	669	296	389	1,354
2	576	292	438	1,306
3	613	328	383	1,324
4	584	273	398	1,255
5	628	251	363	1,242
6	673	265	433	1,371
7	704	262	503	1,469
8	753	269	452	1,474
9	793	318	528	1,639
1870	842	290	541	1,673
1	810	377	539	1,726
2	876	367	514	1,757
3	989	408	567	1,964
4	940	368	514	1,822
5	974	397	561	1,932
6	1,092	389	585	2,066
7	1,114	456	561	2,131
8	1,054	462	578	2,094
9	1,042	426	619	2,087
1880	1,108	448	610	2,166
1	1,188	435	639	2,262
2	1,112	582	673	2,367
3	1,220	604	697	2,521
4	1,203	580	680	2,463
5	1,081	647	698	2,426
6	1,138	589	675	2,402
7	1,085	547	684	2,316
8	1,127	480	709	2,316
9	1,145	614	692	2,451
1890	1,174	542	778	2,494
1	1,185	571	928	2,684
2	1,316	571	866	2,753
3	1,409	585	867	2,861
4	1,327	609	818	2,754
5	1,367	550	939	2,856
6	1,340	520	852	2,712
7	1,399	510	955	2,864
8	1,562	551	975	3,088
9	1,539	546	1,099	3,184
1900	1,515	518	1,128	3,161
1	1,595	517	1,087	3,199
2	1,620	484	1,201	3,305
3	1,565	587	1,285	3,437
4	1,517	602	1,211	3,330
5	1,459	572	1,320	3,351
6	1,347	567	1,333	3,247
7	1,435	511	1,378	3,324
8	1,415	566	1,042	3,023
9	1,245	518	1,393	3,156
1910	1,246	487	1,344	3,077
1	1,371	528	1,325	3,224
2	1,288	528	1,523	3,339
3	1,421	537	1,516	3,474
4				
5	1,358	1,752	1,797	4,907
6	1,263	1,214	1,762	4,239
7	1,163	1,201	1,897	4,261
8	1,062	1,534	2,246	4,842
9	1,273	1,763	1,836	4,872
1920	1,328	1,268	1,546	4,142
1	1,310	1,009	1,695	4,014
2	1,308	1,374	1,753	4,435
3	1,231	1,220	1,536	3,987
4	1,167	723	1,571	3,461
5	1,152	686	1,426	3,264
6	1,154	609	1,386	3,149
7	1,119	709	1,429	3,257
8	1,126	654	1,425	3,205
9	1,127	641	1,591	3,359
1930	1,117	605	1,368	3,090
1	954	607	1,383	2,944
2	1,023	630	1,387	3,040
3	1,063	651	1,348	3,062
4	968	485	1,267	2,720
5	974	513	1,334	2,821
6	990	429	1,381	2,800
7	879	637	1,449	2,965
8	919	548	1,303	2,770

Sources: As Table B.8

TABLE B.10
DEATHS & DISCHARGES, SCOTLAND, 1954-87

Year	Deaths & Discharges	Deaths
4	8,362	1,961
5	9,186	1,987
6	9,995	1,996
7	9,268	1,897
8	9,428	
9	10,639	
1960		
1	11,499	
2	12,228	
3	14,108	2,499
4	14,126	2,238
5	19,589	2,382
6	19,686	
7	20,434	
8	20,637	
9	21,684	
1970	19,069	
1		
2	25,036	2,763
3	25,025	2,788
4	25,725	2,420
5	25,194	2,209
6	26,414	2,556
7	25,203	2,125
8	25,061	2,399
9	24,986	2,408
1980	26,033	2,353
1	25,966	2,411
2	23,870	2,515
3	26,061	2,414
4	26,776	2,481
5	27,735	2,628
6	27,573	2,582
7	28,096	2,371

Source: Scottish Health Statistics.

TABLE B.11
SMRS FOR MENTAL HOSPITALS, SCOTLAND, VARIOUS YEARS

				95% Confidence Intervals		
Year	Males SMR	Females SMR	Persons SMR	Males	Females	Persons
1861	626	507	562	86	73	56
1871	383	331	354	47	39	30
1881	365	309	335	40	34	26
1891	409	272	333	37	27	22
1901	403	359	379	32	28	21
1967	300	299	300	19	16	12
1981			298			12

Sources: Inspectors of Lunacy, Census of Population, Mitchell & Deane (1968)

Note- Each Confidence Interval Is An Amount Which Must Be Added Or Subtracted From The Smr A Result Which Straddles 100 Would Indicate That The Results Were Not Significant At The 5% Level All The Above Results Are Well Within This Range.

TABLE B.12
PSYCHIATRIC OUTPATIENT ATTENDANCES BY TYPE - SCOTLAND 1965-1989

Year	New	Repeat	Total Operations
1965	18,747	90,561	109,308
1970	23,843	140,589	164,432
1975	27,874	156,913	184,787
1980	31,107	174,578	205,685
1986	34,098	199,396	233,494
1989	36,644	212,170	248,814

Source:Scottish Health Statistics (HMSO) Various Years.

TABLE B13
CURRENT EXPENDITURE, MENTAL HEALTH SERVICES, SCOTLAND: VARIOUS SERIES., 1857-1950

Year	Ependiture Parish Cos On Maintainence of Pauper Lunatics £m.	Mitchell & Deane £m.	Expenditure on Mentally Deficient £m.	Loan Charges Actual £m.
7				
8	0.08			
9	0.09			
1860	0.09			
1	0.10			
2	0.10			
3	0.10			
4	0.10			
5	0.11			
6	0.11			
7	0.12			
8	0.13			
9	0.13			
1870	0.13			
1	0.13			
2	0.14			
3	0.15			
4yr end				
5	0.16			
6	0.17			
7	0.17			
8	0.18			
9	0.19			
1880	0.19			
1	0.20			
2	0.21			
3	0.21			0.02
4	0.21			0.03
5	0.22			0.03
6	0.22			0.03
7	0.23			0.02
8	0.23			
9	0.23			0.03
1890	0.24			0.04
1	0.24			0.03
2	0.25			0.04
3	0.26	0.10		0.08
4	0.26	0.01		0.05
5	0.27	0.02		0.11
6	0.28	0.09		0.06
7	0.29	0.08		0.02
8	0.30	0.08		0.03
9	0.31	0.09		0.03
1900	0.33	0.10		0.04
1	0.35	0.11		0.04
2	0.36	0.11		0.04
3	0.37	0.13		0.05
4	0.37	0.15		0.05
5	0.39	0.16		0.06
6	0.39	0.16		0.06
7	0.39	0.17		0.06
8	0.40	0.19		0.06
9	0.40	0.17		0.06
1910	0.41	0.16		0.05
	0.42	0.17		0.05
	0.43	0.16		0.05
	0.43	0.16		0.05
	0.45	0.16		0.05
	0.45	0.45		0.05
	0.48	0.51		0.05
	0.51	0.55	0.04	0.05
	0.56	0.54	0.05	
	0.56	0.60	0.06	0.05
1920	0.62	0.77	0.07	0.05
	0.80	0.90	0.09	0.04
	0.93	0.79	0.11	0.04
	0.85	0.74	0.10	
	0.77	0.76	0.10	0.03
	0.78	0.78	0.11	0.03
	0.77	0.78	0.12	0.03
	0.78	0.82	0.13	0.03
	0.78	0.83	0.14	
	0.80	0.80	0.14	0.03
1930	0.80	0.94	0.16	0.03
	0.99	1.31	0.18	
	0.97	1.26	0.19	
	0.93	1.24	0.21	
	0.93	1.21	0.23	
	0.93	1.23	0.25	

Year	Ependiture Parish Cos On Maintainence of Pauper Lunatics £m.	Mitchell & Deane £m.	Expenditure on Mentally Deficient £m.	Loan Charges Actual £m.
		0.94	1.27	0.26
		0.97	1.36	0.30
		1.07	1.49	0.24
			1.55	
1940			1.60	
1			1.99	
2			2.14	
3			2.11	
4			2.19	
5			2.31	
6			2.43	
7			2.71	
8				
9				
1950				

Sources: Maintence expenditure from Lunacy Commisioners' reports to 1914 and the Board of Control for Scotland to 1938 ;
Mitchell & Deane (1968) & Local Taxation Returns
Notes
a) The Mitchell & Deane series, which started in 1893, remainded poor to 1915 because of partial coverage, but is comprehensive thereafter. Their series has been extended to 1948 using the Local Taxation Returns. The series however includes both mental illness and mental deficiency spending as well as Loan Charges.

TABLE B.14
MENTAL ILLNESS AND MENTAL HANDICAP EXPENDITURE SCOTLAND, 1950-1987

	NHS Accounts		Hospital Costing Returns	
Year	Mental Hospitals £m.	Mental Deficient £m.	Mental Hospitals £m.	Mental Deficient £m.
50				
1951	4.06			
2	4.40	0.75		
3	4.77	0.80		
4	5.25	0.80		
5	5.57	0.89		
6	6.00	0.92		
7	6.34	1.09		
8	6.97	1.17		
9	7.27	1.25		
60	7.70	1.34		
1	7.92	1.51		
2	8.52	1.62		
3	9.03	1.88		
4	9.70	2.03		
5	10.42	2.24		
6	11.37	2.63		
7	12.50	2.99		
8	13.20	3.66		
9	14.52	4.22	15.73	4.15
70			17.06	4.94
1			19.81	6.14
2			23.35	7.37
3			26.59	8.52
4			30.89	10.00
5			43.59	14.13
6			58.75	19.25
7			65.84	21.37
8			74.23	24.45
9			89.93	27.96
80			92.57	31.37
1			123.18	40.93
2			136.46	45.64
3			145.09	48.99
4			153.05	51.68
5			158.17	53.74
6			167.98	56.99
7			181.61	61.36
8				
9				
90				

Sources:
Columns 2 and 3 are taken from NHS Accounts up to 1969.
Columns 4 and 5 are taken from Hospital Costing Returns from 1969.

TABLE B.15
MENTAL ILLNESS EXPENDITURE, CURRENT & CONSTANT 1985 PRICES, SCOTLAND, 1858-1986

	Current Expenditure			At Constant 1985 Prices			
Year	Maintainence Expenditure	Gross Up for Overheads	Gross Up for Non-Paupers	Maintainence Expenditure	Grossed Up for Overheads	Grossed Up for Non-Paupers	Grossed Up for NHS Expenditure
	£m.	£m.	£m.	£m.	£m.	£m.	
8	0.08	0.10	0.12				
9	0.09	0.11	0.13				
1860	0.09	0.12	0.14				
1	0.10	0.12	0.15				
2	0.10	0.12	0.15				
3	0.10	0.13	0.15				
4	0.10	0.13	0.15				
5	0.11	0.13	0.16				
6	0.11	0.14	0.17				
7	0.12	0.15	0.18				
8	0.13	0.16	0.19				
9	0.13	0.17	0.20				
1870	0.13	0.17	0.20	5.17	6.46	7.74	
1	0.13	0.17	0.20	5.04	6.30	7.55	
2	0.14	0.17	0.21	4.86	6.08	7.35	
3	0.15	0.19	0.23	5.11	6.38	7.74	
4	0.15	0.19	0.23	5.26	6.57	7.96	
5	0.16	0.20	0.24	5.81	7.26	8.71	
6	0.17	0.21	0.25	6.22	7.77	9.31	
7	0.17	0.22	0.26	6.72	8.40	10.07	
8	0.18	0.23	0.27	7.22	9.02	10.61	
9	0.19	0.24	0.28	7.78	9.72	11.54	
1880	0.19	0.24	0.28	7.67	9.58	11.18	
1	0.20	0.25	0.30	8.13	10.17	12.12	
2	0.21	0.26	0.31	8.41	10.51	12.45	
3	0.21	0.27	0.32	8.59	10.73	12.70	
4	0.21	0.27	0.32	8.89	11.11	13.14	
5	0.22	0.27	0.32	9.32	11.66	13.78	
6	0.22	0.28	0.33	9.68	12.10	14.25	
7	0.23	0.28	0.33	9.72	12.15	14.31	
8	0.23	0.28	0.33	9.77	12.21	14.39	
9	0.23	0.29	0.34	9.76	12.21	14.46	
1890	0.24	0.30	0.35	9.86	12.32	14.52	
1	0.24	0.31	0.36	10.24	12.80	15.07	
2	0.25	0.32	0.37	10.54	13.18	15.51	
3	0.26	0.32	0.38	10.77	13.46	15.87	
4	0.26	0.33	0.38	11.13	13.91	16.38	
5	0.27	0.33	0.39	11.61	14.51	17.10	
6	0.28	0.35	0.41	12.05	15.06	17.78	
7	0.29	0.36	0.42	12.27	15.34	18.05	
8	0.30	0.37	0.44	12.80	16.00	18.83	
9	0.31	0.39	0.45	13.02	16.28	19.11	
1900	0.33	0.41	0.48	12.87	16.09	18.86	
1	0.35	0.43	0.51	13.75	17.18	20.12	
2	0.36	0.45	0.52	14.50	18.12	21.25	
3	0.37	0.46	0.53	14.87	18.59	21.68	
4	0.37	0.46	0.54	15.05	18.81	22.05	
5	0.39	0.48	0.56	15.54	19.42	22.59	
6	0.39	0.49	0.57	15.72	19.65	22.76	
7	0.39	0.49	0.56	15.32	19.15	22.14	
8	0.40	0.50	0.58	15.70	19.63	22.78	
9	0.40	0.50	0.58	15.91	19.89	23.07	
0	0.41	0.51	0.59	16.02	20.02	23.11	
1	0.42	0.52	0.59	16.15	20.19	22.79	
2	0.43	0.53	0.61	16.11	20.14	22.95	
3	0.43	0.54	0.61	16.18	20.23	22.97	
4	0.45	0.56	0.63	16.57	20.71	23.56	
5	0.45	0.56	0.64	15.08	18.85	21.59	
6	0.48	0.60	0.68	13.97	17.47	20.03	
7	0.51	0.63	0.74	11.73	14.66	17.06	
8	0.56	0.70	0.83	10.88	13.60	16.20	
9	0.56	0.70	0.84	9.29	11.62	13.91	
1920	0.62	0.77	0.93	8.54	10.67	12.80	
1	0.80	1.00	1.20	12.36	15.45	18.49	
2	0.93	1.16	1.38	17.12	21.40	25.35	
3	0.85	1.07	1.27	17.05	21.31	25.29	
4	0.77	0.96	1.15	15.54	19.43	23.33	
5	0.78	0.97	1.15	15.69	19.61	23.29	
6	0.77	0.97	1.15	15.83	19.79	23.63	
7	0.78	0.97	1.16	16.37	20.47	24.30	
8	0.78	0.98	1.15	16.61	20.76	24.49	
9	0.80	1.00	1.19	17.03	21.29	25.31	
1930	0.80	1.00	1.27	17.15	21.43	27.09	
1	0.99	1.24	1.56	21.78	27.22	34.10	
2	0.97	1.21	1.52	22.04	27.54	34.59	
3	0.93	1.17	1.45	21.52	26.90	33.55	
4	0.93	1.16	1.45	19.12	23.89	29.88	
5	0.93	1.17	1.46	21.46	26.83	33.65	
6	0.94	1.18	1.48	21.61	27.01	33.92	
7	0.97	1.21	1.52	21.44	26.80	33.65	

	Current Expenditure			At Constant 1985 Prices			
Year	Maintainence Expenditure	Gross Up for Overheads	Gross Up for Non-Paupers	Maintainence Expenditure	Grossed Up for Overheads	Grossed Up for Non- Paupers	Grossed Up for NHS Expenditure
	£m.	£m.	£m.	£m.	£m.	£m.	£m.
8	1.07	1.33	1.66	22.92	28.65	35.75	
9							
1940							
1							
2							
3							
4							
5							
6							
7							
8							
9							
1950							
1			4.06				43.22
2			4.40				43.13
3			4.77				45.46
4			5.25				49.06
5			5.57				50.18
6			6.00				50.83
7			6.34				51.56
8			6.97				54.01
9			7.27				55.49
1960			7.70				57.86
1			7.92				57.80
2			8.52				60.02
3			9.03				62.30
4			9.70				65.13
5			10.42				66.80
6			11.37				70.15
7			12.50				75.27
8			13.20				76.74
9			15.73				88.39
1970			17.06				89.31
1			19.81				93.02
2			23.35				99.78
3			26.59				105.53
4			30.89				104.71
5			43.59				116.25
6			58.75				136.63
7			65.84				136.59
8			74.23				137.46
9			89.93				147.43
1980			92.57				128.03
1			123.18				154.55
2			136.46				160.17
3			145.09				161.21
4			153.05				160.94
5			158.17				158.17
6			167.98				163.72
			181.61				168.62

Sources:Previous Tables for expenditure data at current prices.
Annual reports of Lunacy Commissioners & Board of Control for % Paupers to total patients..
GDP deflator from Feinstein to 1960,Income & Expenditure thereafter.
Grossing up factor of 25% up to 1938 based on analysis of data for England & Wales.
Expenditure from 1950 based on NHS Accounts to 1969 and Hospital Costing Returns from 1970.

TABLE B.16
UNIT COST S, PSYCHIATRIC INPATIENTS, CURRENT & CONSTANT PRICES, SCOTLAND; SCOTLAND, 1885-1985

	Current Prices							
Year	Food	Tobacco	Wines, Spirits Liquors	Clothing, Shoes& Boots	Salaries/ Wages	Other Expenses	Total	Cost per Week at Constant 1985 Prices
	£pw	£pw	£pw	£pw	£pw	£pw	£pw	
1885	11.6	0.5	0.3	2.0	6.4	5.3	25.8	21
1890	10.5	0.5	0.3	2.0	6.5	6.1	25.6	21
1895	9.7	0.5	0.2	1.8	6.3	5.8	24.0	20
1900	10.2	0.5	0.2	1.8	7.1	6.4	26.0	20
1905	10.9	0.5	0.1	2.0	7.8	6.5	27.6	21
1910	10.9	0.6	0.1	1.7	8.0	6.4	25.3	19
1995								
1920	23.0	1.4	0.1	4.8	19.3	13.4	61.9	16
1925	16.8	1.4	0.1	3.0	23.1	13.1	56.8	22
1930	15.1	1.4	0.1	2.9	22.6	12.1	53.5	22
1935	12.9	1.4	0.1	2.1	21.6	10.6	48.0	21
1940								
1945								
1950								
1955								51
1960								65
1965								85
1970								116
1975								209
1980								221
1985								246

Sources: Annual Reports of General Board of Lunacy, General Board of Control, NHS Health Service Cost Returns.

TABLE B.17
CAPITAL EXPENDITURE DEBT AND LOAN CHARGES:
MENTAL HEALTH SERVICES, CURRENT & CONSTANT PRICES, SCOTLAND, 1884-1948

	Current Prices			1985 Prices	
Year	Expenditure Out of Loans £m.	Indebtedness £m.	Loan Charges £m.	Expenditure Out of Loans £m.	Indebtedness £m.
4			0.02		
5			0.03		
6			0.03		
7			0.02		
8			0.02		
9					
1890			0.03		
1			0.04		
2			0.03		
3			0.04		
4			0.08		
5			0.05		
6			0.11		
7			0.06		
8			0.02		
9			0.03		
1900	0.10		0.03	4	
1	0.09		0.03	3	
2	0.09		0.04	4	
3	0.15		0.04	6	
4	0.34		0.05	14	
5	0.13		0.05	5	
6	0.17		0.06	7	
7	0.14		0.06	5	
8	0.11		0.06	4	
9	0.07		0.06	3	
1910	0.05		0.06	2	
1	0.05		0.05	2	
2	0.04		0.05	2	
3	0.04		0.05	2	
4	0.07		0.05	2	
5	0.11		0.05	4	
6	0.05	1.42	0.05	2	42
7	0.02	1.31	0.05	0	31
8	0.00	1.24	0.05	0	24
9	0.00			0	
1920	0.04		0.05	1	
1	0.03	1.05	0.05	0	16
2	0.02	1.00	0.04	0	18
3			0.04		
4					
5	0.04	0.72	0.03	1	15
6	0.11	0.80	0.03	2	16
7	0.04	0.76	0.03	1	16
8	0.11	0.75	0.03	2	16
9					
1930	0.15		0.03	3	
1	0.15	0.92	0.03	3	20
2	0.16	0.99		4	23
3	0.17	1.14		4	26
4	0.22	1.23		5	25
5					
6	0.34	1.75		8	40
7	0.33	2.00		7	44
8	0.16	2.11		3	45
9	0.20	2.21		4	46
1940	0.18	2.30		3	43
1	0.09	2.29		2	40
2	0.03	2.23		1	36
3	0.02	2.18		0	34
4	0.02	2.12		0	31
5	0.01	2.03		0	29
6	0.01	1.96		0	27
7	0.06	1.95		1	25
8	0.07	1.94		1	23
		0.10			

Sources: Indebtedness:Local Taxation Returns
for Scotland.
Capital Expenditure :Statistical Abstract

TABLE B.18
MENTAL HEALTH SERVICES, SCOTLAND FUNDING BY SOURCE, SCOTLAND, 1858-1938

Year	Pauper Maintence Cost £m.	Imperial Grant £m.	Private Contribution £m.	Grant %	Private %	Rates %	Total %
8	0.08						
9	0.09	0.00	0.00				
1860	0.09	0.00	0.00				
1	0.10	0.00	0.00				
2	0.10	0.00	0.00				
3	0.10	0.00	0.00				
4	0.10	0.00	0.00				
5	0.11	0.00	0.00				
6	0.11	0.00	0.00				
7	0.12	0.00	0.00				
8	0.13	0.00	0.00				
9	0.13	0.00	0.00				
1870	0.13	0.00	0.01				
1	0.13	0.00					
2	0.14	0.00					
3	0.15	0.00					
4yr end		0.00					
5	0.16	0.06	0.01	37.7	5.1	57.2	100
6	0.17	0.06	0.01	37.9	4.8	57.2	100
7	0.17	0.07	0.01	37.7	4.6	57.7	100
8	0.18	0.07	0.01	37.4	4.3	58.3	100
9	0.19	0.07	0.01	37.9	4.2	57.9	100
1880	0.19	0.07	0.01	38.1	4.6	57.3	100
1	0.20	0.08	0.01	38.2	4.6	57.1	100
2	0.21	0.08	0.01	37.8	4.4	57.7	100
3	0.21	0.08	0.01	38.2	4.4	57.4	100
4	0.21	0.08	0.01	38.3	4.9	56.8	100
5	0.22	0.09	0.01	38.8	4.8	56.4	100
6	0.22	0.09	0.01	38.8	4.6	56.5	100
7	0.23	0.09	0.01	39.1	4.6	56.3	100
8	0.23	0.09	0.01	39.5	4.6	56.0	100
9	0.23	0.09	0.01	39.8	4.6	55.6	100
1890	0.24	0.09	0.01	38.3	5.1	56.6	100
1	0.24	0.09	0.01	37.1	4.8	58.1	100
2	0.25	0.12	0.01	45.9	4.7	49.4	100
3	0.26	0.12	0.01	45.5	4.5	50.0	100
4	0.26	0.12	0.01	44.7	4.4	50.9	100
5	0.27	0.12	0.01	43.4	4.4	52.2	100
6	0.28	0.12	0.01	41.9	4.2	53.9	100
7	0.29	0.12	0.01	40.6	4.1	55.2	100
8	0.30	0.12	0.02	38.8	4.9	56.3	100
9	0.31	0.12	0.02	37.5	5.3	57.2	100
1900	0.33	0.12	0.02	35.6	5.4	59.0	100
1	0.35	0.12	0.02	33.6	5.1	61.4	100
2	0.36	0.12	0.02	32.4	5.7	61.9	100
3	0.37	0.12	0.02	31.7	5.8	62.5	100
4	0.37	0.12	0.02	31.3	5.8	62.9	100
5	0.39	0.12	0.02	30.2	5.3	64.6	100
6	0.39	0.12	0.02	29.7	5.5	64.8	100
7	0.39	0.12	0.02	29.9	5.3	64.8	100
8	0.40	0.12	0.02	29.1	5.4	65.5	100
9	0.40	0.12	0.02	28.8	5.1	66.1	100
1910	0.41	0.12	0.02	28.6	5.1	66.4	100
1	0.42	0.12	0.02	27.9	5.0	67.1	100
2	0.43	0.12	0.02	27.1	5.0	67.9	100
3	0.43	0.12	0.02	26.8	5.0	68.2	100
4	0.45	0.12	0.02	26.0	5.0	69.0	100
5	0.45	0.12	0.02	25.8	5.0	69.2	100
6	0.48	0.12	0.02	24.4	5.0	70.6	100
7	0.51	0.12	0.03	23.0	5.0	72.0	100
8	0.56	0.12	0.03	20.9	5.8	73.4	100
9	0.56	0.12	0.03	20.7	6.0	73.3	100
1920	0.62	0.12	0.04	18.8	6.2	75.1	100
1	0.80	0.12	0.04	14.5	5.2	80.3	100
2	0.93	0.12	0.04	12.5	4.5	83.0	100
3	0.85	0.12	0.05	13.6	6.2	80.2	100
4	0.77	0.12	0.05	15.1	6.5	78.4	100
5	0.78	0.12	0.05	15.0	6.1	78.9	100
6	0.77	0.12	0.05	15.0	6.0	79.0	100
7	0.78	0.12	0.05	14.9	5.8	79.3	100
8	0.78	0.12	0.05	14.8	6.6	78.6	100
9	0.80	0.12	0.05	14.5	6.6	78.9	100
1930	0.80	0.12	0.06	14.5	6.9	78.7	100
1	0.99	0.12	0.06	11.7	5.8	82.5	100
2	0.97	0.12	0.06	12.0	5.9	82.1	100
3	0.93	0.12	0.06	12.4	6.2	81.4	100
4	0.93	0.12	0.06	12.5	6.2	81.3	100
5	0.93	0.12	0.05	12.4	5.4	82.1	100
6	0.94	0.12	0.05	12.3	5.3	82.4	100
7	0.97	0.12	0.05	11.9	5.3	82.7	100
8	1.07	0.12	0.06	10.9	5.3	83.9	100

Sources; Annual Reports of General Board of Lunacy/Control for Scotland.
Note: The % share of Rates has been estimated as a residual.

APPENDIX 3

IRELAND

Introduction

This appendix deals with the data sources for Ireland in a similar way to the appendices on England & Wales and Scotland. The position of Ireland is complicated by the partition of the country from 1920, which lead to duplication, if not replication, of information sources relating to mental health services. The data sources for the 32 counties[1] are discussed first, followed by those for the 26 county State and finally those for N. Ireland.

32 Counties - Data Sources

The Irish Inspectors of Lunatics were the counterpart of the English & Wales Lunacy Commissioners but with somewhat different powers, notably their lack of remit over 'lunatics' who remained 'at large'. Annual reports were produced from 1845 through to 1919, showing the number of psychiatric patients in the range of institutions, and, as with Scotland, with considerable attention to finances.

ACTIVITY

Residents

Data on the number of certified lunatics in the range of institutions covered by the Irish lunacy laws are shown in Table C.1 for the period 1852-1919. The range of institutions was similar to that in England & Wales, with the District and Auxiliary[2] Lunatic Asylums mirroring the dominant role played by the County and Borough asylums. The number of places in the District asylums grew from just under 4,300 in 1860 to some 8,700 in 1880 and 16,400 by 1900 before peaking at just over 21,500 in 1914. During the 1914-18 War, this number fell to 20,000 in 1918. The poorhouses provided for the next largest group of inpatients, with an expansion from 2,500 in

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[1] County numbers provide a useful shorthand. Ireland hereafter refers to the 32 county entity which was part of the UK up to 1920. The southern 26 counties after 1920 became the Free State to 1948 and the Republic of Ireland thereafter. The term 26 Counties is used in the text. N.Ireland refers to the 6 counties which remained part of the UK after 1920.

[2] The Youghal asylum was 'auxiliary' to the main District asylum in Cork and constituted the sole auxiliary lunatic asylum up to 1920.

1860 to 3,500 in 1880, peaking at 4,200 in 1892 and falling steadily thereafter to just below 2,000 by 1918. These institutions accounted for around one third of the number of District asylum places up to 1890, but this share fell to around one tenth by 1918. By contrast with England & Wales, private hospitals played a relatively small role, with only 509 inpatients in private hospitals in 1860 or 7% of all places, and 961 in 1918 or under 5%. Prisons contained several hundred lunatics up to the 1867 Dangerous Lunatics Act after which this number fell to zero. The Central Criminal Lunatic asylum was opened in Dundrum in 1850. A small number of single chancery lunatics were recorded after 1895.

No data were provided by the Inpsectors of Lunacy on the number of lunatics minded privately or 'at large'. This omission appears to be due to the earlier development of lunacy legislation in Ireland relative to England and its separation from the Poor Law, under which some patients received outdoor relief in England & Wales. However, data were collected by the police on the number of lunatics and idiots and imbeciles 'at large' between 1867 and 1877. Additional data relating to those 'at large' are contained in the Censuses of Population from 1871, which are reviewed below.

Census of Population

As the Inspectors of Lunacy did not provide data on the numbers of 'lunatics' at large, the Census of Population provides the main source. These data show that the number of lunatics 'at large' fell from 1,600 or 20% of all lunatics in 1861 to just under 600 (3%) in 1901 and 1,200 (5%) in 1911. The number of Idiots at large was greater, put at 5,700 or 77% of all Idiots in 1861, falling to just under 3,000 or 66% by 1911. Most of the idiots (later mentally deficient) in institutional care were in the poorhouses, as discussed below[1].

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[1] The number of lunatics and Idiots in Institutions and 'at large' according to the Census of Population was as follows:

	in Institutions	At Large			in Institutions	At Large	
	Census	Lunatics	Idiots		Census	Lunatics	Idiots
1851	5,345	1,073	3,562	1891	16,218	893	4,077
1861	6,821	1,602	5,675	1901	19,238	596	3,272
1871	10,015	1,343	5,147	1911	22,773	1,221	2,832.
1881	12,922	943	4,548				

Sources: Census of Population, Ireland. various years.

Notes: 1901 and 1911 data for institutions covers only Asylums and Workhouses.

Idiots and Imbeciles under Care

The Inspectors' reports provided data on the numbers of Idiots and Imbeciles in the poorhouses throughout the period and in the District asylums between 1861 and 1887. The latter series was discontinued in 1888, as shown in Table C.2, due presumably to the decline in the number to under 10% of inpatients.

Only a minority of all Idiots and Imbeciles received institutional care, which was provided mainly by the poorhouses. This group made up over 66% of all persons of unsound mind in the poorhouses in 1861, and this proportion fell to under 50% 1885, at which level it remained through to 1914. A much smaller proportion of inmates of the District Lunatic Asylums were classed as Idiots (later Idiots and Imbeciles): 10% in 1861 falling to 8% by 1887, the last date for which these data were presented in the Inspectors Reports. Clearly, then, the District Lunatic Asylums catered mainly for lunatics and in the analysis that follows of admissions and discharges, it seem reasonable to assume that virtually all the flow of patients into the District and private asylums related to what would today be termed the psychiatrically ill rather than the mentally handicapped.

Sex

The proportions of each sex in Irish lunatic asylums is shown in Table C.3. The proportion of males rose from just under 50% in 1880 to 52% in 1900 at which level it remained to 1918.

Ages

The age profile of the resident inmates of the public asylums is shown in Table C.4, based on the Census of Population and the reports of the Inspectors. Overall, as in England & Wales, the younger age groups predominated, with well under 10% aged over 65 (except in 1911 when the proportion of females over 65 reached 13%).

Public/Private

The privately provided sector was very small in Ireland, being confined to eight small private asylums. Two factors appear to have been responsible, firstly the predominance of committals as 'dangerous lunatics' for whom no charge could be levied, and secondly, doubts as to whether the legislation allowed for voluntary inpatients in the state asylums[1].

Ratio of Inpatients to Population

The ratio of all psychiatric hospital inmates to population, shown in Table C.5 for 1852 to 1918, rose from 1.3 per 1,000 persons in 1860 to 2.5 in 1880 and 4.7 in 1900, 5.6 in 1910 and to a peak of 5.9 in 1916. A slightly narrower definition, based on excluding the number of mentally deficient (using actual data for the Poorhouses, and for District asylums up to 1886 and assuming the same proportion thereafter), shows a similar trend at a slightly lower level.

Admissions

Data on admissions were also published by the Inspectors, distinguishing first and total admissions for both public and private hospitals between 1865 to 1919, as shown in Table C.6. Total admissions rose from around 1,200 in 1865 to 2,500 in 1880, 3,700 in 1900, and to a peak of 4,100 in 1908 before falling back to 3,200 in 1918. First admissions accounted for the bulk of all admissions throughout the entire period - 92% in 1865, 81% in 1880, 78% in 1900 and 84% in 1918. As discussed in Chapter 4, the bulk of admissions were as dangerous lunatics[2]. Private hospital admissions stayed at around 7% of all admissions.

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[1] Although these doubts were resolved by around 1900 in favour of District asylums being able to accept paying patients, the proportion who were recorded was small - 3% in 1913 (Inspector's Report, 1913).

[2] Finnane has shown that committal as a 'dangerous lunatic' was common in Ireland, as follows:

	% All committals as 'dangerous lunatics'	
	Males	Females
1854-56	42%	32%
1860-2	50%	35%
1870-72	57%	43%
1880-2	63%	48%
1890-2	76%	67%
1900-02	72%	60%
1910-12	76%	59%

Finnane (1981).

Admission rates are also shown in Table C.6. The total admission rate rose steadily almost four-fold over the period, from 22 per 100,000 in 1865 to 82 in 1918. The first admission rate rose by less; from 20 per 100,000 in 1865 to 59 in 1918, with a peak of 72 in 1902.

Leaving

Detailed data on those leaving, both live ('Recovered', 'Improved', 'Unimproved') and dead, which were provided by the same source, are shown in Table C.7. Recovered was the most common category of live discharge: 72% in 1850, 72% in 1880 and 74% in 1910. Deaths were also common, making up 23% of all discharges in 1850, 37% in 1880 and 43% in 1900.

SMRs

As for England & Wales, SMRs can be calculated using the age profile of inmates and national death rates. As shown in Table C.8 for the years 1871 to 1911, these SMRs were high - 378 in 1871, 351 in 1883 and 303 in 1891 for 'Persons', with little difference between the sexes. The 95% Confidence Intervals, which were relatively narrow (of the order of plus or minus 10% for persons) indicate that these high values were not due to chance.

EXPENDITURE

Current Expenditure

Unlike England & Wales and Scotland, no benchmark expenditure series such that provided by Mitchell and Deane (1968) exists for Ireland. Although such a series, based on local authority spending as reported in the Local Taxation Returns, could be readily compiled, it would cover only part of the expenditure on the care of lunatics prior to 1900. After that date, however, when local authorities became responsible for the administration of the public asylums, the Local Taxation Returns provide useful information. Similarly, the fact that unlike England & Wales, pauper lunatics were not funded through the Poor Law rules out any reliance on data from these authorities.

However, as with Scotland, the annual reports of the Inspectors of Lunatics provided data on the spending on the District and Auxiliary Lunatic Asylums each year from 1859 to 1900, with occasional data thereafter on the current cost of services provided. From 1900/01 the Local Taxation Returns included an income and expenditure account for the Committees of the Lunatic Asylums. These data, along with other data from the Local Taxation Returns, are shown in Table C.9.

The data on expenditure on the District and Auxiliary Asylums, summarised in Column 2 of Table C.9, show a five-fold increase from £0.081m. in 1859 to £0.397m. in 1899/90. From the latter date, since expenditure data were only published sporadically by the Inspectors of Lunatics, column 1 continues with data from Local Taxation Returns for the period from 1901 to 1919[1]. This composite series is shown as Column 1 in Table C.9 and is used in the later analysis.

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[1] The Committees of Lunatic Asylums had become responsible for the financial accounts, with data on expenditure published in Local Taxation Returns, as column 3 in Table C.9. From 1900 data for eight years are available from both the Inspectors of Lunacy and the Local Taxation Returns, and show a close but inexact fit. The difference ranges between 6.8% in favour of the Inspectors to 13% in favour of Local Taxation Returns in 1916-7. Because the Inspectors Reports only published intermittent data on expenditure after 1900, and the fairly close fit between the two series for the years that both sources are available after 1900, the best series would appear to be one composed of the Inspectors of Lunacy data from 1859 to 1900 and the Local Taxation Returns from then to 1917-8.

Mental Handicap.

Since the 1913 Mental Deficiency Act did not apply to Ireland, data on expenditure on mental handicap are lacking until later than in the rest of the (then) UK [1]. No separate data for spending on mental handicap are available for Ireland as a whole up to 1920s and, as we shall see, none are available for either part of Ireland until much later.

The above series excludes two other headings: expenditure on lunatics in poorhouses and those in private hospitals. The series for expenditure on District and Auxiliary asylums can be readily grossed for each of these, based on the assumption of equal unit costs. These are also shown in Table C.9.

In constant 1985 prices, non-capital expenditure broadly followed the trend in the number of inpatients, rising from £8.2m. in 1870 to a peak of £25m. in 1904 and remaining at this level up the war when it fell to £16.9m. in 1919.

Unit Costs

Data on the average cost of maintenance of inmates of the District and Auxiliary asylums data were provided annually in the Inspectors of Lunatics reports. The results, summarised in Table C.10 for the years 1870-1915, show the average cost at five yearly intervals, both as reported in the Inspectors' reports and adjusted to cover the same items as the corresponding series for England & Wales (excluding the non-capital costs associated with buildings and repairs). The average cost rose only slightly from £20 in 1870 to £23 per patient per annum in 1900 and to £25 by 1915. During the 1914-18 War, however, the cost rose sharply to £47 by 1919. In constant 1985 prices, however, much less variation can be observed: rising from £15 per annum in 1870 to £18 in 1885 before falling steadily to £15 in 1915 and rising again to £17 in 1918.

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[1] A series is available of spending by the Poor law authorities on "Maintenance of Blind, Deaf and Dumb and Idiots in institutions and cost of relief in external hospitals" from 1900-01 to 1917-8. Only small amounts, not exceeding £30,000 per annum in any of the years covered, were recorded.

Capital Costs and Indebtedness

Data on capital indebtedness are not available until 1900-01 with the advent of the committees of Lunatic Asylums and the publication of their accounts in the Local Taxation Returns. No data have been located on expenditure out of loans.

Sources of Finance

Data on the capitation grant from imperial sources from 1875 to 1919, are shown in Table C.11 along with the data provided in the annual Inspectors reports and, from 1900-01, the Committees of Lunatic Asylums reports, contained in the Local Taxation Returns from 1900. As shown, the level of the capitation grant increased from £56,948 in 1875 to £183,080 by 1919, a more than three-fold increase. From 1903/4 income was also received for Criminal Lunatics, but the amounts never amounted to more that £16,000. Over the period 1875 to 1919, then, total income grew from £0.197m. to £0.959m. an increase of almost five-fold (4.86). However, in the period up to 1900, the Imperial Grant grew by a factor of 2.7 while total income grew by 1.85 times. This divergence, discussed elsewhere, was due to the curbing of the level of the capitation payments after 1898.

Expressed as shares, the share of the Government Grant ran at around 40% of total receipts in the period to 1885 after which it increased to 51% in 1888. In the early 1890s its share began to decline following the Government of Ireland Act 1890, so that the share in the 1890s hovered just above 40% before falling to the mid-30% range during the period to 1912. The share of the Government Grant fell sharply during the 1914-18 War, to 19% by 1919.

IRISH FREE STATE / REPUBLIC OF IRELAND

Introduction

Following the establishment of the Irish Free State in 1922, the District and Auxiliary Lunatic Asylums came under the Department of Local Government and Public Health, under whose aegis the Inspector of Mental Hospitals produced annual reports from 1926 to 1963. These reports showed the number of both mentally ill and mentally deficient (handicapped) persons resident at year-ends, as well as admissions, deaths and discharges, usually by age and sex. A one-off report was issued by the Inspector of Mental Hospitals covering 1977-79, which provided valuable information for some of the intervening period. Data on service use has also been provided by the Medico-Social Research Board (MSRB) which published censuses in 1963, 1971, and 1981 as well as annual reports of admissions and discharges from 1965 to 1986.

Expenditure data were published in the annual reports of the Inspector of Mental Hospitals up to 1946 and in the 1979 report. The same series as published by the Inspectors reports was also published by the Statistical Abstract (CSO, various years) from 1923 to 1970. Other sources include the annual Estimates Volumes, and publications of the Department of Health from the mid-1970s.

ACTIVITY

Residents

Psychiatric patients were catered for in the same set of institutions in the Free State as previously, with the District & Auxiliary asylums providing the bulk of the places, followed by the poorhouses up to 1946, after which the private hospitals became the second largest provider. Table D.1 provides data on resident inpatients between 1923 and 1985 by type of institution. The total number of patients in care remained largely unchanged at around 20,000 with a range from 19,000 to just under 22,000 between 1923 and 1960, with a peak of 21,720 in 1956. The total fell to 16,500 in 1970, 13,500 in 1980 and 11,900 in 1985.

The District & Auxiliary asylums accounted for 84% of all inpatient places in 1923, rising to 93% by 1950 and 1960, before falling slightly to 90% in each of 1980 and 1985. The share of the poorhouses fell from 10% in 1923 to 2% by 1946 after which data ceased to be collected. The private hospitals increased their share from 4% in 1923 to 5% in 1960, 6% in 1870 and 8% in 1980. Only around 100 criminal lunatics were catered for in the State asylum, and around 200 in unlicensed houses which continued up to 1956. In the 1980s hostels were developed to provide places in a similar fashion to the unlicensed houses. In addition, after 1984, the data show around 1,000 places in special units attached to General Hospitals.

Mental Handicap.

A number of mentally handicapped persons continued to be resident in the both the poorhouses and to a lesser extent in the Lunatic Asylums after partition. Data were provided up to 1946 in the reports of the Inspector of Mental Hospitals on the numbers of lunatics and mentally deficient persons in the poorhouses (later referred to as Poor Law Institutions), and these are also shown in Table D.1. Essentially, mentally defective persons made up between one third and one half of all lunatics in the poorhouses.

Much less data were provided on the number of mentally defective persons in the District asylums. As noted above, some 8% of inmates were so handicapped in 1887. The next published data came in a survey in 1958 which put the number of mentally deficient inpatients at 2,700 or 13% (Annual Report of the Inspector of Mental Hospitals,1959), a figure confirmed by the censuses in 1963 and 1971 (MSRB, 1964 & 1972)[1] which provided totals of 2,700 for each year. These data have been employed in Table D.1 to estimate the number of mentally handicapped persons in the District asylums between 1923 and 1985 assuming 13% of resident inpatients were mentally deficient for the earlier years.

Sex

Males, who had historically accounted for a slight majority of inpatients prior to partition, retained this dominance in the Free State. As shown in Table D.2, males made up 52% of all inpatients in 1923, a figure which rose to 55% in 1971 and 1981. Slightly higher proportions applied to the District & Auxiliary asylums.

Ages

As in the other countries, resident inpatients tended to be predominantly young until recent decades when the elderly became the main group. Data were published for the range of institutions by the Inspector of Mental Hospitals up to 1962 and the MSRB censuses of 1963, 1971 and 1981 provide data for the public and private psychiatric hospitals for those years as shown in Table D.3. Under 10% of resident inpatients were aged 65 or over in 1923 and 1935. By 1962 the proportion aged over 65 had risen to 14% of males and 20% of females. These proportions jumped to 46% and 59% in 1971 and to 51% and 64% in 1981.

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[1] The only data are available on the number of mentally handicapped inpatients remaining in the Lunatic Asylums derives from the MSRB censuses which put the numbers as follows:

	PUBLIC HOSPITALS		PRIVATE HOSPITALS	
	Mentally Deficient	as % all Patients	Mentally Deficient	as % all Pats
1963	2,732	13.8	229	22.0
1971	2,638	16.9	42	4.1
1981	2,133	16.9	27	2.7

Legal Status

Many inpatients continued to be detained involuntarily after the 1945 Mental Treatment Act, as shown in Table D.4. The proportion detained as 'Persons of Unsound Mind' (PUMs) fell from 97% in 1947 to 71% in 1962, the last year for which data were published[1]. The remainder of inpatients were split between voluntary and temporary status.

Ratio of inpatients to population

The ratio of inpatients to population started at the relatively high level of 6.5 per 1,000 for all inpatients of psychiatric hospitals in 1923 (Table D.5), and rose to a peak of 7.6 in 1956 before commencing a long-term decline which left the ratio at 3.4 in 1985. The ratio of psychiatric (excluding the estimated number of mentally deficient inpatients, based on the various censuses) inpatients moved in a similar manner, rising from 5.3 in 1923 to a peak of 6.5 in 1956 and falling to 2.8 by 1985.

Admissions

Data on admissions to both the District asylums and the private hospitals were published by the Inspector of Mental Hospitals up to 1962, with subsequent data published by the MSRB from 1965 to 1981. These data, shown in Table D.6 indicate that the same pattern of dramatically raised admissions in the period after 1945 applied to the Irish Republic as to England & Wales.

Total admissions remained steady between 2,700 and 3,200 between 1920 and 1940 after which they fell to just over 2,000 in the years 1941 to 1945. A rapid increase commenced in 1946 so that by 1950 the total had more than doubled to over 5,800 and more than doubled again to 12,600 by 1960. The 1970 figure rose to just over 20,000 and to just under 29,000 by 1984. Thus between 1945 and 1984, total admissions rose by a factor of 11.5 or by almost 9% per annum.

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[1] Since the 1945 Mental Treatment Act continued up to 1992 to provide the main legislative framework under which admissions take place, data should be available on the legal status of inpatients. Although the MSRB censuses collected such data, as did their annual reviews of admissions, these data have not been published. The proportion of Persons of Unsound Mind (PUMs) in the early 1980s has been put at 11% (MSRB personal communication).

First admissions showed a similar but slightly less extreme rise, with a 4.3 fold increase over the same period, or around 5% per annum. First admissions, which made up the bulk of admissions prior to 1945, doubled to just under 4,000 in 1950 and to just over 6,300 by 1960. A less extreme rise continued to 7,700 in 1970 and to 8,500 in 1980.

In terms of admissions per 100,000 persons, the rates for the Republic are high - over 800 per 100,000 for all admissions and 249 per 100,000 for first admissions in 1984. The total admission rate rose 11 fold between 1920 and 1984, from 75 to 822 and the first admission rate increased five fold from 59 to 249. The similarity between the increase in the number of total and first admission and in the respective admission rates shows that the admission rate was little affected by the population decline.

Admissions to private hospitals made up a sizeable proportion of these totals; around one seventh of both first and all admissions were to such hospitals in 1923 and around one fifth in 1970.

Leaving

Data on the number leaving the psychiatric institutions were published by the same sources as for admissions. These data, as shown in Table D.7, distinguished 'Recovered' and 'Others' to 1962, and simply 'live' and 'dead' thereafter. Live discharges remained in the range 1,200 to 1,400 up to 1940, then rising to 4,200 in 1950, 11,000 in 1960, 19,100 in 1970 and 26,100 in 1980. Deaths were as common as live discharges up to 1945 but remained at a fairly steady level of around 1,000 per annum as live discharges rose rapidly after 1945, roughly matching the increase in discharges.

Standardised Mortality Ratios (SMRs)

Standardised Mortality Ratios, which enable comparison of relative mortality levels, are shown in Table D.8, indicating that inmates of the psychiatric hospitals experienced significantly raised mortality. SMRs have been estimated up to 1961,

based on the reports of the Inspector of Mental Hospitals which provided data for the District & Auxiliary asylums, and based on the MSRB censuses for 1963, 1971 and 1981 for public and private hospitals. The SMRs for 1926 and 1935 were some 3 to 4 times what would be expected if Republic-wide death rates applied[1]. The SMRs for 1951 and 1961 declined to around 200 for both males and females, but the values for 1971 rose again to around 269 and to 232 in 1981.

Outpatients

Data on outpatient attendances are only available from 1983, as shown in Table D.9, which shows some 40,000 patients in contact with these services, with around 10,000 first attendances per annum and total attendances at around 200,000.

[1] Mortality rates by age and sex for the Republic of Ireland have been employed (Vital Statistics, various years) to calculate these SMRs.

EXPENDITURE

Current Expenditure

The reports of the Inspector of Mental Hospitals provide data on public expenditure on the public mental hospitals to 1946, after which the Statistical Abstract continued to publish the same series up to 1970. The Inspector's report for 1977-79 published data on the cost of running the psychiatric services for the period 1969-79, based on the annual Estimates Volume (SO, various years) for public expenditure. In addition, the Statistical Abstract (SO, various years) published expenditure for health board costs up to the mid-1970s and the Department of Health (Statistical Information Relevant to the Health Services, various years) published data on expenditure by programme, including the psychiatric services from 1976.

Current spending on mental health services for the Republic of Ireland is shown in Table D.10 for the period 1923 to 1981, along with the different series which are available. Column 2 shows the data from the annual reports of the Inspector of Mental Hospitals up to 1946, after which the 1947 Health Services Financial Provisions Act changed the funding system which had prevailed since 1875. From 1947, each of the Local Authorities recouped 50% of its net revenue expenditure on health services from the Exchequer.

Columns 3 and 4 show the same series as published in the Statistical Abstract for revenue expenditure to 1970 and for loan charges up to 1961. The Inspector's report for 1977-79 contained data from the Estimates Volumes for the period 1969-79, which is shown in column 7, extended back to 1959 and forward to 1980.

The Statistical Abstract continued to publish data on the net cost to the health boards (established in 1973) of the various services, including the psychiatric services, up to 1976. This series is shown in column 7 supplemented by data from the programme budgeting series published by the Department of Health from 1976.

Although each of these series gives slightly different totals, the differences in most years is fairly small. In the period of overlap, 1960 and 1961, the series that seems to

best match that reported by the Inspector of Mental Hospitals / the Statistical Abstract would appear to be that of the net expenditure of the health boards.

To allow analysis of expenditure trends two further adjustments must be made to the data shown in Table D.10: firstly, they must be expressed in constant prices and secondly, an allowance must be made for the costs of the total psychiatric sector, that is including all the institutions both public and private, but excluding the mentally handicapped patients.

In the analysis of England & Wales, the UK GDP deflator was employed to express expenditure in constant prices. Only occasional estimates of GDP are available for Ireland between 1923 and the early 1950s - no time series exists from which a GDP deflator could be constructed. Two choices were available - use of the UK GDP deflator or of the Consumer Price Index for Ireland. As a comparison of these, shown in Table D.11, indicated little difference, it was decided to use the UK GDP deflator.

Public expenditure on the District & Auxiliary asylums in constant 1985 prices is shown in Column 8 of Table D.10, indicating fairly steady expenditure between 1923 and 1945 of between £17m. and £19m. before rising to £24m. in 1950, £31m. in 1960, £58m in 1970, £150m. in 1980.

Expenditure on psychiatric inpatients as opposed to mental hospitals is shown in column 9. These data refer to all psychiatric institutions, including the poor law institutions and the private hospitals, but excluding patients who were classed an mentally deficient. As each of these adjustments tend to balance one another, the result shows relatively little change to the spending series in 1985 prices for the psychiatric hospitals. The two series indicate an identical spend in 1923 but a somewhat lower total of £146m. for psychiatric patients in 1981 as opposed to £159m. for the psychiatric hospitals.

Unit Costs

The reports of the Inspector of Mental Hospitals and the Statistical Abstract published data on the average cost per inpatient week between 1923 and 1970,

including the maintenance costs and hospital running costs. As no data were published on unit costs after 1970, an approximation has been made by dividing total expenditure by the number of inpatient residents for each year from 1923 to 1981, as shown in Table D12. This series shows a close fit with the published data for the period of overlap (1923-1970), indicating its value as a guide to unit costs after 1970. Since the expenditure data includes a small but growing proportion devoted to non-inpatient services, however, the unit costs for later years are overestimated.

As might be expected, unit costs showed considerable stability to the mid-1950s, and then rose rapidly as the number of inpatients fell, spending continued to rise. The cost per inpatient week in 1985 prices, deflated as in Table D.10, varied between £16 in 1923 and £22 in 1955, before rising to £26 in 1960, £50 in 1970 and a three-fold jump to £168 in 1980.

Revenue Sources

Table D.13 shows the level and composition of receipts between 1923 and 1952, broken down to show the contribution of Capitation, Rates, and Other receipts. In percentage terms, Rates made the main contribution, accounting for between 69% and 79% of total spending between 1923 and 1950, after which their share fell to 59% in 1952. Capitation accounted for between 14% and 19% of revenue from 1923 to 1940 after which it fell to around 10% before jumping to 33% in 1951 and 29% in 1952. The contribution of Others, which included fees and miscellaneous income, varied by much less, between 10% and 13% over the entire period.

Capital Expenditure and Indebtedness

Few data on capital indebtedness data have been located. After the 1947 Health Services Financial Provisions Act which led to the Exchequer taking on greater financial responsibility, the concept of indebtedness ceased to have meaning. No data have been located on capital spending on the psychiatric services.

N. IRELAND

Introduction

With the establishment of the N. Ireland State, a separate Inspectors of Lunatics Office was instituted in Belfast, which published annual reports between 1924 and 1927. From 1928, data on the lunatic asylums was provided by the Ministry of Home Affairs in the form of a section on mental health in the annual *'Report of the Administration of Home Office Services'* (HMSO, Various Years). Such sections continued to appear until 1964 when mental health issues became briefly the responsibility of the Chief Medical Officer. Data was also provided by the N. Ireland Hospitals Authority (NIHA) from 1950 to 1972. From 1974, *Health and Personal Social Service Statistics N. Ireland* (HMSO, various years) provided data on both activity levels and expenditure. Expenditure data for the earlier years are available in the *Local Taxation Returns* for 1920 to 1948 and subsequently in the *NHS Accounts* and the *Hospital Maintenance Expenditure Accounts*, (equivalent to the Hospital Costing Returns of England & Wales).

Overall, then, a dataset can be assembled covering the activities and expenditure patterns of provision for mental illness in N. Ireland. This section first examines the data on both activity and then on spending under the headings used above. The main gap in the data concerns the wartime period 1939-45, and the main problem in analyzing the data concerns the disentangling of mental illness and mental handicap provision.

ACTIVITY

Residents

The data on the numbers of lunatic inpatients resident inpatients in institutions in N. Ireland is complicated (as for the Free State) by the inclusion of a number of mentally deficient persons. This group were not distinguished from the psychiatrically ill until the early 1950s, a consequence of the exclusion of Ireland from the 1913 Mental Deficiency Act which led to separate provision for the mentally handicapped in the rest of the UK. As with Ireland pre-1920, the published data refer to the total inpatients in the psychiatric hospitals, including the mentally deficient up to 1950.

The number of lunatics resident in psychiatric institutions in N. Ireland is shown in Table E.1. based on the following sources:

* Inspectors/Home Affairs reports, 1923-1964
* Chief Medical Officers report 1965-66
* N. Ireland Hospitals Authority 1950-1972
* Health & Personal Social Service Statistics, 1974-1988.

Up to 1950, data were published on the range of institutions catering for lunatics, thereafter the published data refer to the inmates of NHS psychiatric hospitals.

The total number of inmates rose slowly, by around 50% between 1920 and the peak in 1960 after which the same decline as in the other countries began. From 4,260 inpatients in 1920, the total rose to 4,860 in 1930, 5,690 in 1940, 5,440 in 1950, and 6,450 in 1960. By 1970 this had fallen to 5,480, to 3,800 in 1980 and 3,250 in 1986.

The District asylums remained the main institution with over 95% of all inpatients. A relatively small number of lunatics were catered for in the other types of institution, the largest of which were the poorhouses, which contained just under 200 lunatics in 1920, rising to a peak of just under 400 by 1926 and then remaining steady at around 200 from 1930 up to 1948 when they were absorbed into the NHS. Fewer than 50 criminal lunatics were catered for in the State asylum and Chancery lunatics

numbered between 20 and 46 up to 1947, the last year for which data on this group were published.

Mentally Deficient

The mentally deficient were not distinguished as a separate group within the District Asylums until after 1951, when 12% were so classed. The similarity of that figure with that of the Republic in 1958 and 1963 is striking. The percentage of inmates of psychiatric hospitals who were mentally deficient in N. Ireland fell to 9% by 1972. The 1951 percentage has been applied to the total inmates in care to extrapolate the number of mentally defectives in the district asylums between 1920 and 1950, as shown in Table E.1.

Ratio of Inpatients to Population

The ratio of psychiatric inpatients to population (excluding mental defectives from 1920 to 1950, as discussed above) followed the trend in inpatients, rising by around 40% from 1920 to a peak in 1960 and declining thereafter. As shown in Table E.1, the ratio of inpatients to population rose from 2.9 in 1920 to 3.3 in 1930, 3.8 in 1940, 3.4 in 1950, a peak of 4.0 in 1960, before falling to 3.1 in 1970, 2.2 in 1980 and 2.0 in 1986.

Sex

As shown in Table E.2, males made up 52% of inmates in 1920, rising to 54% in 1945 before falling back to 50% in 1960, and 54% in 1980.

Age

Very little data has been published on the age distribution of inmates of psychiatric institutions in N. Ireland. Data for 1921 and 1931 were published by the Inspector of Lunacy and these are shown in Table E.3, which indicates that relatively few inmates were aged over 60.

Legal Status

The legal status of inmates, as shown in Table E.4 showed considerable change after the 1932 Mental Treatment (N.Ireland) Act which introduced categories similar to those of England & Wales. The proportion of certified inpatients fell from close to 97% in 1936 to 53% in 1961. The proportion who were classified as 'Special', under the new category introduced in 1949 to identify the mentally deficient inpatients, rose from 8% in 1949 to 11% in 1961.

Admissions

The available data on admissions, shown in Table E.5 draws on the same sources as for residents above. A full series showing both total and first admissions has been compiled with only four missing years, which have been interpolated.

All admissions rose slowly at first, from 865 in 1920 to 940 in 1930, and 1,124 in 1940. The number doubled to 2,320 in 1950 and more than doubled again to 5,200 in 1960. The rise continued to 8,000 in 1970 and 8,200 in 1980.

First admissions rose in a similar manner, from 681 in 1920 to 876 in 1940. The 1950 total showed a 70% rise to 1,444, with a further sharp increases to 2,560 in 1960. After 1970 first admissions levelled off, with 2,995 in 1970 and 2,628 in 1980.

The total admission rate rose by a factor of seven between 1920 and 1980, rising from 69 per 100,000 in 1920 to 87 in 1940, 169 in 1950, 365 in 1960, 540 in 1970 and 533 in 1980. The first admission rate rose by a factor of between three and four, from 54 in 1920, 67 in 1940, 105 in 1950, 180 in 1960, 196 in 1970 and 171 in 1980. These high rates show more similarity to those of the Republic of Ireland than the rest of the UK.

Out-patients

Data on new outpatients attendances have been published since 1972 and are shown in Table E.8. New outpatient attendances rose from 1,768 in 1951 to 3,397 in 1960, 6,087 in 1970 and 6,854 in 1980.

Leaving

The same sources have been drawn on to provide data on the numbers leaving the mental hospitals for the years 1923-1986. The overall number l of deaths and discharges remained rose steadily up to around 1940 and then rose rapidly in line with total admissions. Live discharges rose from around 650 in the period 1920 to 1940 to just under 1,800 in 1950, 4,400 in 1960, 7,500 in 1970 and 10,700 in 1980. Deaths remained at around 500 after 1945, varying between 400 and 600. No data have been located after 1972. As was the norm elsewhere, 'recovered' and 'others' were distinguished in the early years, up to 1932 in N. Ireland, with only aggregate data thereafter.

SMRs

SMRs could only be calculated for two years, 1921 and 1931 based on Census of Population data on the age distribution of inmates shown in Table E.3. These ratios, shown in Table E.7, were high: 441 in 1921 and 347 in 1931.

EXPENDITURE

Current Expenditure

As with the Republic of Ireland and unlike England & Wales and Scotland, no Mitchell-and-Deane type series exists for N. Ireland. For the period from 1922 to 1948 the annual Local Taxation Returns published gross expenditure data based on the accounts of the public mental hospitals, with a gap in the war years 1938/8 to 1944/5. This series is shown as column 2 in Table E.9. After 1948, two sources of NHS spending are available: the NHS Accounts and the Hospital Costing Returns, with almost identical figures, as shown in column 3. These public expenditure data must be adjusted to cover total public expenditure and then to include private spending. Although the effects of such adjustments were explored, as they make very little difference due to the small size of the workhouse and private sectors in N.Ireland, they have been ignored.

The remaining columns in Table E.9 show expenditure in constant price terms. Real expenditure remained relatively steady between 1920 and 1938, after which it rose rapidly despite falling inpatient numbers from the early 1960s. Expenditure rose from £3m. in 1921/2 to £5.6m. in 1940, £12m. in 1950, £17m. in 1960, £30m. in 1970 and £44m. in 1977.

Unit Costs

Unit cost data were published to 1948 in the Inspectors / Home Office reports and from 1955 in the NHS Hospital Costing Returns (HMSO, various years). These are shown in constant prices in Table E.10, indicating a pattern broadly similar to the other countries with stable values up to 1940 and a rapid rise thereafter. In constant 1985 prices, the rise was as follows: £15 in 1920, £16 in 1930, £14 in 1940, £45 in 1950, £50 in 1960, £94 in 1970 and £191 in 1976.

Capital

The available data on capital spending and loan charges, covering the period 1923-48, are shown in Table E.11. Capital spending in real terms varied widely with

peaks in the period 1930-33 and 1935-6. Loan charges were low, at under 10% of non-capital spending throughout the period to 1948.

Revenue

Revenue to the district asylums was mainly from rates, as shown in Table E.12. A fixed amount central government grant was introduced in 1927 and accounted for around 20% of revenue up to its abolition in 1948. Fees accounted for under 10% of proceeds for most of the period, leaving the rates to cover the remainder.

Conclusions

The above survey of the available data on expenditure on lunacy (including mental illness and mental deficiency) suggests that although the sources are complex, consistent series can compiled under the headings discussed in section 1.

TABLE C.1

LUNATIC INPATIENTS BY TYPE OF CARE, IRELAND: 1854-1919

Year	District and Auxiliary Asylums	Poorhouses	Criminal Lunatics (Dundrum)	Prisons	Registered Insane Persons	Private Hospitals	Single Chancery	Total
1852	2,735							
3	2,768							
4	2,900							
5	3,054		147					
6	3,299		126					
7	3,638	1,707	123	168		444		6,080
8	3,923	1,707	123	200		444		6,397
9	4,061	1,707	123	250		444		6,585
1860	4,289	2,534	133	293	426	509		7,758
1	4,243	2,534	131	293	424	509		7,710
2	4,388	2,592	131	339	470	515		7,965
3	4,506	2,225	128	378	506	546		7,783
4	4,672	2,455	127	389	516	556		8,199
5	4,835	2,733	125	505	630	583		8,781
6	5,070	2,748	132	339	471	613		8,902
7	5,212	2,705	158	334	492	626		9,035
8	5,816	2,742	162	53	215	632		9,405
9	6,316	2,907	170	5	175	639		10,037
1870	6,663	2,754	167	1	168	638		10,223
1	6,992	2,914	172		172	652		10,730
2	7,140	2,966	175		175	647		10,928
3	7,344	3,130	160		160	664		11,298
4	7,140	2,966	175		175	647		10,928
5	7,585	3,120	160		160	664		11,529
6	8,073	3,141	158	2	160	672		12,046
7	8,183	3,216	166		166	644		12,209
8	8,407	3,372	167		167	636		12,582
9	8,490	3,372	167		167	636		12,665
1880	8,667	3,513	177	3	180	622		12,982
1	8,978	3,540	173		173	635		13,326
2	9,271	3,610	173		173	650		13,704
3	9,542	3,631	172		172	636		13,981
4	9,687	3,673	178	1	179	639		14,178
5	9,872	3,630	173		173	632		14,307
6	10,077	3,738	172	1	173	602		14,590
7	10,499	3,853	169	1	170	625		15,147
8	10,825	3,957	168		168	601		15,551
9	11,180	4,038	176	1	177	631		16,026
1890	11,488	3,961	179	2	181	621		16,251
1	11,733	4,180	143		143	632		16,688
2	12,133	4,198	149		149	644		17,124
3	12,434	4,044	156		156	642		17,276
4	12,771	4,076	161	1	162	646		17,655
5	13,332	4,112	163	1	164	663	86	18,357
6	14,041	3,992	165		165	676	92	18,966
7	14,598	4,030	170	3	173	691	98	19,590
8	15,289	4,039	169	2	171	714	91	20,304
9	15,909	3,989	162	1	163	699	103	20,863
1900	16,404	3,805	162		162	709	89	21,169
1	16,880	3,746	170		170	732	102	21,630
2	17,580	3,539	169		169	745	105	22,138
3	18,094	3,660	153		153	773	114	22,794
4	18,615	3,320	159		159	794	108	22,996
5	19,057	3,215	160		160	818	115	23,365
6	19,306	3,128	162		162	845	113	23,554
7	19,511	3,053	158		158	870	126	23,718
8	20,038	2,723	168		168	863	139	23,931
9	20,270	2,655	174		174	901	144	24,144
1910	20,603	2,571	168		168	909	143	24,394
1	20,880	2,557	168		168	906	144	24,655
2	21,158	2,493	162		162	880	146	24,839
3	21,314	2,494	166		166	886	149	25,009
4	21,527	2,440	168		168	905	140	25,180
5	21,530	2,332	165		165	937	139	25,103
6	21,284	2,258	157		157	923	144	24,766
7	20,524	2,113	167		167	944	145	23,893
8	19,742	1,852	165		165	961	168	22,868

Source: Annual Reports of the Inspectors in Lunacy

TABLE C.2
MENTALLY ILL & MENTALLY HANDICAPPED (LUNATICS / IDIOTS/IMBECILES/ IN DISTRICT ASYLUMS AND IN POORHOUSES

IRELAND 32 COUNTIES, 1861-1914

	District Aslums									Workhouses			
Year	Mania	Monomania	Dementia	Melancholia Ancholo	Imbeciles	Epileptics	Idiots	Total Inmates	% Idiot & Imbecile	Idiot & Imbecile	Workhouse Idiots	Lunatics	%Idiots
1861	2,565	253	489	633	304		143	4,387	10	447	1,724	868	67
2	2,511	231	626	647	61	284	161	4,521	11	506	1,268	957	57
3	2,676	270	395	611	209	378	133	4,672	15	720	1,323	1,028	56
4	2,686	251	465	633	184	379	131	4,729	15	694	1,388	1,031	57
5	2,687	259	502	641	236	386	124	4,835	15	746	1,659	1,074	61
6	2,771	298	595	646	249	389	122	5,070	15	760	1,638	1,110	60
7	2,960	281	616	645	209	376	125	5,212	14	710	1,595	1,110	59
8	3,344	285	782	674	211	396	124	5,816	13	731	1,605	1,137	59
9	3,650	411	820	638	234	445	128	6,326	13	807	1,633	1,274	56
1870	3,774	377	893	740	272	475	124	6,655	13	871	1,609	1,145	58
1	4,022	439	859	764	251	474	183	6,992	13	908	1,660	1,254	57
2	4,105	443	916	727	259	505	185	7,140	13	949	1,660	1,306	56
3	4,228	418	1,086	684	254	499	178	7,347	13	931	1,689	1,441	54
4	4,278	443	1,175	711	256	533	197	7,593	13	986	1,740	1,401	55
5	4,206	465	1,369	748	265	523	165	7,741	12	953	1,717	1,462	54
6	4,379	465	1,485	777	267	520	180	8,073	12	967	1,787	1,429	56
7	4,460	497	1,386	804	317	537	182	8,183	13	1,036	1,920	1,452	57
8	4,583	548	1,419	816	327	530	184	8,407	12	1,041	1,840	1,497	55
9	4,692	538	1,421	835	312	500	192	8,490	12	1,004	1,873	1,618	54
1880	4,912	514	1,501	819	218	552	151	8,667	11	921	1,875	1,698	53
1	5,007	522	1,586	881	222	535	195	8,948	11	952	1,869	1,771	51
2						609	227	9,271	9	836			51
3						603	215	9,542	9	818	1,853	1,873	50
4						567	192	9,872	8	759	1,859	1,916	49
5						607	215	10,077	8	822	1,837	1,896	49
6						604	223	10,499	8	827	1,907	1,934	50
7						605	283	10,825	8	888	1,879	2,082	47
8										888	1,903	2,180	47
9										917	1,903	2,180	47
1890										942	1,888	2,199	46
1										962	2,024	2,283	47
2										995	2,196	2,138	51
3										1020	1,716	2,466	41
4										1047	1,778	2,434	42
5										1093	1,781	2,465	42
6										1151	1,735	2,390	42
7										1197	1,706	2,454	41
8										1254	1,695	2,473	41
9										1305	1,643	2,474	40
1900										1345	1,710	2,220	44
1										1384	1,691	2,178	44
2										1442	1,596	2,064	44
3										1484	1,548	2,234	41
4										1526	1,548	2,234	41
5										1563	1,440	1,894	43
6										1583	1,349	1,889	42
7										1600	1,349	1,889	42
8										1643	1,301	1,522	46
9										1662	1,276	1,473	46
1910										1689	1,282	1,377	48
1										1712	1,207	1,434	46
2										1735	1,150	1,420	45
3										1748	1,150	1,420	45
4										1765	1,197	1,308	48

Sources: Annual Reports of Inspectors of Lunacy in Ireland,
HMSO, available in British Parliamentary Papers, various years.
Notes:
1.The first eight columns were published for the dates shown,giving data for District Asylums.
2.Similiar data were published for 1861-1915,as shown, classifying workhouse inmates.

TABLE C.3
RESIDENT INPATIENTS, MENTAL HOSPITALS, BY SEX

IRELAND, 1880-1919.

				Percentages	
Year	Male	Female	Total	Male %	Female %
1880	6,477	6,505	12,982	50	50
1	6,622	6,704	13,326	50	50
2	6,810	6,894	13,704	50	50
3	7,010	6,971	13,981	50	50
4	7,170	7,008	14,178	51	49
5	7,227	7,080	14,307	51	50
6	7,337	7,253	14,590	50	50
7	7,615	7,532	15,147	50	50
8	7,851	7,700	15,551	51	50
9	8,043	7,983	16,026	50	50
1890	8,165	8,086	16,251	50	50
1	8,405	8,283	16,688	50	50
2	8,705	8,419	17,124	51	49
3	8,947	8,329	17,276	52	48
4	9,121	8,534	17,655	52	48
5	9,504	8,853	18,357	52	48
6	9,824	9,142	18,966	52	48
7	10,127	9,463	19,590	52	48
8	10,522	9,782	20,304	52	48
9	10,756	10,107	20,863	52	48
1900	11,014	10,155	21,169	52	48
1	11,217	10,413	21,630	52	48
2	11,503	10,635	22,138	52	48
3	11,803	10,991	22,794	52	48
4	11,900	11,096	22,996	52	48
5	12,184	11,181	23,365	52	48
6	12,254	11,300	23,554	52	48
7	12,274	11,444	23,718	52	48
8	12,355	11,576	23,931	52	48
9	12,562	11,582	24,144	52	48
1910	12,704	11,690	24,394	52	48
1	12,868	11,787	24,655	52	48
2	12,962	11,877	24,839	52	48
3	13,030	11,979	25,009	52	48
4	13,187	11,993	25,180	52	48
5	13,070	12,033	25,103	52	48
6	13,044	11,722	24,766	53	47
7	12,427	11,466	23,893	52	48
8	11,819	11,049	22,868	52	48

Source: Annual Reports of the Inspectors in Lunacy

TABLE C.4

AGE PROFILE OF INMATES OF LUNATIC ASYLUMS, IRELAND: 1870-1918,.

Year	1871		1881		1891		1901		1911	
	M %	F %	M %	F %	M %	F %	M %	F %	M %	F %
>25	9	9	10	10	10	9	9	8	8	6
25-34	29	25	26	23	24	21	24	20	21	19
35-44	26	24	28	27	25	27	25	23	26	24
45-54	18	20	20	20	23	23	19	23	21	21
55-64	12	13	10	11	11	13	14	17	14	16
>65	5	7	5	5	5	5	7	8	10	13
UNK	2	2	3	3	3	3	1	1	1	2
Total	100	100	100	100	100	100	100	100	100	100

Sources: 1871 Census of Population;1881 to 1911,Inspectors of Lunacy Annual Reports.

Note:UNK=Unknown

TABLE C.5
LUNATIC INPATIENTS IN CARE PER 1,000 POPULATION, IRELAND, 32 COUNTIES: 1852 TO 1918

Year	Places per 1000 District & Auxiliary Asylums	Poorhouse	Total Public	Private	Total
1852	0.4				
3	0.4				
4	0.5				
5	0.5				
6	0.6				
7	0.6	0.3	0.9	0.1	1.0
8	0.7	0.3	1.0	0.1	1.1
9	0.7	0.3	1.0	0.1	1.1
1860	0.7	0.4	1.2	0.1	1.3
1	0.7	0.4	1.2	0.1	1.3
2	0.8	0.4	1.2	0.1	1.4
3	0.8	0.4	1.2	0.1	1.4
4	0.8	0.4	1.3	0.1	1.5
5	0.9	0.5	1.4	0.1	1.6
6	0.9	0.5	1.4	0.1	1.6
7	0.9	0.5	1.5	0.1	1.6
8	1.1	0.5	1.6	0.1	1.7
9	1.2	0.5	1.7	0.1	1.8
1870	1.2	0.5	1.8	0.1	1.9
1	1.3	0.5	1.9	0.1	2.0
2	1.3	0.6	1.9	0.1	2.0
3	1.4	0.6	2.0	0.1	2.1
4	1.3	0.6	1.9	0.1	2.1
5	1.4	0.6	2.1	0.1	2.2
6	1.5	0.6	2.2	0.1	2.3
7	1.5	0.6	2.2	0.1	2.3
8	1.6	0.6	2.3	0.1	2.4
9	1.6	0.6	2.3	0.1	2.4
1880	1.7	0.7	2.4	0.1	2.5
1	1.7	0.7	2.5	0.1	2.6
2	1.8	0.7	2.6	0.1	2.7
3	1.9	0.7	2.7	0.1	2.8
4	1.9	0.7	2.7	0.1	2.8
5	2.0	0.7	2.8	0.1	2.9
6	2.1	0.8	2.9	0.1	3.0
7	2.2	0.8	3.0	0.1	3.1
8	2.3	0.8	3.1	0.1	3.2
9	2.4	0.8	3.2	0.1	3.4
1890	2.4	0.8	3.3	0.1	3.4
1	2.5	0.9	3.4	0.1	3.6
2	2.6	0.9	3.6	0.1	3.7
3	2.7	0.9	3.6	0.1	3.7
4	2.8	0.9	3.7	0.1	3.8
5	2.9	0.9	3.9	0.2	4.0
6	3.1	0.9	4.0	0.2	4.2
7	3.2	0.9	4.1	0.2	4.3
8	3.4	0.9	4.3	0.2	4.5
9	3.5	0.9	4.5	0.2	4.6
1900	3.7	0.9	4.6	0.2	4.7
1	3.8	0.8	4.7	0.2	4.9
2	4.0	0.8	4.8	0.2	5.0
3	4.1	0.8	5.0	0.2	5.2
4	4.2	0.8	5.0	0.2	5.2
5	4.3	0.7	5.1	0.2	5.3
6	4.4	0.7	5.1	0.2	5.4
7	4.4	0.7	5.2	0.2	5.4
8	4.6	0.6	5.2	0.2	5.5
9	4.6	0.6	5.3	0.2	5.5
1910	4.7	0.6	5.3	0.2	5.6
1	4.8	0.6	5.4	0.2	5.6
2	4.8	0.6	5.5	0.2	5.7
3	4.9	0.6	5.5	0.2	5.8
4	5.0	0.6	5.6	0.2	5.8
5	5.0	0.5	5.6	0.3	5.9
6	5.0	0.5	5.5	0.2	5.8
7	4.8	0.5	5.3	0.3	5.6
8	4.6	0.4	5.1	0.2	5.3

Source: Annual Reports of the Inspectors in Lunacy
Data for 1899-1912 are the averages of the maximum and minimum values
.2. Lunatic asylum data: numbers at year end.
3. Total public includes prisons
4.Mentally deficient inpatients excluded,based on Table C.4

TABLE C.6
ADMISSIONS AND ADMISSION RATES: IRELAND 1865-1918.
[DISTRICT & AUXILIARY AND PRIVATE ASYLUMS]

						Admissions per 100,000	
Year	First Admissions	Private	All	Total Admissions	Private	All	First Admissions	All Admissions
1865	1,144		1,144	1,242		1,242	20	22
6	1,109		1,109	1,291		1,291	20	23
7	1,197		1,197	1,782		1,782	22	33
8	1,262		1,262	1,527		1,527	23	28
9	2,117		2,117	2,223		2,223	39	41
1870	2,334		2,334	2,692		2,692	43	50
1	1,948		1,948	2,333		2,333	36	43
2	1,863		1,863	2,253		2,253	35	42
3	1,787		1,787	2,165		2,165	34	41
4	1,849		1,849	2,277		2,277	35	43
5	1,777		1,777	2,132		2,132	34	40
6	1,888		1,888	2,344		2,344	36	44
7	1,924		1,924	2,314		2,314	36	44
8	1,934		1,934	2,366		2,366	37	45
9	1,955		1,955	2,393		2,393	37	45
1880	1,925	130	2,055	2,366	166	2,532	37	49
1	2,044	122	2,166	2,502	145	2,647	40	51
2	2,137	127	2,264	2645	173	2818	42	55
3	2,185	103	2,288	2,704	135	2,839	44	57
4	2,209	126	2,335	2,736	162	2,898	44	58
5	2,240	136	2,376	2,850	172	3,022	45	61
6	2,140	101	2,241	2,746	141	2,887	44	59
7	2,243	139	2,382	2,813	187	3,000	46	63
8	2,471	108	2,579	3,452	146	3,598	52	62
9	2,329	129	2,458	2,956	165	3,121	49	66
1890	2,451	118	2,569	3,095	147	3,242	52	69
1	2,350	132	2,482	3,010	167	3,177	50	68
2	2,315	115	2,430	3,181	160	3,341	50	72
3	2,458	122	2,580	3,207	160	3,367	53	73
4	2,448	123	2,571	3,229	162	3,391	53	74
5	2,458	137	2,595	3,216	178	3,394	54	74
6	2,564	134	2,698	3,329	194	3,523	57	78
7	2,551	148	2,699	3,285	207	3,492	56	78
8	2,676	160	2,836	3,469	202	3,671	59	79
9	2,856	156	3,012	3,549	202	3,751	63	83
1900	2,771	159	2,930	3,546	208	3,754	62	85
1	2,821	153	2,974	3,572	209	3,781	63	85
2	3,173	188	3,361	3,947	237	4,184	72	90
3	3,125	194	3,319	3,950	237	4,187	71	94
4	3,103	161	3,264	3,910	225	4,135	70	94
5	2,966	185	3,151	3,772	248	4,020	67	94
6	2,763	208	2,971	3,524	257	3,781	63	88
7	2,745	213	2,958	3,554	276	3,830	63	87
8	3,069	209	3,278	3,798	269	4,067	70	88
9	2,842	178	3,020	3,601	258	3,859	65	94
1910	2,844	208	3,052	3,576	270	3,846	65	86
1	2,945	204	3,149	3,685	269	3,954	67	89
2	2,735	194	2,929	3,509	247	3,756	63	88
2	2,735	194	2,929		241		63	80
4	2,798	194	2,992	3,528	252	3,780	65	51
5	2,710	194	2,904	3,409	270	3,679	63	86
6	2,619	194	2,813	3,268	300	3,568	61	87
7	2,482	194	2,676	3,135	309	3,444	58	79
8	2,503	194	2,697	3,227		3,227	59	82

Source: Annual Reports of the Inspectors of Lunacy.
Note: 1913 by interpolation.

TABLE C.7
DISCHARGES AND DEATHS FROM DISTRIC & AUXILIARY ASYLUMS: IRELAND, 1847-1918.

	Recovered			Improved			Unimproved			Deaths		
Year	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total
7	173	194	367	42	39	81	27	25	52	248	174	422
8	190	242	432	40	60	100	31	37	68	160	146	306
9	190	242	432	40	60	100	31	37	68	160	146	306
1850	227	211	438	36	56	92	44	32	76	161	139	300
1	206	228	434	41	61	102	53	85	138	144	94	238
2	187	206	393	46	58	104	52	33	85	137	113	250
3	222	200	422	53	58	111	101	91	192	140	140	280
4	222	200	422	53	58	111	101	91	192	140	140	280
5	222	200	422	53	58	111	101	91	192	140	140	280
6	247	263	510	85	84	169	129	107	236	151	117	268
7	278	264	542	78	71	149	25	21	46	158	133	291
8	313	311	624	97	85	182	33	43	76	155	148	303
9	331	312	643	65	98	163	46	37	83	165	126	291
1860	292	352	644	69	79	148	37	30	67	186	161	347
1	262	295	557	62	88	150	30	22	52	193	165	358
2	266	288	554	41	44	85	35	11	46	174	187	361
3	292	335	627	50	66	116	106	62	168	180	156	336
4	284	302	586	40	75	115	38	28	66	218	192	410
5	293	303	596	59	64	123	41	20	61	204	196	400
6	326	344	670	133	129	262	105	94	199	224	185	409
7	307	331	638	83	96	179	51	46	97	246	219	465
8	404	445	849	84	68	152	219	187	406	236	186	422
9	534	477	1,011	273	198	471	85	58	143	293	263	556
1870	518	490	1,008	145	87	232	52	33	85	354	306	660
1	511	472	983	130	124	254	38	39	77	305	277	582
2	528	540	1,068	104	111	215	42	39	81	354	284	638
3	547	484	1,031	180	113	293	50	24	74	368	297	665
4	487	445	932	133	111	244	53	40	93	357	266	623
5	470	469	939	119	117	236	41	15	56	391	351	742
6	506	464	970	130	95	225	25	22	47	395	370	765
7	568	508	1,076	138	111	249	34	15	49	419	402	821
8	532	515	1,047	124	97	221	31	18	49	426	391	817
9	527	477	1,004	141	104	245	64	41	105	504	445	949
1880	527	474	1,001	161	141	302	41	31	72	423	385	808
1	515	504	1,019	158	148	306	41	28	69	412	378	790
2	515	504	1,019	158	148	306	41	28	69	412	378	790
3	594	485	1,079	188	184	372	46	62	108	451	441	892
4	633	518	1,151	228	234	462	56	55	111	474	391	865
5	625	571	1,196	243	273	516	56	233	289	466	390	856
6	652	520	1,172	217	163	380	49	40	89	513	373	886
7	652	520	1,172	217	163	380	49	40	89	513	373	886
8	658	549	1,207	200	156	356	103	41	144	516	378	894
9	628	585	1,213	269	250	519	55	33	88	389	396	785
1890	680	575	1,255	229	251	480	76	38	114	499	437	936
1	684	534	1,218	263	234	497	83	73	156	458	430	888
2	684	534	1,218	263	234	497	83	73	156	458	430	888
3	678	561	1,239	249	209	458	66	57	123	515	561	1,076
4	725	584	1,309	200	173	373	52	40	92	556	552	1,108
5	695	569	1,264	181	164	345	65	37	102	517	416	933
6	696	539	1,235	183	169	352	63	34	97	471	455	926
7	681	511	1,192	168	166	334	73	35	108	606	485	1,091
8	714	565	1,279	151	135	286	56	44	100	570	535	1,105
9	745	593	1,338	164	143	307	91	56	147	631	501	1,132
1900	716	572	1,288	172	153	325	97	63	160	716	622	1,338
1	713	590	1,303	226	195	421	68	42	110	724	533	1,257
2	771	591	1,362	226	180	406	93	57	150	688	638	1,326
3	807	641	1,448	279	198	477	67	53	120	702	687	1,389
4	759	659	1,418	227	168	395	81	46	127	752	697	1,449
5	722	667	1,389	235	157	392	65	30	95	809	641	1,450
6	751	553	1,304	242	190	432	50	29	79	779	678	1,457
7	772	599	1,371	239	169	408	50	29	79	815	671	1,486
8	762	639	1,401	226	164	390	37	20	57	704	713	1,417
9	751	631	1,382	230	159	389	36	10	46	823	719	1,542
1910	711	596	1,307	218	165	383	50	19	69	806	673	1,479
1	820	678	1,498	196	163	359	39	19	58	759	728	1,487
2	777	637	1,414	181	161	342	29	18	47	758	666	1,424
3	777	637	1,414	181	161	342	29	18	47	758	666	1,424
4	817	627	1,444	184	145	329	36	24	60	752	723	1,475
5	743	560	1,303	190	151	341	51	28	79	896	780	1,676
6	710	618	1,328	191	178	369	45	21	66	939	804	1,743
7	665	517	1,182	283	184	467	32	13	45	1,226	965	2,191
8	617	568	1,185	319	185	504				1,249	994	2,243

Source: Annual Reports of the Inspectors of Lunacy.

TABLE C.8
SMRS FOR RESIDENTS OF DISTRICT ASYLUMS
IRELAND 32 COUNTIES , VARIOUS YEARS.

				95% Confidence Intervals (+/-)		
Year	Males	Females	Persons	Males	Females	Persons
1871	393	363	378	44	43	31
1883	347	356	351	34	36	25
1891	295	313	303	27	30	20
1901	352	293	324	26	25	18
1912	384	368	376	27	28	20

Sources: 1871 Census of Population, Other years - Reports of Inspectors of Lunatics.

TABLE C.9
NON-CAPTAL EXPENDITURE IN MENTAL HEALTH SERVICES, IRELAND, 32 COUNTIES, 1859-1918
[AT CONSTANT AND CURRENT PRICES]

	Current Expenditure				Constant 1985 Prices			
Year	Expenditure on D&A £m.	Public Expenditure £m.	Private Expenditure £m.	Total Expenditure £m.	County Asylums £m.	Public £m.	Private £m.	Total £m.
9	0.08	0.02	0.01	0.11				
1860	0.08	0.02	0.01	0.10				
1	0.09	0.02	0.01	0.12				
2	0.09	0.02	0.01	0.13				
3	0.10	0.02	0.01	0.13				
4	0.10	0.02	0.01	0.13				
5	0.10	0.02	0.01	0.13				
6	0.11	0.02	0.01	0.15				
7	0.12	0.03	0.01	0.16				
8	0.13	0.03	0.01	0.17				
9	0.14	0.03	0.01	0.18				
1870	0.17	0.03	0.02	0.21	6.46	7.57	0.62	8.19
1	0.18	0.03	0.02	0.23	6.66	7.86	0.62	8.48
2	0.17	0.03	0.02	0.22	6.18	7.31	0.56	7.87
3	0.19	0.04	0.02	0.24	6.43	7.69	0.58	8.27
4	0.19	0.04	0.02	0.24	6.72	7.97	0.61	8.58
5	0.19	0.04	0.02	0.24	7.00	8.32	0.61	8.93
6	0.19	0.03	0.02	0.24	7.23	8.48	0.60	9.08
7	0.20	0.03	0.02	0.25	7.74	9.05	0.61	9.66
8	0.21	0.04	0.02	0.26	8.18	9.66	0.62	10.27
9	0.20	0.04	0.01	0.25	8.22	9.74	0.62	10.35
1880	0.20	0.04	0.01	0.25	7.94	9.47	0.57	10.04
1	0.21	0.04	0.01	0.27	8.49	10.12	0.60	10.73
2	0.21	0.04	0.01	0.26	8.36	9.94	0.59	10.53
3	0.22	0.04	0.01	0.28	8.84	10.53	0.59	11.12
4	0.22	0.04	0.01	0.28	9.20	10.97	0.61	11.57
5	0.22	0.04	0.01	0.27	9.24	10.96	0.59	11.56
6	0.21	0.04	0.01	0.27	9.19	10.91	0.55	11.46
7	0.22	0.04	0.01	0.27	9.34	11.14	0.56	11.70
8	0.22	0.04	0.01	0.27	9.50	11.35	0.53	11.88
9	0.24	0.05	0.01	0.29	10.02	11.96	0.57	12.52
1890	0.26	0.05	0.01	0.32	10.72	12.71	0.58	13.29
1	0.27	0.05	0.01	0.34	11.44	13.59	0.62	14.21
2	0.28	0.05	0.01	0.34	11.67	13.66	0.62	14.28
3	0.28	0.05	0.01	0.35	11.74	13.99	0.61	14.59
4	0.29	0.05	0.01	0.36	12.47	14.77	0.63	15.40
5	0.37	0.07	0.02	0.45	15.85	18.69	0.89	19.58
6	0.33	0.05	0.02	0.40	14.17	16.50	0.77	17.27
7	0.34	0.06	0.02	0.41	14.66	17.05	0.79	17.84
8	0.39	0.06	0.02	0.47	16.71	19.33	0.88	20.21
9	0.40	0.06	0.02	0.48	16.71	19.23	0.84	20.07
1900	0.46	0.06	0.02	0.54	18.18	20.56	0.88	21.44
1	0.48	0.06	0.02	0.57	19.26	21.66	0.95	22.61
2	0.48	0.05	0.02	0.56	19.63	21.86	0.95	22.81
3	0.49	0.06	0.02	0.57	19.99	22.38	0.98	23.36
4	0.53	0.06	0.03	0.62	21.70	23.98	1.05	25.03
5	0.54	0.05	0.03	0.61	21.65	23.72	1.06	24.78
6	0.53	0.05	0.03	0.61	21.35	23.36	1.06	24.42
7	0.53	0.05	0.03	0.61	20.97	22.88	1.07	23.95
8	0.53	0.04	0.03	0.60	20.98	22.52	1.05	23.57
9	0.54	0.04	0.03	0.61	21.38	22.88	1.10	23.98
1910	0.58	0.04	0.03	0.65	22.92	24.40	1.17	25.57
1	0.55	0.04	0.03	0.62	21.53	22.96	1.08	24.04
2	0.57	0.04	0.03	0.64	21.55	22.95	1.04	23.99
3	0.59	0.04	0.03	0.65	21.98	23.40	1.07	24.47
4	0.60	0.04	0.03	0.66	22.19	23.50	0.93	24.44
5	0.61	0.07	0.03	0.70	20.29	22.48	0.88	23.37
6	0.67		0.03		19.54		0.85	
7	0.74	0.08	0.03	0.85	17.24	19.01	0.79	19.81
8	0.88	0.08	0.04	1.00	17.21	18.82	0.84	19.66
9	1.02	0.08	0.04	1.14	16.88	18.25	0.71	16.88

Source: Annual Reports of the Inpsectors of Lunacy, Feinstein (1972)
Notes:
1.Deflated by UK GDP Deflator from Feinstein (1972).
'Adjusted' to reflect the components included in England and Wales in order to facilitate comparisons.

TABLE C.10
UNIT COSTS IN DISTRICT LUNATIC ASYLUMS , IRELAND
1870-1918 (AT CURRENT AND CONSTANT PRICES)

	Current Prices		Constant 1985 Prices	
Year	Cost/ Year	Cost/Year Adjusted	Cost/Year	Cost/Year Adjusted
1870	22	20	16	15
1875	25	22	18	16
1880	23	22	17	16
1885	22	22	18	18
1890	22	21	18	17
1895	23	22	19	18
1900	25	23	19	17
1905	24	23	18	18
1910	24	22	18	17
1915	25	24	16	15
1918	47	45	18	17

Source: Annual Reports of the Inpsectors of Lunacy, Feinstein (1972)

Notes:

1.Deflated by UK GDP Deflator from Feinstein (1972).

'Adjusted' to reflect the components included in England and Wales in order to facilitate comparisons.

TABLE C.11
INCOME BY SOURCE AND % SHARES, DISTRICT & AUXILIARY ASYULUMS, IRELAND, 32 COUNTIES, 1875-1918.

	Current Prices				Percentage Shares			
Year	Imperial Capitation £m.	Rates etc.	Criminal Lunatics	Total	Government Grant %	Rates %	Rest %	Total %
1875	0.1	0.1		0.2	29	71		100
6	0.1	0.1		0.2	42	58		100
7	0.1	0.1		0.2	38	62		100
8	0.1	0.1		0.2	39	61		100
9	0.1	0.1		0.2	45	55		100
1880	0.1	0.1		0.2	44	56		100
1	0.1	0.1		0.2	42	58		100
2	0.1	0.1		0.2	44	56		100
3	0.1	0.1		0.2	43	57		100
4	0.1	0.1		0.2	44	56		100
5	0.1	0.1		0.2	47	53		100
6	0.1	0.1		0.2	51	49		100
7	0.1	0.1		0.2	49	51		100
8	0.1	0.1		0.2	51	49		100
9	0.1	0.1		0.2	47	53		100
1890	0.1	0.1		0.2	48	52		100
1	0.1	0.2		0.3	43	57		100
2	0.1	0.2		0.3	43	57		100
3	0.1	0.2		0.3	44	56		100
4	0.1	0.2		0.3	46	54		100
5	0.1	0.2		0.3	43	57		100
6	0.1	0.2		0.3	43	57		100
7	0.1	0.2		0.3	43	57		100
8	0.1	0.2		0.4	40	60		100
9	0.2	0.2		0.4	42	58		100
1900	0.2	0.3		0.5	35	65		100
1	0.2	0.4		0.5	32	68		100
2	0.2	0.4		0.5	32	68		100
3	0.2	0.4		0.5	33	66	1	100
4	0.2	0.3	0	0.5	35	64	1	100
5	0.2	0.3	0	0.5	35	63	2	100
6	0.2	0.3	0	0.5	36	62	2	100
7	0.2	0.3	0	0.5	37	61	2	100
8	0.2	0.3	0	0.5	36	62	1	100
9	0.2	0.3	0	0.6	36	63	1	100
1910	0.2	0.3	0	0.6	38	60	1	100
1	0.2	0.3	0	0.5	34	65	1	100
2	0.2	0.4	0	0.6	31	67	1	100
3	0.2	0.4	0	0.6	31	68	1	100
4	0.2	0.4	0	0.6	31	68	1	100
5	0.2	0.5	0	0.7	25	74	1	100
6	0.2	0.5	0	0.7	26	73	1	100
7	0.2	0.7	0	0.9	22	76	2	100
8	0.2	0.8	0	1	19	79	2	100

Source: Annual Reports of the Inpsectors of Lunacy.

TABLE D.1
LUNATICS / MENTALLY ILL BY TYPE OF INSTITUTION, IRELAND, 26 COUNTIES, 1923-1986

Year	District & Auxiliary Asylums	Poorhouse	State Criminal Lunatic Asylum	Private Mental Hospitals	Unlicensed Houses	Units in General Hospitals	Total	Of which Mentally Deficient in District Asylums	Mentally Deficient in Poorhouses	Net Psychiatrically ill (excluding Mentally Defective)
1923	16,106	1,973	115	807	106		19,107	2,428	1000	15,679
4	16,298	1,934	113	782	126		19,253	2,447	1000	15,806
5	16,504	1,872	111	793	135		19,415	2,467	1000	15,948
6	16,708	1,994	117	804	138		19,761	2,511	1000	16,250
7	16,834	1,834	115	807	156		19,746	2,510	974	16,262
8	17,087	1,563	116	823	164		19,753	2,510	784	16,459
9	17,379	1,551	115	841	164		20,050	2,548	750	16,752
1930	17,454	1,505	115	843	164		20,081	2,552	812	16,717
1	17,584	1,399	115	843	164		20,105	2,555	800	16,750
2	17,828	1,256	115	843	164		20,206	2,568	700	16,938
3	18,235	1,107	115	843	164		20,464	2,601	600	17,263
4	18,425	1,020	111	779	194		20,529	2,609	600	17,320
5	18,487	1,082	108	764	198		20,639	2,623	579	17,437
6	18,741	1,109	112	784	210		20,956	2,663	600	17,693
7	18,672	1,170	116	763	224		20,945	2,662	528	17,755
8	18,947	1,009	108	731	243		21,038	2,674	310	18,054
9	19,042	1,002	109	718	254		21,125	2,685	387	18,053
1940	19,134	915	106	689	237		21,081	2,679	362	18,040
1	18,746	1,057	105	652	266		20,826	2,647	395	17,784
2	18,131	977	106	642	248		20,104	2,555	375	17,174
3	17,731	919	110	639	253		19,652	2,498	366	16,788
4	17,606	929	112	614	250		19,511	2,480	350	16,681
5	17,708	872	113	597	248		19,538	2,483	350	16,705
6	17,791	899	109	561	246		19,606	2,492	350	16,764
7	17,635	688	108	882	228		19,541	2,483		17,058
8	18,000	275	108	878	219		19,480	2,476		17,004
9	18,477	253	104	881	209		19,924	2,532		17,392
1950	18,677	227	97	891	187		20,079	2,552		17,527
1	18,797	274	93	881	196		20,241	2,572		17,669
2	19,067	417	94	875	190		20,643	2,624		18,019
3	19,472	364	95	954	182		21,067	2,677		18,390
4	19,734	315	95	925	173		21,242	2,700		18,542
5	19,810	355	89	928	170		21,352	2,714		18,638
6	20,063	433	89	980	155		21,720	2,760		18,960
7	19,808		89	972			20,869	2,652		18,217
8	20,046		83	1,029			21,158	2,689		18,469
9	19,190		94	1,019			20,303	2,580		17,723
1960	19,442		84	1,064			20,590	2,617		17,973
1	18,643		88	1,022			19,753	2,510		17,243
2	19,000		92	1,013			20,105	2,555		17,550
3	19,246		100	1,013			20,359	2,732		17,627
4	17,929		100	1,060			19,089	2,562		16,527
5	17,594		100	1,057			18,751	2,516		16,235
6	17,059		100	1,025			18,184	2,440		15,744
7	16,767		100	1,020			17,887	2,400		15,487
8	16,173		100	1,051			17,324	2,325		14,999
9	15,775		100	1,027			16,902	2,268		14,634
1970	15,392		100	1,008			16,500	2,214		14,286
1	14,922		100	1,039			16,061	2,680		13,381
2	14,818		100	1,038			15,956	2,680		13,276
3	14,449		100	1,022			15,571	2,615		12,956
4	14,082		100	1,074			15,256	2,562		12,694
5	13,869		100	1,098			15,067	2,531		12,536
6	13,408		100	1,065			14,573	2,448		12,125
7	13,288		110	1,064			14,462	2,429		12,033
8	12,875		99	1,093		126	14,193	2,384		11,809
9	12,693		109	1,145		136	14,083	2,365		11,718
1980	12,212		109	1,096		126	13,543	2,275		11,268
1	12,444		109	994		157	13,704	2,160		11,534
2	12,227		109	957		157	13,450	2,188		11,262
3	11,393		109	948		165	12,615	2,052		10,563
4	10,979		109	967	791	143	12,989	2,113		10,876
5	10,595		109		1,092	151	11,947	1,943		10,004
6	10,000		109							
7	8,900		109							

Sources: Inspector of Mental Hospitals Reports, 1923-63, 1977-9;
Statistical Abstract of Ireland, Statistical Information
Relevant to the Health Services, (various years).
Notes
1. Unlicenced houses data ends 1956. Data for 1984-5 refers to hostels.
2. Interpolated data: Criminal Lunatics 1930-33, 1963-76, Private Mental Hospitals
1930-33, Mental Deficiency in Poor Law Institutions 1923-1926.
3. The numbers of mentally handicapped in the District hospitals
has been estimated by application of the proportions in mental hospital in 1958, 1963, 1971 and 1981.
4.Unlicensed houses - data for 1984 & 1985 refer to hostel accomodation.

TABLE D.2
MENTAL HOSPITAL INPATIENT RESIDENTS BY SEX,
IRELAND (26 COUNTIES)-1928-86
[ALL INSTITUTIONS TO 1956, D.& A. ASYLUMS AFTER]

Year	Males	Females	Total	% Male	% Female
1926	10,369	9,518	19,887	52	48
7	10,405	9,637	20,042	52	48
8	10,287	9,466	19,753	52	48
9	10,458	9,592	20,050	52	48
1930	10,485	9,599	20,084	52	48
1	10,458	9,592	20,050	52	48
2					
3					
4					
5	10,733	9,798	20,531	52	48
6	10,890	10,066	20,956	52	48
7	10,865	10,080	20,945	52	48
8	10,903	10,135	21,038	52	48
9	10,952	10,173	21,125	52	48
1940	10,876	10,205	21,081	52	48
1	10,748	10,078	20,826	52	48
2	10,401	9,703	20,104	52	48
3	10,059	9,593	19,652	51	49
4	9,960	9,951	19,911	50	50
5	9,963	9,575	19,538	51	49
6	9,984	9,622	19,606	51	49
7	9,938	9,603	19,541	51	49
8	9,887	9,587	19,474	51	49
9	10,182	9,742	19,924	51	49
1950	10,229	9,850	20,079	51	49
1	10,293	9,948	20,241	51	49
2	10,578	10,065	20,643	51	49
3	10,748	10,319	21,067	51	49
4	10,843	10,399	21,242	51	49
5	10,997	10,355	21,352	52	49
6	11,207	10,513	21,720	52	48
7	10,512	9,296	19,808	53	47
8	10,693	9,353	20,046	53	47
9	10,574	9,016	19,590	54	46
1960					
1	10,279	8,798	19,077	54	46
2	10,095	8,548	18,643	54	46
3	10,588	9,213	19,801	54	46
-	-	-	-	-	-
1971	9,242	7,419	16,661	56	44
-	-	-	-	-	-
1981	7,737	6,247	13,984	55	45

Source: Inspector of Mental Hospitals to 1962,Medico-Social Research Board (MSRB) censuses 1963,1971,1981.
Note: Data refer to all psychiatric care to 1955 \ district & private hospitals thereafter.
No data for 1922-1924,1960,1964-1970 and 1972-1980.

TABLE D.3
AGES OF RESIDENTS OF PSYCHIATRIC HOSPITALS, REPUBLIC OF IRELAND
VARIOUS YEARS

Age	1926		1935		1962		1971		1981	
	Male %	Female %	Male %	Female %	Male %	Female %	Male %	Female %	Male %	Female %
under 25	11	9	27	23	18	13	3	3	2	1
25-44	47	42	43	41	39	36	13	10	13	10
45-65	33	37	26	30	30	31	38	29	34	25
65+	9	12	4	6	14	20	46	59	51	64
	100	100	100	100	100	100	100	100	100	100

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Source: Inspector of Mental Hospitals to 1962, MSRB for 1971 and 1981.
Note: Totals may not add to 100 due to rounding.
Data refer to all institutions to 1962, District & Private hospitals 1971 & 1981.

TABLE D.4
INPATIENT RESIDENTS IN MENTAL HOSPITALS BY LEGAL STATUS
RELAND (26 COUNTIES), 1947-1962

	Number of Residents			Percentages		
Year	Voluntary	Temporary	P.U.M.	Voluntary %	Temporary %	P.U.M. %
1947	114	450	17,071	1	3	97
8	171	724	17,099	1	4	95
9	259	886	17,332	1	5	94
1950	340	1,017	17,320	2	5	93
1	422	1,094	17,281	2	6	92
2	512	1,452	17,103	3	8	90
3	595	1,608	17,269	3	8	89
4	720	1,761	17,253	4	9	87
5	872	1,727	17,211	4	9	87
6	1,063	1,970	17,030	5	10	85
7	1,225	1,994	16,589	6	10	84
8	1,563	2,184	16,299	8	11	81
9	1,875	2,204	15,511	10	11	79
1960						
1	2,589	2,385	14,103	14	13	74
2	3,099	2,257	13,287	17	12	71

Note: No data on published on legal status post 1962. MSRBCensuses of 1963, 1971 and 1981 asked question regarding legal status but only published results for 1963 by voluntary/involuntary .Percentages refer to all institutions.
P.U.M. = Persons of Unsound Mind

TABLE D.5
INPATIENTS PER 1,000 POPULATION
IRELAND: 26 COUNTIES, 1923-86

	Inpatients per 1,000	
Year	Psychiatric Inpatients	All in Mental Hospitals
1923	5.3	6.4
4	5.4	6.5
5	5.4	6.6
6	5.6	6.7
7	5.6	6.7
8	5.7	6.7
9	5.8	6.8
1930	5.7	6.8
1	5.7	6.8
2	5.7	6.8
3	5.8	6.9
4	5.8	6.9
5	5.9	7.0
6	6.0	7.1
7	6.1	7.1
8	6.1	7.1
9	6.0	7.1
1940	6.1	7.1
1	6.0	7.1
2	5.8	6.8
3	5.7	6.7
4	5.6	6.6
5	5.6	6.6
6	5.6	6.6
7	5.7	6.6
8	5.7	6.6
9	5.9	6.7
1950	5.9	6.8
1	6.0	6.9
2	6.1	7.0
3	6.3	7.2
4	6.4	7.3
5	6.4	7.4
6	6.6	7.6
7	6.4	7.3
8	6.5	7.5
9	6.3	7.2
1960	6.3	7.3
1	6.0	6.9
2	6.1	7.0
3	6.1	7.1
4	5.7	6.6
5	5.6	6.5
6	5.4	6.2
7	5.3	6.1
8	5.1	5.9
9	4.9	5.7
1970	4.7	5.5
1	4.4	5.2
2	4.2	5.1
3	4.1	4.9
4	3.9	4.7
5	3.8	4.6
6	3.7	4.4
7	3.6	4.3
8	3.5	4.2
9	3.4	4.1
1980	3.2	3.9
1	3.3	3.9
2	3.2	3.8
3	3.0	3.6
4	3.1	3.7
5	2.8	3.4

Sources:based on Table D.1,and population data From Vital Statistics (Cso,Dublin,Various Years).
Note:Psychiatric inpatients refer to total inpatients in psychiatric hospitals,excluding estimated mental defectives.

TABLE D.6
ADMISSION AND ADMISSION RATES, IRELAND: 26 COUNTIES, 1973-84

	Admissions		Private		Public & Private			
Year	First Persons	All Persons	First Admissions	All Admissions	First	All	First Rate per 100,000 Persons	Total Rate per 100,000 Persons
1920	1,820	2,314			2,095	2,695	59	75
1	1,969	2,449			2,244	2,830	64	79
2	2,167	2,702			2,442	3,083	72	89
3	2,121	2,638			2,396	3,019	70	88
4	2,100	2,634			2,375	3,015	70	88
5	2,042	2,584			2,317	2,965	68	87
6	2,024	2,592	275	381	2,299	2,973	68	87
7	1,987	2,529	234	318	2,221	2,847	67	86
8	2,000	2,583	209	310	2,209	2,893	68	88
9	2,150	2,696	259	334	2,409	3,030	73	92
1930	1,829	2,348			2,050	2,652	62	80
1	1,941	2,486			2,162	2,790	66	85
2	2,059	2,578			2,280	2,882	70	87
3	2,151	2,928			2,372	3,232	73	99
4	2,053	2,736			2,274	3,040	69	92
5	1,703	2,362	221	304	1,924	2,666	57	80
6	1,903	2,443	215	278	2,118	2,721	64	82
7	1,888	2,423	204	258	2,092	2,681	64	82
8	2,066	2,639	180	235	2,246	2,874	70	90
9	2,076	2,682	147	199	2,223	2,881	71	91
1940	1,851	2,421	159	199	2,010	2,620	63	82
1	1,652	2,193	135	167	1,787	2,360	55	73
2	1,459	1,943	144	166	1,603	2,109	49	66
3	1,575	2,036	154	197	1,729	2,233	53	69
4	1,655	2,188	154	197	1,809	2,385	56	74
5	1,840	2,306	164	202	2,004	2,508	62	78
6	2,055	2,544	164	202	2,219	2,746	69	86
7	2,335	3,076	335	556	2,670	3,632	79	103
8	2,789	3,766	742	1,060	3,531	4,826	84	114
9	3,021	4,354	875	1,156	3,896	5,510	101	146
1950	3,089	4,558	907	1,274	3,996	5,832	104	154
1	3,392	5,112	977	1,396	4,369	6,508	115	173
2	3,334	5,027	1,095	1,525	4,429	6,552	113	170
3	3,566	5,574	1,181	1,686	4,747	7,260	121	189
4	3,713	5,841	1,087	1,594	4,800	7,435	126	199
5	3,827	6,738	1,267	1,931	5,094	8,669	130	229
6	3,780	6,713	1,524	2,427	5,304	9,140	130	232
7	4,043	7,248	1,738	2,836	5,781	10,084	140	251
8	4,142	8,187	1,794	3,054	5,936	11,241	145	287
9	3,997	8,569	1,994	3,173	5,991	11,742	140	301
1960	4,085	9,145	2,222	3,410	6,307	12,555	144	323
1	4,184	9,432	2,039	3,532	6,223	12,964	148	335
2	4,578	10,293	2,207	3,835	6,785	14,128	162	364
3								
4								
5	4,846	11,718	1,904	3,722	6,750	15,440	235	537
6	4,773	12,762	1,903	3,764	6,676	16,526	231	573
7	5,028	13,732	1,898	3,874	6,926	17,606	239	607
8	5,231	14,760	2,049	4,180	7,280	18,940	250	650
9	5,493	15,406	2,137	4,234	7,630	19,640	261	671
1970	5,566	16,021	2,117	4,283	7,683	20,304	260	688
1								
2					8,589	22,964	284	759
3					9,018	24,036	293	782
4					8,914	24,964	285	799
5					8,873	25,892	279	815
6					8,939	26,434	277	819
7					8,788	26,385	269	806
8					8,678	27,662	262	835
9					8,631	27,358	256	812
1980					8,459	27,098	249	797
1					8,480	28,685	233	787
2					8,702	28,778	250	826
3								
4					8,749	28,830	249	822

Notes:1. Rates include small number of admissions to special units: 138 in 1978, 221 in 1979, 252 in 1980, 244 in 1981 and 270 in 1984.
2. Admissions to private hospitals interpolated 1920-26, 1931-36, 1944 & 1946.

TABLE D.7 DISCHARGES & DEATHS, PSYCHIATRIC HOSPITALS
REBULIC OF IRELAND: 1920-86.

	Live Discharges			Deaths in District & Auxiliary Asylums		
Year	Recovered Persons	All Other Persons	Persons	Male	Female	Persons
1920	1,017	456	1,473	558	467	1,025
1	905	372	1,277	507	444	951
2	916	370	1,286	587	514	1,101
3	1,005	357	1,362	549	488	1,037
4	959	391	1,350	600	492	1,092
5	950	323	1,273	579	526	1,105
6	1,051	306	1,357	602	429	1,031
7	1,006	328	1,334	584	485	1,069
8	972	302	1,274	532	520	1,052
9	962	326	1,288	574	542	1,116
1930	884	290	1,174	589	510	1,099
1	916	333	1,249	601	506	1,107
2	942	322	1,264	596	474	1,070
3	972	548	1,520	573	428	1,001
4	1,011	454	1,465	576	505	1,081
5	963	247	1,210	611	460	1,071
6	945	237	1,182	557	469	1,026
7	656	595	1,251	630	611	1,241
8	987	323	1,310	572	482	1,054
9	1,038	371	1,409	593	583	1,176
1940	874	251	1,125	600	601	1,201
1	1,004	288	1,292	668	621	1,289
2	888	268	1,156	780	616	1,396
3	982	280	1,262	667	503	1,170
4	999	211	1,708	592	511	2,045
5	1,037	227	1,756	454	486	1,819
6	1,182	280	2,058	530	489	1,593
7	1,427	433	2,556	758	609	1,367
8	1,772	609	3,202	560	459	1,019
9	2,117	731	3,844	490	526	1,016
1950	2,359	822	4,234	609	573	1,182
1	2,485	1,236	4,904	642	632	1,274
2	2,538	1,046	4,816	594	560	1,154
3	2,818	1,404	5,555	508	479	987
4	2,898	1,537	5,781	530	545	1,075
5	3,386	1,739	6,793	597	609	1,206
6	3,595	1,772	7,054	542	514	1,056
7	3,956	2,406	8,295	602	539	1,141
8	4,484	2,308	9,046	575	582	1,157
9	5,508	2,544	10,949	562	520	1,082
1960	5,485	2,851	10,960	577	480	1,057
1	5,561	3,077	11,334	632	527	1,159
2	6,112	3,794	12,850	592	529	1,121
3			13500			1,175
4			14000			1,200
5			14,464	665	588	1,253
6			15,823	634	629	1,263
7			16,714	568	587	1,155
8			18,235	604	583	1,187
9			18,898	596	502	1,098
1970			19,088	660	546	1,206
1						
2						
3			23,110	546	545	1,091
4			24,019	566	492	1,058
5			24,796	480	461	941
6			25,665	486	442	928
7			25,393	484	441	925
8			26,684	466	402	868
9			26,196	461	405	866
1980			26,065	463	458	921
1			27,627	475	382	857

Sources: Inspector of Mental Hosptals to 1962, MSRB 1965-81.

TABLE D.8
SMRS FOR RESIDENTS OF DISTRICT ASYLUMS
REPUBLIC OF IRELAND

Year	Males	Females	Persons
1926	474	349	413
1935	363	282	323
1941	366	359	363
1951	229	218	223
1961	195	182	188
1971	280	257	269
1981	228	237	232
1926 95% CI = +/-	29	26	19
1935 95% CI = +/-	38	33	25
1950 95% CI = +/-	28	28	20
1951 95% CI = +/-	20	20	14
1961 95% CI = +/-	16	16	11
1971 95% CI = +/-	21	22	15
1981 95% CI = +/-	21	24	16

Note- Each confidence interval is an amount which must be added or subtracted from the SMR a result which straddles 100 would indicate that the results were not significant at the 5% level all the above results are well within this range.

TABLE D.9 OUTPATIENT SERVICES IRELAND 26 COUNTIES 1983-1987

Year	Number of Patients	First Attendance	Total Attendance
1983	45,197		200,321
1984	30,886	9,574	158,269
1985			
1986	39,925	9,660	182
1987	37,187	10,243	178,979

Sources: Statistical Information Relevant ot the Health Services,Department of Health Dublin

TABLE D.10
EXPENDITURE SERIES FOR MENTAL HEALTH, REPUBLIC OF IRELAND, 1923-81
[CURRENT AND CONSTANT 1985 EXPENDITURE, IN MILLIONS OF POUNDS]

Source	Inspector of Mental Hospitals	Statistical Abstract			Net Health Board Estimates Volume		1985 UKPrices	
Year	Total Expenditure £m.	Total Expenditure £m.	Loan Charges £m.	Net Expenditure (excluding Loan Charges)	Expenditure £m.	Expenditure £m.	Psychiatric Hospital Expenditure £m.	All (Excluding Mental Handicap) £m.
1923	0.9	0.9	0.1	0.9			17	17
4	0.9	0.9	0.1	0.8			17	16
5	0.9	0.9	0.1	0.8			17	17
6	0.9	0.9	0.1	0.8			17	17
7	0.8	0.8	0.1	0.8			16	16
8	0.8	0.8	0.1	0.8			16	16
9	0.8	0.8	0.1	0.8			16	15
1930	0.8	0.8	0.1	0.8			17	16
1	0.8	0.8	0.1	0.8			17	16
2	0.8	0.8	0.1	0.8			17	16
3	0.8	0.8	0.1	0.8			17	16
4	0.8	0.8	0.1	0.8			16	15
5	0.8	0.8	0.1	0.8			18	17
6	0.9	0.9	0.1	0.8			19	18
7	0.9	0.9	0.1	0.8			19	18
8	1.0	1.0	0.1	0.9			19	18
9	1.1	1.1	0.1	1.0			20	18
40	1.1	1.1	0.1	1.0			19	18
1	1.2	1.2	0.1	1.1			19	18
2	1.2	1.2	0.1	1.1			18	17
3	1.4	1.4	0.1	1.3			20	19
4	1.5	1.5	0.1	1.3			20	19
5	1.5	1.5	0.1	1.4			19	18
6	1.5	1.5	0.1	1.4			19	19
7		1.5	0.1	1.5			19	17
8		1.6	0.1	1.6			19	17
7		2.1	0.1	2.1			24	22
9		2.2	0.1	2.2			25	23
1950		2.4	0.1	2.3			24	23
1		2.5	0.1	2.5			24	23
2		3.0	0.1	2.9			28	26
3		3.0	0.1	3.0			28	26
4		3.3	0.1	3.2			29	27
5		3.5	0.1	3.4			28	26
6		3.8	0.1	3.6			29	27
7		4.0	0.1	3.8			30	27
8		4.1	0.1	4.0		3.5	30	28
1959		4.5	0.1	4.3		3.7	33	30
60		4.4	0.1	4.3		3.9	31	29
1		4.6	0.1	4.5	4.3	4.1	31	29
2		5.0			4.7	4.6	33	30
3		5.3			5.1	4.7	34	31
4		6.1			6.3	5.2	40	37
5		7.0			6.7	6.4	41	38
6		7.4			7.3	6.5	44	41
7		7.8			7.8	7.8	45	42
8		8.5			8.8	8.4	49	46
9	10.8	9.1			10.8	9.7	57	51
1970	12.4	11.5			12.4		58	52
1	14.7				14.7	16.6	63	56
2	18.2				18.2	17.6	72	65
3	23.5				23.5	18.7	106	96
4	37.2				37.2	36.4	99	90
5	41.3				41.3	49.3	96	87
6	49.1				49.1	51.7	102	93
7	63.5				63.6		118	109
8					76.6	69.5	125	115
9					106.4	105.7	147	135
1980					119.5	114.0	150	137
1					135.2		159	146
2								

Sources: Inspector on Mental Hospitals to 1946.Statistical Abstract 1923-70. Statistical Information Relevant to the Health Services, 1976-86, Estimates Vol, 1970-86.
Notes: Inspector of Mental Hospitals report 1977-9 matches Statistical Abstract series for net expenditure by Health Boards on mental hospitals.Best series would appear to be that of Inspectors of Mental Hospitals/Statistical Abstract net of Loan Charges to 1972,followed by that of Net Health Board Expenditure as reported in the Statistical Abstract and Statistical Information relevant to the Health Services.

TABLE D.11
COMPARISION OF UK & REPUBLIC OF IRELAND PRICE INDEXES,1922-1980.

		Price Indexes	
Year	UK GDP Deflator	UK RPI	Ireland CPI
1922	100	100	100
3	84	95	98
4	77	96	102
5	76	96	99
6	76	94	100
7	73	92	93
8	73	91	92
9	72	90	93
1930	72	86	90
1	70	81	85
2	68	79	83
3	67	77	80
4	75	77	80
5	67	78	83
6	67	80	84
7	70	84	90
8	72	85	92
9	75	86	92
1940	81	101	109
1	73	109	121
2	95	109	132
3	100	109	150
4	106	110	157
5	109	111	155
6	111	111	152
7	121	111	169
8	130	120	167
9	133	123	169
1950	134	126	174
1	144	139	191
2	157	151	206
3	162	155	211
4	165	159	213
5	171	165	215
6	182	170	229
7	189	180	243
8	198	185	249
9	201	187	246
1960	205	188	249
1	211	195	257
2	218	200	268
3	223	207	271
4	227	214	295
5	235	224	308
6	253	233	319
7	269	239	326
8	286	250	341
9	310	264	370
1970	331	280	407
1	364	307	442
2	407	329	479
3	451	359	539
4	519	416	647
5	591	517	756
6	748	603	912
7	1,028	698	1,010
8	1,185	756	1,090
9	1,386	858	1,264
1980	1,623	1,012	1,495

Sources: UK Mitchell & Dean(1968),Feinstein(1972), Statistical Abstract. Ireland - Statistical Abstract.,
Note: As no GDP deflator is available for Ireland until the 1950s,the UK GDP deflator has been employed. A comparision of the United Kingdom's Retail Price Index (RPI) and the Republic of Ireland's Consumer Price Index (CPI) shows similiar values up to the 1950s.

TABLE D.12
UNIT COSTS IN MENTAL HOSPITAS, IRELAND, 26 COUNTIES
[ACTUAL AND ESTIMATED, 1923-1984, CONSTANT AND CURRENT PRICES]

Year	Unit Cost (current) per annum	Unit Cost (constant) per week	Total Expenditure until 1982 per annum	Numbers in Mental Hospitals	Estimated Unit Costs per annum	Estimated Unit Costs per week
1923	53	15.5	13	16,106	803	15.4
5	51	14.8	13	16,504	766	14.7
6	49	14.1	12	16,708	745	14.3
7	44	13.7	12	16,834	738	14.2
8	43	13.5	12	17,087	720	13.9
9	43	13.2	12	17,379	700	13.5
1930	43	13.7	13	17,454	740	14.2
1	43	14.4	14	17,584	773	14.9
2	41	14.3	14	17,828	759	14.6
3	41	14.7	14	18,235	768	14.8
4	40	14.3	14	18,425	760	14.6
5	40	13.9	14	18,487	747	14.4
6	44	15.1	14	18,741	768	14.8
7	43	13.8	14	18,672	747	14.4
8	47	14.6	15	18,947	780	15.0
9	48	15.2	16	19,042	818	15.7
1940	51	13.3	14	19,134	720	13.9
1	59	14	14	18,746	737	14.2
2	61	13.2	13	18,131	705	13.6
3	66	12.7	13	17,731	708	13.6
4	72	13.3	13	17,606	728	14.0
5	74	13.8	13	17,708	735	14.1
6	77	14.6	14	17,791	772	14.8
7	92	15.7	13	17,635	728	14.0
8	118	20.4	14	18,000	776	14.9
9	121	20.5	18	18,477	990	19.0
1950	122	20.2	19	18,677	998	19.2
1	129	19.4	18	18,797	953	18.3
2	150	20.9	18	19,067	937	18.0
3	156	21.3	21	19,472	1,062	20.4
4	165	22.3	21	19,734	1,049	20.2
5	168	22.4	22	19,810	1,119	21.5
6	180	22.6	22	20,063	1,087	20.9
7	191	22.6	22	19,808	1,126	21.7
8	200	23.1	23	20,046	1,143	22.0
9	215	25.1	24	19,190	1,259	24.2
1960	221	25.5	26	19,442	1,338	25.7
1	242	27.1	25	18,643	1,334	25.7
2	269	28.9	25	19,000	1,311	25.2
3	293	31.1	26	19,246	1,353	26.0
4	317	30.8	26	18,000	1,418	27.3
5	394	36.7	31	17,594	1,739	33.5
6	424	38.2	31	17,059	1,829	35.2
7	471	41.5	33	16,767	1,983	38.1
8	511	43.1	34	16,173	2,104	40.5
9	561	43.6	35	15,775	2,246	43.2
1970	711	50.2	40	15,392	2,583	49.7
1			42	14,922	2,797	53.8
2			46	14,818	3,096	59.5
3			50	14,449	3,486	67.1
4			72	14,082	5,131	98.7
5			74	13,869	5,303	102.0
6			68	13,408	5,049	97.1
7			73	13,288	5,467	105.2
8			87	12,875	6,771	130.2
9			91	12,693	7,131	137.1
1980			106	12,212	8,712	167.6
1			97	12,444	7,788	149.8
2			98	12,227	7,985	153.6
3				11,393		
4				10,979		
5				10,595		
6				10,000		
				8,900		

Sources: Statistical Abstract,to 1970. Sources as Table E.10 after 1970.
Notes: Unit Cost data only available to 1970.However, unit costs calculated by dividing net expenditure by average residents gives unit cost estimates which are close to those available to 1970. These estimated unit costs, which can be extended to 1982, implicitly assume that all expenditure was on inpatient services.

TABLE E.1
INPATIENTS BY TYPE OF MENTAL INSTITUTION AND RATES PER 1,000, NORTHERN IRELAND, 1920-85

								Ratio / 1,000	
Year	District Asylums	Poorhouse	Criminal	Private	Chancery	Total	Estimated 1920-1950 Mental Handicapped in District Asylums	All Hospitals Psychiatric	All Inpatients Including Mentally Handicap
1920	3,983	191	23	39	24	4,260	511	3.0	3.4
1	3,955	201	29	38	24	4,247	510	3.0	3.4
2	3,965	222	28	38	24	4,277	513	3.0	3.4
3	3,993	204	28	38	28	4,291	515	3.0	3.4
4	4,060	384	26	36	28	4,534	544	3.2	3.6
5	4,054	360	23	41	31	4,509	541	3.2	3.6
6	4,192	383	22	36	32	4,665	560	3.3	3.7
7	4,300	319	22	41	32	4,714	566	3.3	3.8
8	4,457	288	20	29	37	4,831	580	3.4	3.9
9	4,482	246	21	40	38	4,827	579	3.4	3.9
1930	4,524	253	5	40	36	4,858	583	3.5	3.9
1	4,638	228	7	39	38	4,950	594	3.5	4.0
2	4,696	208	6	31	43	4,984	598	3.5	4.0
3	4,804	194	8	43	42	5,091	611	3.6	4.1
4	4,968	179	8	38	22	5,215	626	3.6	4.1
5	5,125	161	7	31	20	5,344	641	3.7	4.2
6	5,235	169	7	33	22	5,466	656	3.8	4.3
7	5,295	206	8	35	24	5,568	668	3.8	4.4
8	5,394	180	8	35	31	5,648	678	3.8	4.4
9	5,410	144	20	31	43	5,648	678	3.8	4.4
1940	5,393	199	21	31	43	5,687	682	3.9	4.4
1	5,259	191	5	31	43	5,529	663	3.7	4.2
2	5,171	170	7	31	43	5,422	651	3.6	4.1
3	4,995	183	6	31	43	5,258	631	3.5	3.9
4	4,992	237	8	31	43	5,311	637	3.4	3.9
5	4,888	258		21	43	5,210	625	3.4	3.8
6	4,941	249		20	46	5,256	631	3.4	3.9
7	4,983	269		46	46	5,344	641	3.5	4.0
8	5,071	301		49		5,421	651	3.5	4.0
9	5,262	235				5,497	660	3.5	4.0
1950	5,364	79				5,443	653	3.5	4.0
1	5,473					5,473	657	3.5	4.0
2	5,574					5,574	669	3.5	4.1
3	5,775					5,775	693	3.5	4.2
4	5,891					5,891	707	3.6	4.3
5	6,032					6,032	724	3.7	4.3
6	6,176					6,176	741	3.8	4.4
7	6,313					6,313	758	3.9	4.5
8	6,349					6,349	762	4.0	4.5
9	6,336					6,336	760	4.0	4.5
1960	6,452					6,452	774	4.0	4.5
1	6,400					6,400	768	4.0	4.5
2	6,231					6,231	748	3.9	4.3
3	5,992					5,992	719	3.7	4.1
4	5,986					5,986	718	3.7	4.1
5	6,051					6,051	726	3.7	4.1
6	5,981					5,981	718	3.6	4.1
7	5,809					5,809	697	3.5	3.9
8	5,838					5,838	701	3.5	3.9
9	5,637					5,637	676	3.4	3.7
1970	5,483					5,483	658	3.3	3.6
1	5,254					5,254	630	3.1	3.4
2	5,072					5,072	609	3.0	3.3
3	4,957					4,957	595	2.9	3.2
4	4,677					4,677	561	2.6	3.0
5	4,564					4,564	548	2.5	3.0
6	4,468					4,468	536	2.4	2.9
7	4,403					4,403	528	2.4	2.9
8	4,343					4,343	521	2.4	2.8
9	4,198					4,198	504	2.4	2.7
1980	3,808					3,808	457	2.3	2.5
1	3,802					3,802	456	2.2	2.5
2	3,605					3,605	433	2.2	2.4
3	3,656					3,656	439	2.3	2.4
4	3,707					3,707	445	2.3	2.4
5	3,503					3,503	420	2.2	2.3
6	3,250					3,250	390	2.0	2.1

Sources: 1920-1938: Report of the Inspectors of Lunacy and Report of the Administration & Home Office Services showing numbers at year end 1939-44: data on average numbers in mental hospitals in Health and Local Government Administration in Northen Ireland 1945 & 1946 ditto but data for full range of provision at year end 1950-86 N.Ireland Hospital Authority & from 1972, N. Ireland Health and Personal Social Service Statistics.

TABLE E.2
MENTAL HOSPITALS,
PROPORTIONS INMATES BY SEX:,NORTHEN IRELAND, 1920-1986

Year	Total	Males	Females	Male %	Female %	Total %
1920	4262	2,229	2,033	52	48	100
1	4,247	2,223	2,024	52	48	100
2	4,277	2,216	2,061	52	48	100
3	4,291	2,258	2,033	53	47	100
4	4,534	2,371	2,163	52	48	100
5	4,509	2364	2,145	52	48	100
6	4,665	2,480	2,185	53	47	100
7	4,714	2,505	2,209	53	47	100
8	4,840	2,569	2,271	53	47	100
9	4,827	2,585	2,242	54	46	100
1930	4,858	2,602	2,256	54	46	100
1	4,950	2,664	2,286	54	46	100
2	5,025	2,704	2,321	54	46	100
3	5,091	2,747	2,344	54	46	100
4	5,215	2,795	2,420	54	46	100
5	5,347	2,892	2,455	54	46	100
6	5,466	2,977	2,489	55	46	100
7	5,568	3,027	2,541	54	46	100
8	5,648	3,036	2,612	54	46	100
9						
1940						
1						
2						
3						
4						
5				54	46	100
6				54	46	100
7	4,983	2702	2,281	53	47	100
8	5,071	2699	2,372	53	47	100
9	5,262	2790	2,472	53	47	100
1950	5,364	2841	2,523	53	47	100
1	5,410	2859	2,551	53	47	100
2	5,222	2885	2,337	55	45	100
3	5,685	2938	2,747	52	48	100
4						100
5	5,946	3058	2,888	51	49	100
6	6,128	3138	2,990	51	49	100
7	6,244	3191	3,053	51	49	100
8	6294	3195	3,099	51	49	100
9	5,574	2767	2,807	50	50	100
1960	5,699	2853	2,846	50	50	100
1	5,665	2802	2,863	50	51	100
2	5,724	2824	2,900	49	51	100
3	5,323	2645	2,678	50	50	100
4	5,333	2643	2,690	50	50	100
5	5,420	2634	2,786	49	51	100
6	5,360	2634	2,726	49	51	100
7	5,202	2604	2,598	50	50	100
8	5,234	2591	2,643	50	51	100
9	5,143	2552	2,591	50	50	100
1970	5,006	2505	2,501	50	50	100
1						
2						
3						
4	4,085	2350	1,735	58	43	100
5	3,885	2277	1,608	59	41	100
6	3,756	2240	1,516	60	40	100
7	3,662	2213	1,449	60	40	100
8	3,672	2175	1,497	59	41	100
9	3,690	2068	1,622	56	44	100
1980	3,475	1873	1,602	54	46	100
1	3,430	1878	1,552	55	45	100
2	3,605	1738	1,867	48	52	100
3						
4						
5	3,503	1641	1,862	47	53	100
6	3,250	1501	1,749	46	54	100

Source: as Table E.1
Notes: No data for 1939-1944,1954,1971-1973 and 1983-1984.

TABLE E.3 AGE S OF RESIDENT INPATIENTS, NORTHEN IRELAND, 1921 & 1931

Year	1921		1931	
	M %	F %	M %	F %
Under 25	6	4	6	6
25-44	41	35	39	32
44-64	42	47	41	43
65+	12	14	14	18
	100	100	100	100

Sources: Inspectorate of Lunacy Annual Report,
Report of Administration of Home Office Services (HMSO)

TABLE E.4
RESIDENT INPATIENTS BY LEGAL STATUS: N.IRELAND MENTAL HOSPITALS

	Residents by Legal Status					Percentages				
Year	Voluntary	Temporary	Certified	Special	Total	Voluntary	Temporary	Certified	Special	Total
6	110	45	5,080		5,235	2	1	97		100
7	127	48	5,120		5,295	2	1	97		100
8	160	80	5,154		5,394	3	1	96		100
9										
1940										
1										
2										
3										
4										
5										
6										
7										
8										
9	368	549	3,909	436	5,262	7	10	74	8	100
1950	388	606	3,760	615	5,369	7	11	70	11	100
1	375	736	3,690	672	5,473	7	13	67	12	100
2	394	739	3,679	735	5,547	7	13	66	13	100
3	414	824	3,676	861	5,775	7	14	64	15	100
4	414	824	3,676	861	5,775	7	14	64	15	100
5	529	957	3,688	858	6,032	9	16	61	14	100
6	598	1,021	3,719	383	5,721	10	18	65	7	100
7	673	1,066	3,739	833	6,311	11	17	59	13	100
8	744	1,120	3,670	815	6,349	12	18	58	13	100
9	863	1,050	3,660	763	6,336	14	17	58	12	100
1960	986	1,142	3,571	753	6,452	15	18	55	12	100
1	1,068	1,188	3,409	735	6,400	17	19	53	11	100

Source: as Table E.1
Notes: No data published for 1939-1948.

TABLE E.5
PSYCHIATRIC SERVICES , ADMISSIONS AND ADMISSION RATES TO DISTRICT ASYLUMS NORTHEN IRELAND , 1920-86

	All Admissions			First Admssions			Admission Rates per 100,000	
Year	Male	Female	Total	Male	Female	Total	First	All
1920	466	399	865	371	310	681	54	69
1	412	402	814	318	320	638	51	65
2	409	407	816	307	310	617	49	64
3	423	391	814	319	290	609	48	65
4	402	404	806	311	319	630	50	64
1925	395	372	767			600	48	61
6	530	470	1,000	391	386	777	62	80
7	467	409	876	357	325	682	55	70
8	512	502	1,014	395	388	783	63	81
9	493	486	979	377	374	751	61	79
1930	484	456	940			721	58	76
1	489	467	956	389	361	750	60	77
2	535	474	1,009	423	363	786	63	81
3			1,227			956	76	98
4			1,226			955	75	97
1935			1,281			998	79	101
6			1,281			957	75	100
7			1,228			957	75	96
8			1,295			1,009	78	101
9			1,152			897	69	89
1940			1,124			876	67	87
1			1,070			834	64	82
2			914			712	54	69
3			1,050			818	61	78
4			1,147			894	66	85
1945			1,097			855	63	81
6			1,367			1,065	79	101
7	735	790	1,525			1,014	75	113
8	875	1,024	1,899			1,244	91	139
9	1,118	1,093	2,211			1,393	102	161
1950	1,117	1,204	2,321			1,444	105	169
1	1,211	1,293	2,504			1,628	118	182
2	1,202	1,259	2,461			1,420	103	179
3	1,342	1,335	2,677			1,577	114	193
4	1,409	1,456	2,865			1,647	119	207
1955	1,549	1,677	3,226			1,797	129	231
6	1,824	1,864	3,688			2,017	144	264
7	1,999	2,277	4,276			2,262	162	306
8	2,096	2,492	4,588			2,262	161	327
9	2,322	2,654	4,976			2,438	173	353
1960	2,469	2,715	5,184			2,561	180	365
1	2,610	2,836	5,446			2,690	189	382
2	2,819	3,099	5,918	1,292	1,534	2,826	197	412
3	3,056	3,209	6,265	1,410	1,602	3,012	208	433
4	3,274	3,661	6,935	1,389	1,735	3,124	214	476
1965	3,272	3,530	6,802	1,458	1,647	3,105	212	463
6	3,413	3,483	6,896	1,473	1,574	3,047	206	467
7	3,619	3,538	7,157	1,446	1,471	2,917	196	481
8	3,735	3,879	7,614	1,348	1,586	2,934	195	507
9	3,842	3,856	7,698	1,417	1,511	2,928	193	508
1970	3,982	4,019	8,001	1,409	1,586	2,995	196	524
1	4,000	3,680	7,680	1,387	1,436	2,823	184	499
2	3,795	3,881	7,676	1,299	1,475	2,774	180	497
3								
4								
1975	4,322	4,309	8,631	1,494	1,601	3,095	201	562
6	4,728	4,396	9,124	1,536	1,596	3,132	204	593
7	4,678	4,162	8,840	1,422	1,464	2,886	188	575
8	4,678	4,179	8,857	1,410	1,370	2,780	181	576
9	4,486	3,979	8,465	1,360	1,323	2,683	175	551
1980	4,091	4,108	8,199	1,276	1,352	2,628	171	533
1	3,859	4,004	7,863	1,280	1,425	2,705	177	513
2	3,974	4,084	8,058	1,274	1,397	2,671	174	526
3			8,058			2,671	174	526
4			8,058			2,671	174	526
1985	4,082	4,600	8,682	1,403	1,527	2,930	191	567
6	3,641	4,109	7,750	1,322	1,495	2,817	184	506

Sources: 1920-7: Inspectors of Lunacy Northen Ireland 1st to 5th Report
1927-46: Ministry of Home Affairs: Report on the Administration of Home Office Services,
1946-62: Report on Health and Local Government Administration in Northen Ireland
1947-63 1962-4: Report of the Chief Medical Officer 1965
1962-72 Northen Ireland Hospitals Authority
1974-86: Health and Personal Social Services Statistics for Northen Ireland.

Notes: No data for 1973-1974.

TABLE E.6
DEATHS & DISCHARGES, MENTAL HOSPITALS, NORTHERN IRELAND, 1920-85

	Recovered		Other			Deaths		
Year	Male	Female	Male	Female	Total	Male	Female	Total
1920	339	155	272	222	494	182	179	361
1	305	210	266	249	515	161	162	324
2	302	161	254	209	463	162	178	340
3	310	147	215	242	457	163	165	328
4	273	130	205	198	403	159	177	336
5	293	164			457			313
6	317	180	248	249	497	182	181	363
7	297	134	224	207	431	165	168	333
8	319	170	247	242	489			367
9	319	187	241	265	506	226	221	447
1930					506			448
1	340	157			497	173	168	341
2	326	225			551			341
3					551			341
4					647			440
5					636			462
6					700			477
7					671			483
8					706			458
9					674			454
1940					639			502
1					626			578
2					568			434
3					811			415
4					736			414
5					848			411
6					900			340
7					1095	198	206	404
8			667	731	1398	207	199	406
9			837	794	1631	204	209	413
1950			826	932	1758	260	261	521
1			935	930	1865			538
2			941	951	1892			493
3			1,009	976	1985			463
4			1,097	1,114	2211			536
5			1,217	1,293	2510			573
6			1,494	1,499	2993			554
7			1,628	1,933	3561			575
8			1,750	2,093	3843	341	362	703
9			2,004	2,262	4266			693
1960			2,077	2,304	4381	312	373	685
1			2,335	2,429	4764	228	396	734
2			2,330	2,516	4846	209	203	412
3			2,827	3,002	5829	307	367	674
4			2,995	3,327	6322	287	318	605
5			2,938	3,132	6070	344	322	666
6			3,084	3,179	6263	324	352	676
7			3,384	3,390	6774	264	266	530
8			3,466	3,535	7001	276	289	565
9			3,596	3,600	7196	283	300	583
1970			3,751	3,776	7527	277	327	604
1			3,781	3,665	7446	310	305	615
2			3,579	3,669	7248	313	283	596
3								
4								
5					8300			
6					9088			
7					9363			
8					10793			
9					10936			
1980					10665			
1								
2					10108			
3								
4								
5					10786			
6					10160			

Sources: As Table E.4.
Notes: From 1977 on, the data include psychiatric units
No data published 1973-1974, 1981 and 1983-4.

TABLE E.7 SMRS , MENTAL HOSPITAL INPATIENTS, NORTHERN IRELAND VARIOUS YEARS

	SMRS			95% CIS		
Year	Males	Females	Persons	Males	Females	Persons
1922	416	466	441	64	68	48
1932	349	345	347	52	52	37

Sources: Derived from Table E.4 and UK mortality rates.

TABLE E.8 NORTHEN IRELAND - NEW OUTPATIENT ATTENDANCES

Year	Outpatient Attendances
1950	
1	1,768
2	1,828
3	1,690
4	
5	
6	2,063
7	
8	
9	
1960	3,397
1	3,684
2	4,410
3	4,491
4	4,892
5	4,925
6	5,074
7	5,468
8	5,393
9	6,068
1970	6,086
1	6,017
2	5,992
3	
4	7,478
5	7,661
6	7,299
7	
8	6,824
9	
1980	6,854
1	7,974
2	8,966
3	
4	
5	9,353
6	

Sources: As Table E.1

TABLE E.9
PSYCHIATRIC EXPENDITURE, CURRENT AND CONSTANT 1985 PRICES, N.IRELAND, 1921-1977

	Current Prices		Constant 1985 Prices		
Year	Psychiatric Hospital Experiment Gross £m.	Net £m.	Net Hospital £m.	Adjusted Public £m.	Adjusted Total £m.
1921-2	0.24	0.22	3.37	3.07	3.12
3	0.22	0.20	3.68	3.36	3.41
4	0.22	0.20	3.97	3.63	3.69
5	0.23	0.21	4.23	3.94	4.00
6	0.23	0.21	4.20	3.91	3.97
7	0.22	0.20	4.18	3.89	3.95
8	0.21	0.19	4.08	3.77	3.83
9	0.21	0.20	4.22	3.88	3.93
1930	0.23	0.20	4.35	3.98	4.05
1	0.24	0.21	4.38	4.01	4.08
2	0.23	0.20	4.42	4.03	4.10
3	0.22	0.20	4.59	4.17	4.24
4	0.22	0.19	4.48	4.07	4.14
5	0.23	0.20	4.68	4.24	4.29
6	0.25	0.21	4.91	4.44	4.48
7	0.26	0.23	5.24	4.74	4.79
8	0.29	0.25	5.57	5.05	5.11
9	0.31	0.26	5.56	5.04	5.10
1940	0.26	0.26	5.33	5.40	5.47
1	0.26	0.26	4.91	5.00	5.07
2	0.26	0.26	4.50	4.58	4.65
3	0.26	0.26	4.20	4.27	4.33
4	0.26	0.26	4.02	4.09	4.15
5	0.26	0.26	3.79	3.88	3.93
6	0.45	0.42	5.95	5.43	5.50
7	0.50	0.47	6.51	5.94	6.02
8	0.69	0.65	8.31	7.60	7.73
9		0.65	7.75	7.10	7.17
1950		1.07	12.32	11.21	11.21
1		1.25	14.41	12.92	12.92
2		1.34	14.20	14.20	14.20
3		1.19	11.66	11.66	11.66
4		1.20	11.46	11.46	11.46
5		1.30	12.10	12.10	12.10
6		1.46	13.12	13.12	13.12
7		1.64	13.87	13.87	13.87
8		1.85	15.07	15.07	15.07
9		2.01	15.60	15.60	15.60
1960		2.21	16.90	16.90	16.90
1		2.41	18.11	18.11	18.11
2		2.71	19.74	19.74	19.74
3		2.94	20.68	20.68	20.68
4		3.00	20.68	20.68	20.68
5		3.35	22.48	22.48	22.48
6		3.80	24.33	24.33	24.33
7		4.04	24.91	24.91	24.91
8		4.20	25.30	25.30	25.30
9		4.62	26.85	26.85	26.85
1970		5.09	28.58	28.58	28.58
1		5.78	30.27	30.27	30.27
2		6.67	31.32	31.32	31.32
3		7.66	32.74	32.74	32.74
4		8.96	35.54	35.54	35.54
5		13.33	45.18	45.18	45.18
6		16.17	43.13	43.13	43.13
7		18.87	43.88	43.88	43.88

Sources: Hospital Costing Returns and NHS Accounts
Note: Adjusted to include all psychiatrically ill inpatient expenditure, both public and private.

TABLE E.10
UNIT COSTS, N.IRELAND MENTAL HOSPITALS

Year	Unit Cost per week Current Prices	Unit Cost per week 1985 prices
1920	1	15
1930	1	16
1940	1	14
1950	4	45
1960	7	50
1970	18	94
1976	82	191

Sources: as Table E.7

TABLE E.11
CAPITAL EXPENDITURE & DEBT PAYMENTS, MENTAL HOSPITALS, N. IRELAND, 1920-48

Year	Capital Expenditure Current Prices	Constant 1985 Prices	Debt Payments	As % Net Expenditure
1920-1				
2	0.00	0.05	0.01	6.4
3	0.00	0.02	0.01	6.9
4	0.00	0.06	0.01	7.1
5	0.00	0.05	0.01	6.7
6	0.01	0.02	0.01	6.9
7	0.00	0.02	0.02	7.2
8	0.00	0.06	0.01	7.3
9	0.00	0.03	0.01	7.1
1930	0.01	0.26	0.02	7.2
1	0.02	0.36	0.02	7.4
2	0.01	0.30	0.02	7.6
3	0.01	0.12	0.02	7.9
4	0.01	0.14	0.02	7.9
5	0.00	0.32	0.02	7.6
6	0.02	0.46	0.02	7.7
7		0.00	0.02	7.1
8	0.02	0.50	0.02	7.0
9	0.04	0.76	0.02	7.1
1940				
1				
2				
3				
4				
5				
6	0.00	0.04	0.04	5.8
7	0.02	0.28	0.28	3.1
8	0.03	0.34	0.34	2.2

Source: As Table E.7

TABLE E.12

PSYCHIATRIC HOSPITALS REVENUE BY TYPE, N.IRELAND, 1921-48

Year	County Borough Councils	Fees	Government Grant	Other	Total Revenue	Shares in County Borough Councils	In Percentage Fees	Government Grant	Other	Total
	£m.	£m.	£m.	£m.	£m.	%	%	%	%	%
1921-2	0.30	0.02		0.01	0.30	89.4	6.1	2.0	2.4	100
3	0.20	0.02		0.01	0.20	86.7	9.4	1.2	2.8	100
4	0.20	0.02		0.01	0.20	83.9	10.2	1.2	4.7	100
5	0.20	0.02		0.01	0.20	84.2	10.9	1.2	3.7	100
6	0.20	0.02		0.01	0.20	84.1	9.5	1.3	5.2	100
7	0.10	0.02	0.04	0.02	0.20	63.8	6.9	21.3	8.1	100
8	0.10	0.01	0.04	0.01	0.20	68.0	6.6	22.0	3.4	100
9	0.10	0.01	0.04	0.01	0.20	67.2	6.8	22.2	3.8	100
1930	0.20	0.01	0.04	0.01	0.20	69.9	5.9	20.5	3.7	100
1	0.20	0.01	0.04	0.01	0.20	69.5	6.2	20.3	4.0	100
2	0.20	0.02	0.04	0.01	0.20	69.4	6.8	21.1	2.8	100
3	0.20	0.02	0.04	0.01	0.20	68.9	6.8	21.1	3.1	100
4	0.10	0.02	0.04	0.02	0.20	62.8	7.1	20.2	9.9	100
5	0.20	0.02	0.04	0.01	0.20	69.4	6.8	21.1	2.8	100
6	0.10	0.02	0.04	0.01	0.20	65.2	8.4	21.4	4.9	100
7	0.20	0.02	0.04	0.01	0.20	67.2	8.4	19.7	4.7	100
8	0.20	0.02	0.04	0.01	0.30	68.5	8.5	17.8	5.1	100
9	0.20	0.02	0.04	0.01	0.30	71.6	7.9	16.0	4.5	100
1940										
1										
2										
3										
4										
5										
6	0.20	0.04	0.09	0.04	0.40	52.8	8.7	24.1	14.4	100
7	0.30	0.04	0.10	0.04	0.50	57.5	7.9	23.6	11.0	100
8	0.30	0.05	0.10	0.04	0.60	57.1	7.5	18.5	16.9	100

Sources: as Table E.7

APPENDIX 4 - TABLES TO CHAPTER 8

TABLE F.1

PROPORTION OF POPULATION IN INSTITUTIONS BY TYPE (PER 1,000 POP.)

ENGLAND/WALES

Year	1851	1861	1871	1881	1891	1901	1911	1921	1931	1941	1951	1966	1971	1981
Mental Institutions	0.9	1.2	1.7	2	2.8	3	3	3.2	4		4.6	3.8	3.5	2.3
Hospitals	0.5	0.5	0.9	0.9	0.9	1.3	1.5	3.6	5.7		5.8	5.5	5.1	5
Workhouse/ Elderly/ Children	7	6.2	6.5	6.9	6.3	6.4	7.2	3.3	2.9		2.6	3.4	3.7	4.3
Prisions	1.3	1.3	1.7	1.7	1.2	1.1	1.1	0.7	0.5		0.7	0.9	1	1.6
	9.7	9.2	10.8	11.5	11.2	11.8	12.8	10.8	13.1		13.7	13.6	13.3	13.2

SCOTLAND

Year	1861	1871	1881	1891	1901	1911	1921	1931	1941	1951	1961	1971	1981
Mental Institution	1.2		2.3	2.5	2.9		3.3	4.1			4.8	4.8	4.1
Hospitals	0.5		0.8	1.2	1.8		5.5	6.8			8.2	6.3	6.2
Workhouse / Elderly / Children	4.3		6.7	7.2	4.8		3.6	4.6			3.1	3.3	3
Prisons	0.7		0.8	0.7	1.9			0.7			0.8	1.4	0.7
Total	6		9.7	10.9	9.5		12.4	15.4			16.1	14.4	13.3

IRELAND

Year	1861	1871	1881	1891	1901	1911	1921	1926	1936
Mental	0.9	1.4	2.6	3.8	4.8		6.8	7.7	
Hospitals	0.5	0.5	0.7	1	1.2		4.4	5.9	
Workhouse / Elderly / Children	8.6	9.1	9.2	9.7	8.8		4.3	4.2	
Prisons	0.9	0.9	0.8	0.7	0.7		0.3	0.2	
	10.9	11.9	13.3	15.2	15.5		15.8	18	

Sources: Census of Population, various years.

TABLE F.2
INPATIENTS PER 1,000 BY COUNTRY

Year	England & Wales	Scotland	Northen Ireland	Republic of Ireland
1860	1.9	1.4		0.4
1	1.9	1.5		0.4
2	2.0	1.5		0.5
3	2.0	1.5		0.4
4	2.1	1.5		0.5
5	2.2	1.6		0.4
6	2.2	1.6		0.5
7	2.2	1.6		0.5
8	2.3	1.7		0.6
9	2.3	1.8		0.7
1870	2.4	1.8		0.8
1	2.4	1.9		0.8
2	2.5	1.9		0.8
3	2.5	1.9		0.9
4	2.6	1.9		0.8
5	2.6	1.9		0.9
6	2.7	2.0		1.0
7	2.7	2.1		1.0
8	2.7	2.1		1.0
9	2.7	2.2		1.1
1880	2.8	2.2		1.1
1	2.8	2.3		1.2
2	2.8	2.3		1.3
3	2.8	2.3		1.4
4	2.9	2.3		1.4
5	2.9	2.3		1.5
6	2.9	2.3		1.5
7	2.9	2.3		1.6
8	2.9	2.4		1.7
9	2.9	2.4		1.8
1890	3.0	2.4		1.8
1	3.0	2.5		1.9
2	3.0	2.5		1.9
3	3.0	2.6		2.1
4	3.0	2.6		2.2
5	3.1	2.7		2.3
6	3.1	2.7		2.5
7	3.1	2.8		2.6
8	3.2	2.8		2.7
9	3.2	2.9		2.9
1900	3.3	2.9		3.0
1	3.3	3.0		3.1
2	3.3	3.0		3.3
3	3.4	3.1		3.4
4	3.5	3.1		3.5
5	3.5	3.2		3.6
6	3.5	3.2		3.7
7	3.6	3.2		3.8
8	3.6	3.2		3.9
9	3.6	3.3		4.0
1910	3.6	3.3		4.0
1	3.6	3.3		4.1
2	3.6	3.4		4.2
3	3.7	3.4		4.2
4	3.7	3.4		4.3
5	3.7	3.4		5.0
6	4.0	3.3		5.0
7	4.0	3.3		4.8
8	3.9	3.2		4.6
9	3.7	3.2		
1920	3.3	3.2	2.9	
1	3.1	3.2	2.9	
2	3.2	3.3	2.9	
3	3.2	3.3	2.9	5.6
4	3.3	3.4	3.1	5.7
5	3.4	3.4	3.1	5.8
6	3.4	3.4	3.2	5.9
7	3.4	3.5	3.2	5.9
8	3.5	3.5	3.3	5.9
9	3.5	3.6	3.3	6.0
1930	3.6	3.8	3.4	6.0
1	3.6	3.9	3.4	6.0
2	3.6	3.9	3.4	6.0
3	3.7	3.9	3.5	6.0
4	3.7	3.9	3.5	6.0
5	3.7	4.0	3.6	6.1
6	3.7	4.0	3.7	6.2
7	3.8	4.0	3.7	6.2
8	3.8	4.0	3.8	6.2
9	3.8	4.0	3.8	6.2
1940	3.8	4.0	3.8	6.2
1	3.8	3.8	3.6	6.2
2	3.7	3.8	3.5	6.0
3	3.6	3.7	3.4	5.8
4	3.5	3.7	3.4	5.8

Year	England & Wales	Scotland	Northern Ireland	Republic of Ireland
5	3.5	3.7	3.3	5.7
6	3.4	3.7	3.3	5.7
7	3.4	3.7	3.4	5.7
8	3.4	3.7	3.4	5.7
9	3.4	3.7	3.4	5.9
1950	3.3	3.8	3.4	5.9
1	3.4		3.5	6.0
2	3.4	4.0	3.5	6.1
3	3.4	4.1	3.5	6.3
4	3.4	4.1	3.6	6.4
5	3.4	4.1	3.7	6.4
6	3.4	4.1	3.8	6.6
7	3.4	4.1	3.9	6.4
8	3.3	4.1	3.9	6.5
9	3.2	4.0	4.0	6.3
1960	3.2	3.9	4.0	6.3
1	3.0	3.8	4.0	6.0
2	3.1	3.8	3.9	6.1
3	3.0	3.8	3.7	6.1
4	2.9	3.9	3.7	5.6
5	3.0	3.8	3.7	5.4
6	2.8	3.8	3.6	5.2
7	2.8	3.8	3.5	5.1
8	2.8	3.7	3.5	4.9
9	2.7	3.7	3.4	4.8
1970	2.6	3.7	3.3	4.6
1	2.5	3.6	3.1	4.4
2	2.4		3.0	4.3
3	2.3		2.9	4.1
4	2.2		2.6	4.0
5	2.1	3.4	2.6	3.9
6	2.1	3.4	2.5	3.7
7	2.0	3.3	2.5	3.6
8	1.9	3.3	2.4	3.5
9	1.9	3.1	2.3	3.5
1980	1.8	3.0	2.1	3.3
1	1.8	3.0	2.1	3.3
2	1.7	3.1	2.0	3.2
3	1.7	3.0		3.0
4	1.6	3.0		3.1
5	1.6	3.0	2.2	2.9
6	1.6	2.7	2.0	
7	1.5	2.8		

Sources: Appendicx 1 (Table A.8),
Appendix 2 (Table B.6) &
Appendix 3 (Tables C.5, D.5 & E.1) .

TABLE F.4 FIRST ADMISSION RATES BY COUNTRY (PER 100,000)

Year	England & Wales	Scotland	Northern Ireland	Ireland 32/26
1855	32			
6	32			
7	34			
8	34			
9	38			
1860	38			
1	36			
2	35			
3	34			
4	37			
5	40			20
6	38			20
7	40			22
8	41			23
9	39			39
1870	37			43
1	38			36
2	38			35
3	39			34
4	41			35
5	42			34
6	43			36
7	43			36
8	44			37
9	42			37
1880	42			37
1	43			40
2	42			42
3	45			43
4	44			44
5	40			45
6	40			44
7	42			46
8	43			51
9	43			49
1890	46	53		52
1	47	54		50
2	48	56		50
3	49	56		53
4	48	59		53
5	50	56		54
6	50	58		56
7	50	59		56
8	49	62		59
9	49	61		63
1900	50	61		62
1	53	61		63
2	58	64		72
3	55	62		71
4	54	62		70
5	52	59		67
6	52	56		63
7	52	60		63
8	52	60		70
9	50	55		65
1910	50	56		65
1	50	60		67
2	52	57		63
3	50	59		63
4	52	61		65
5	50	63		63
6	50	58		61
7	54	53		58
8	55	56		58
9	55	60		59
1920	50	61	54	59
1	49	58	51	64
2	49	58	49	72
3	49	51	48	70
4	44	52	50	70
5	45	52	48	68
6	45	49	62	68
7	44	51	55	67
8	45	54	63	68
9	44	52	61	73
1930	42	50	58	62
1	48	50	60	66
2	50	46	63	70
3	50	47	76	73
4	51	44	75	69
5	50	44	79	57
6	54	42	75	64
7	55	44	75	64
8	56	41	78	70
9	55		69	71
1940	50		67	63

Year	England & Wales	Scotland	Northen Ireland	Ireland 32/26
1	47		64	55
2	49		54	49
3	53		61	53
4	53		66	56
5	53		63	62
6	69		79	69
7	72		75	79
8	83		91	84
9	93		102	101
1950	90		105	104
1	88		118	115
2	89		103	113
3	97		114	121
4	98		119	126
5	103		129	130
6	106		144	130
7	107		162	140
8	111		161	145
9	121		173	140
1960	128		180	144
1	146		189	148
2	148		197	162
3	157		208	186
4	150		214	210
5	146		212	235
6	144		206	231
7	143		196	239
8	141		195	250
9	138	188	193	261
1970	134	196	196	260
1	128	205	184	272
2	130	203	180	284
3	126	202	179	293
4	121	208	179	285
5	124	210	201	279
6	124	202	204	277
7	123	195	188	269
8	112	199	181	262
9	107	192	175	256
1980	114	193	171	249
1	113	181	177	233
2	109	192	174	250
3	110	188	174	244
4	130	186	174	254
5	128	189	191	245
6	122	186	184	240
7				230
8				234

Sources:Appendix 1 (Tables A.10 & A.11)
Appendix 2 (Table B.7 & 8) &
Appendix 3 (Tables C.6, D.6 & E.5).
Notes: Ireland 32/26 refers to the 32 Counties up to 1919, the 26 Counties thereafter.

TABLE F.3
TOTAL ADMISSION RATES BY COUNTRY (PER 100,000)

Year	England	Scotland	Northern Ireland	IRL 32/26
1855	39			
6	39			
7	41			
8	42			
9	46			
1860	46			
1	45			
2	43			
3	42			
4	45			
5	49	50		22
6	47	53		23
7	48	57		32
8	50	56		28
9	47	60		41
1870	45	56		50
1	46	58		43
2	46	57		42
3	48	65		41
4	50	61		43
5	52	69		40
6	53	73		44
7	53	72		44
8	53	71		45
9	52	66		45
1880	51	72		45
1	52	75		49
2	52	68		52
3	54	76		54
4	53	73		55
5	49	71		58
6	49	66		56
7	51	68		59
8	53	70		59
9	53	71		62
1890	56			66
1	57			64
2	58			69
3	60			70
4	59			70
5	61			71
6	60			73
7	60			73
8	61			77
9	61			77
1900	62			78
1	64			78
2	69			78
3	67			79
4	66			79
5	64			79
6	64			79
7	63			79
8	63			79
9	61			79
1910	61			79
1	61			79
2	62			79
3	61			80
4	60			80
5	60			81
6	60			81
7	57			81
8	64			81
9	65			
1920	60		69	75
1	60		65	79
2	61		64	89
3	60		65	88
4	55		64	88
5	56		61	87
6	56		80	87
7	56		70	86
8	57		81	0
9	56		79	88
1930	53		76	92
1	61		77	80
2	64		81	85
3	64		98	87
4	66		97	99
5	68		101	92
6	72		100	80
7	66		96	82
8	76		101	82
9	76		89	90

Year	England	Scotland	Northen Ireland	IRL 32/26
1940	68		87	91
1	64		82	82
2	66		69	73
3	72		78	66
4	73		85	69
5	79		81	74
6	96		101	78
7	103		113	86
8	118		139	103
9	135		161	114
1950	127		169	146
1	135		182	154
2	142		179	173
3	153		193	170
4	162		207	189
5	177		231	199
6	188		264	229
7	198	67	306	232
8	209	63	327	251
9	239	67	353	287
1960	257	71	365	301
1	300	77	382	323
2	314	79	412	335
3	342	93	433	364
4	336	99	476	421
5	335	108	463	478
6	343	124	467	535
7	350	127	481	573
8	357	138	507	611
9	360	148	508	657
1970	362	156	524	683
1	358	167	499	688
2	377	181	497	724
3	373	198	496	759
4	366	216	496	782
5	376	222	562	799
6	385	241	593	815
7	377	247	575	819
8	371	262	576	806
9	365	283	551	835
1980	387	360	533	812
1	398	383	513	797
2	394	403	526	787
3	405	389	526	826
4	413	398	526	746
5	429	421	567	837
6	422	409	506	845
7				854
8				809
9				826

Sources: Appendix 1 (Tables A.10 & A.11)
Appendix 2 (Table B.7 & 8) &
Appendix 3 (Tables C.6, D.6 & E.5).
Notes: Ireland 32/26 refers to the 32 Counties up to 1919, the 26 Counties thereafter.

TABLE F.5
ENGLAND AND WALES, UNIT COSTS IN WORKHOUSES AS % THOSE IN LUNATIC ASYLUMS, 1875-1930

Year	Eexcluding Salaries	Including Salaries
1875	46	56
1880	44	54
1885	50	66
1890	49	65
1895	51	69
1900	55	76
1905	48	66
1910	45	64
1915	55	84
1920	52	81
1925	45	64
1930	48	72

Sources:Derived from Annual Reports of Lunacy Commissioners and Local Taxation Returns.

TABLE F.6
PSYCHIATRIC HOSPITALS
UNIT COSTS: CURRENT & CONSTANT PRICES, ENGLAND & WALES

Year	England & Wales	Scotland	Ireland	Republic of Ireland	Northern Ireland
1875	19		16		
1880	19		16		
1885	19	21.1	18		
1890	19	20.5	17		
1895	20	20.1	18		
1900	19	19.7	17		
1905	21	21.4	18		
1910	21	19.2	17		
1915	19		15		
1920	16	16.5			15
1925	23	22.1		15	
1930	24	22		14	16
1935	31	21.3		14	
1940				13	14
1945				14	
1950	37			20	45
1955	38	50.7		22	
1960	66	65		25	50
1965	83	84.7		37	
1970	115	116.5		50	94
1975	190	209		102	191
1980	246	221.4		168	
1985	276	246.1			

Notes:
England & Wales To 1970,
England Only 1975-85
Costs Refer To County Asylums
Sources:Appendix 1 (Table A.21)
Appendix 2 (Table B.16) &
Appendix 3 (Tables C.10, D12 E.10).

TABLE F.7
PRICE INDEXES ENGLAND AND WALES 1919-1974

Year	GDP	RPI	MIPI	% Difference MIPI/GDP
1919	100	100	100	0
1922	90	88	85	-6
1928	78	81	84	7
1937	75	74	82	9
1943	107	97	139	30
1947	130	99	153	17
1949	145	110	185	28
1952	170	137	219	29
1959	218	170	297	36
1964	247	194	375	52
1970	318	252	581	83
1974	490	368	844	72

Sources:Mental Illness Price Index derived from Staton (1983).
Gross Domestic Product (GDP) reflator and Retail Price Index (RPI)from Statistical Abstract.

TABLE F.8
ENGLAND AND WALES:PSYCHIATRIC NURSES, INPATIENTS AND VARIOUS RATIOS ENGLAND & WALES, VARIOUS YEARS.

	Nurses							
Year	Male	Females	Total	Inpatients	Inpatients /nurse	Average Nurses hours per week	Total Nurse hours	Nurse Hrs/Inpatient/week
1852	353	400	753	10,217	13.6	90	67,770	7
1900	3,827	4,471	8,298	73,652	8.9	90	746,820	10
1909	5,131	5,741	10,872	97,479	9.0	84	913,248	9
1913	5,720	6,575	12,295	105,504	8.6	80	983,600	9
1922	6,864	8,575	15,439	103,892	6.7	66	1,018,974	10
1936	8,658	11,085	19,743	126,102	6.4	54	1,066,122	8
1948	10,473	10,138	20,611	140,612	6.8	48	989,328	7
1956	10,808	13,019	23,827	145,593	6.1	48	1,143,696	8
1959	12,438	15,589	28,027	133,154	4.8	48	1,345,296	10
1965	12,909	18,347	31,256	125,442	4.0	42	1,312,752	10
1968	13,278	19,074	32,352	118,309	3.7	42	1,358,784	11
1975	15,688	27,964	43,652	79,944	1.8	40	1,746,080	22
1986			57,782	60,300	1.0	37	2,137,934	35

Source:Derived from Stanton 1983.
Note:Hours/Inpatient/Week represents the (number of nurses * average hours) / number of inpatients.

TABLE F.9
MENTAL HOSPITAL NURSES BY SEX, MALE / FEMALE EARNINGS RATIO, AND INDEX OF PAY COSTS ASSUMING EQUAL PAY, ENGLAND & WALES, VARIOUS YEARS

Year	Nurses			ratio female/ male	
	Male	Females	Total	earnings	equal pay index
1852	353	400	753	0.6	1.4
1900	3,827	4,471	8,298	0.7	1.3
1909	5,131	5,741	10,872	0.7	1.2
1913	5,720	6,575	12,295	0.8	1.2
1922	6,864	8,575	15,439	0.8	1.1
1936	8,658	11,085	19,743	0.8	1.1
1945				0.8	
1948	10,473	10,138	20,611	1.0	1.0
1956	10,808	13,019	23,827	1.0	1.0
1959	12,438	15,589	28,027	1.0	1.0
1965	12,909	18,347	31,256	1.0	1.0
1968	13,278	19,074	32,352	1.0	1.0

Source:Derived from Stanton 1983.
Note:Equal pay index based applying equal pay to the earlier years and expresing resulting expenditure as a ratio of actual expenditure.

APPENDIX 5: TABLES TO CHAPTER 9

TABLE G.1
ADMISSION RATES (PER 100,00 PERSONS) BY 'FORM', ENGLAND & WALES, 1883/4 TO 1920

	1883/4	1899-10	1909-13	1920
Mania	19	21	9	7
Melancholia	10	15	10	11
Dementia	5	6	7	13
Senile Dementia	1	3	3	3
Epilepsy/GPI/MH	0	2	9	0
Total	39	50	42	42

Sources: Annual Reports of LUnacy Commissioners

TABLE G.2
ADMISSION RATES (PER 100,000 PERSONS) BY DIAGNOSIS, ENGLAND & WALES, 1952-86

Year	1952	53	54	55	56	57	58	59	1960	1970	71	72	73	74	75	76	77	78	79	80	81	82	83	84
Schizophrenic	14	15	15	16	15	15	16	16	17	16	14	13	13	11	12	12	11	10	9	10	10	9	9	9
Senile Dementia	13	13	14	15	15	15	16	16	17	13	12	11	10	10	11	11	11	11	12	13	13	13	14	15
Other Psychoses	10	14	16	16	17	16	17	17	17	15	14	14	15	15	15	15	14	14	11	12	12	12	12	13
Affective Disorders	21	24	26	29	30	31	32	37	39	14	13	12	12	11	11	11	11	10	8	9	9	8	9	10
Depr.NEC	0	0								0	0	0	0	0	0	0	0	0	22	23	23	22	21	23
Metal Retardation	0	0								1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Drug-related	0	0								1	1	1	1	1	1	1	1	0	0	0	1	1	2	2
Alcohol-related	0	0								4	4	5	5	6	6	6	7	7	7	9	8	8	8	9
Personality Disorders	4	4	4	4	5	5	6	7	8	12	12	12	12	12	12	11	12	11	10	11	11	9	9	10
Neuroses	16	17	19	19	19	19	20	22	23	24	24	21	21	20	20	20	19	17	14	15	15	14	13	13
Others	9	9	3	4	4	5	5	5	7	37	37	38	38	35	36	35	35	34	10	11	11	11	13	10
Total	87	96	97	103	105	106	112	120	128	137	131	127	127	121	124	122	121	114	103	113	113	107	110	114

Sources: 1952-1960 General Registry Office
1970-1986 Mental Health Enquiry.
Notes: Depr. NEC = Depression Not Elsewhere Classified

TABLE G.3
INPATIENTS % BY DIAGOSIS, MENTAL HOSPITALS & UNITS, ENGLAND & WALES 1963, 1971, 1981
(figures all in %)

Year	1954	1963	1971
Schizophrenia/Paranoia	37	49	44
Manic Depression/Affective Disorder	20	15	10
Senile Dementia	13	11	
Other Psychoses	9	8	11
Psychoneneuroses	3	4	
Behaviour & Character / Personality Disorder		2	4
Mental Handicap		5	4
Other Psychiatric Conditions	34	2	11
Other		3	2
Total	100	100	100

Sources: Inpatient censuses 1954, 1963, 1971, Department of Health

TABLE G.4
INPATIENTS PER 1,000 BY DURATION OF STAY, ENGLAND & WALES, 1964-86

Year	< 1 Year	1-5 Years	> 5 Years	All
1963	0.70	0.36	1.78	2.84
1964				
1965	0.70	0.35	1.64	2.69
1966	0.69	0.35	1.59	2.63
1967	0.70	0.33	1.53	2.56
1968				
1969	0.65	0.31	1.42	2.38
1970	0.66	0.31	1.36	2.33
1971	0.64	0.47	1.16	2.27
1972	0.62	0.44	1.09	2.15
1973	0.62	0.41	1.02	2.05
1974	0.58	0.40	0.96	1.94
1975	0.58	0.40	0.90	1.88
1976				
1977	0.57	0.40	0.79	1.76
1978	0.57	0.39	0.75	1.71
1979	0.57	0.39	0.70	1.66
1980	0.58	0.38	0.65	1.61
1981	0.58	0.38	0.62	1.58
1982	0.57	0.37	0.58	1.52
1983	0.56	0.36	0.55	1.47
1984	0.56	0.33	0.51	1.40
1985	0.58	0.32	0.46	1.36
1986	0.55	0.32	0.42	1.29

Source:1963 Inpatient Census
1964-1986 Mental Health Enquiry

TABLE G.5
MENTAL HOSPITALS,ENGLAND AND WALES:DEATHS AND LIVE DISCHARGES, DEATHS AS PERCENTAGE OF DISCHARGES BY DURATION OF STAY

	Deaths Duration < 1 year			Live Discharges Duration <1 year			Deaths As % Of All Discharges	
Year	Males	Females	Persons	Males	Females	Persons	>1Year %	>5 Years %
1964	2,621	4,731	7,352	3,140	3,636	6,776	52	73
5	2,841	5,094	7,935	3,222	3,881	7,103	53	73
6	2,986	5,352	8,338	3,094	3,529	6,623	56	77
7	2,747	5,115	7,862	3,116	3,656	6,772	54	66
8	2,747	5,115	7,862	3,116	3,656	6,772	54	68
9	2,997	5,573	8,570	3,167	3,576	6,743	56	69
1970	2,906	5,435	8,341	3,037	3,237	6,274	57	65
1	2,582	5,045	7,627	2,984	3,205	6,189	55	63
2	2,615	4,979	7,594	3,345	3,706	7,051	52	60
3	2,413	4,621	7,034	3,094	3,570	6,664	51	62
4	2,347	4,593	6,940	2,871	3,365	6,236	53	61
5	2,188	3,990	6,178	2,784	3,167	5,951	51	59
6	2,285	4,408	6,693	2,615	3,082	5,697	54	65
7	2,163	4,080	6,243	2,483	2,845	5,328	54	64
8	2,176	3,998	6,174	2,413	2,716	5,129	55	65
9	2,217	3,998	6,215	2,161	2,660	4,821	56	82
1980	2,143	4,015	6,158	2,267	2,673	4,940	55	66
1	2,125	3,811	5,936	2,176	2,679	4,855	55	67
2	2,131	3,888	6,019	2,131	2,752	4,883	55	67
3	2,061	3,735	5,796	2,184	2,641	4,825	55	65
4	2,041	3,586	5,627	2,612	3,096	5,708	50	60
5	2,061	3,660	5,721	2,177	2,905	5,082	53	59
6	1,982	3,425	5,407	2,453	3,063	5,516	50	54

Source:As Table G.4