

CARE AND CONTROL

THE
ROLE
OF
INSTITUTIONS
IN
NEW
ZEALAND

Social Monitoring Group
Report No. 2

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FOREWORD

During the last few years, there has been a move away from institutionalising people who need care or control. Community care has become the favoured option, with its social and economic advantages being proclaimed by many. Yet few analyses have been made of the effectiveness, efficiency and appropriateness of either form of care and control, separately or in comparison with each other.

This report arises from the Social Monitoring Group's concern that decisions are being made to shift people from institutions to community care, and vice versa, on the basis of incomplete information. The report is limited to a study of institutional care and control in New Zealand, but is nevertheless probably the first systematic study of the efficiency, effectiveness and appropriateness of institutional care and control. As with our first monitoring report, *From Birth to Death* (1985), it provides baseline information with which other comparisons can be made.

It is clear from the study that rather than maintaining institutional and community care as separate forms of care and control, there must be a careful integration between them, with each providing services complementary to the other. The study also shows that it is no longer appropriate to operate large institutions when not enough is known about either the residents or the organisation of the institutions. Nor is it appropriate for institutions to ignore the importance of social, economic and cultural influences.

It is hoped that the report will be read by the general public, policy makers and the residents and staff of institutions.

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CHAPTER 1: INTRODUCTION

Why look at institutions?

Until the early 1960s there was in New Zealand a commonly expressed sense of satisfaction with the development of health, social service and educational facilities. Many of these services were centred on or provided within institutions such as hospitals, boarding schools, children's homes and prisons. However, during the 1960s that acceptance was increasingly challenged. The post-war boom, which had sustained economic growth, began to decline and there were major changes in the population structure, with large numbers of children being born between 1945 and 1960 and large numbers of immigrants entering the country (Population Monitoring Group, 1985). An increasing amount of the nation's wealth was directed to meeting families' needs, especially in housing and education. At the same time the population, both Maori and non-Maori, was becoming more urbanised. While these broad social changes were occurring, there were also changes in approaches to people with social, psychological or health problems. In social, health and criminal justice systems there was greater emphasis on tackling problems within a community setting rather than using institutions as a means of "containing" people who experienced such problems. Reinforcing the drive toward non-institutional responses was a growing concern with individual rights and civil liberties.

However, experience in other countries, where the trend has progressed further, has led to considerable doubts among professional, community and consumer groups about certain community alternatives to institutional care or control and about deinstitutionalisation in some instances. Arguments that community care brings improved autonomy and a better quality of life have been seen as cynical rationalisations for cost cutting when adequate resources have not been made available to the providers of community care or have failed to follow deinstitutionalised patients and inmates into the community.

Significant changes continue to occur in New Zealand and cannot be ignored in developing strategies with respect to institutions and non-institutional care and control. These include the changing role of women. Their move to fuller participation in public life and paid work means that community approaches which assume the availability of women as care givers in the community need to be reassessed. Changes in the relative size of different age groups, particularly of the Maori population, and the ageing of the entire population are also of special significance.

Study objectives

The Social Monitoring Group (SMG) has undertaken this study to analyse changes in the provision of institutional care and control and in the usage of institutions, and to identify the strengths and weaknesses of institutions as forms of care and control. We expect that the key points and policy implications identified will be of assistance to policy makers, and of interest to the providers of institutional care and control and other concerned parties.

What is an institution?

For the SMG's purposes the essential features of an institution are that it

provides non-familial care, usually but not always in formalised settings, where the carers or controllers have no kin relationship with the residents. In addition, the degree of choice institutional residents have as to whether they stay in or leave an institution is often constrained. Those cared for or controlled in an institution tend to live there 24 hours a day. They sleep, eat and often work in the institution. Thus, the SMG has developed the following definition:

An institution is a place where residents choose or are compelled to reside for purposes of receiving care and/or control outside of a family setting.

Included in this definition are hospitals, boarding schools, residential schools for children with special needs, children's homes, children's health camps, prisons and other penal institutions, and old people's homes. Though administered by different bodies and catering for different groups of people in different ways, all these meet the criteria outlined in the definition above.

Approach to the task

This report contains an overview of the operations of the institutions listed above and examines how these institutions operate in terms of three key factors: resource usage, effectiveness and acceptability.

i) **Resource usage** addresses the use made of resources and where possible relates them to the quality of service given. Ideally efficiency rather than the more limited concept of resource usage would be addressed but available information does not allow that level of analysis.

ii) **Effectiveness** looks at the results achieved in terms of the organisation's own goals. This is not always possible as the goals may not be explicitly stated and have had to be assumed.

iii) **Acceptability** examines the attitudes, social values and responses of groups involved with the institutions, and their views on the use of resources and the type of service provided. Whether a service is acceptable or not may depend on the viewpoint of the observers, whether they are the individuals who are admitted to the institutions, their families, service providers, or taxpayers.

In assessing how institutions operate, often the values and perspective of only one of the parties involved are taken into account. The SMG sees several levels at which functioning should be assessed. There is a societal perspective which tends to focus on the costs to the country, both social and financial. There is the community/family perspective which focuses on the effects dependent people have on relatives and carers. Finally there is the perspective of the individual which emphasises individual well-being and rights, sometimes without regard to the effects on the other parties.

The SMG has tried to examine the resources used, effectiveness and acceptability of institutions from all three perspectives. The result is variable because the quality and quantity of the information is not uniform.

The final section of the report examines the policy issues relating to patterns of institutional usage.

CHAPTER 2: INSTITUTIONS FOR PHYSICAL HEALTH

Introduction

Hospitalisation is the form of institutionalisation people are most likely to encounter in their lives, though the likelihood of admission is influenced by sex, ethnicity and age. The hospital system in New Zealand is a dual one. The majority of services are provided by the state, but a significant number are also provided by the private sector, consisting of voluntary agencies, charitable trusts and services provided strictly for profit. This chapter discusses the contribution made by each of the sectors.

Public general hospitals

Between 1982 and 1984 the average length of stay in a public hospital per patient decreased slightly from 10.9 days in 1982 to 10.6 days in 1984 (Department of Health, 1982a and 1984c). However, numbers of admissions increased over this same period from 414,000 in 1982 to 429,745 in 1984 (the fact that maternity figures were not included in public hospital statistics before 1981 makes it difficult to explore trends, for total admissions, over a longer period of time). A comparison of male and female admission rates showed that the overall increase in public hospital admissions between 1982 and 1984 could be attributed to an increase in the female admission rate from 1,523 admissions per 10,000 in 1982 to 1,564 admissions per 10,000 in 1984, whilst the male admission rate decreased slightly from 1,076 per 10,000 in 1982 to 1,071 in 1984.

The increase in the female admission rate is explained, mainly, by increases in special admissions without current diagnosis, which are admissions for a variety of reasons including routine and diagnostic examinations and tests. Admissions for pregnancy and for abortion also increased.

Infogram 2.1 shows that numbers and rates of admissions were influenced by both age and ethnicity. Admission rates are high for infants but decline rapidly with increasing age. They again peak for young adults and then decline before once again increasing with advancing age. Maori admission rates are consistently in the order of double the comparable non-Maori rates, for all age groups.

The first year of life is the period when hospitalisation is most likely. Hospitalisation is even more likely if an infant is male, and extremely likely if an infant is Maori. Total infant admission rates are high and have risen by almost one-third since 1978. Why there should have been such an increase is unclear. It seems unlikely that it is due to real changes in health, though this cannot be excluded. It appears more likely that the increase is due to changes in medical practice. This explanation is supported by the fact that the average length of stay per patient has decreased from 6.8 days in 1978 to 5.3 days in 1984, whilst the ratio of readmissions to first admissions appears to have increased. This indicates that although young children are staying for shorter periods of time, per admission, their chances of being readmitted in the same year have increased.

Infogram 2.1**PUBLIC HOSPITAL ADMISSIONS**
(By age and ethnicity, 1984)

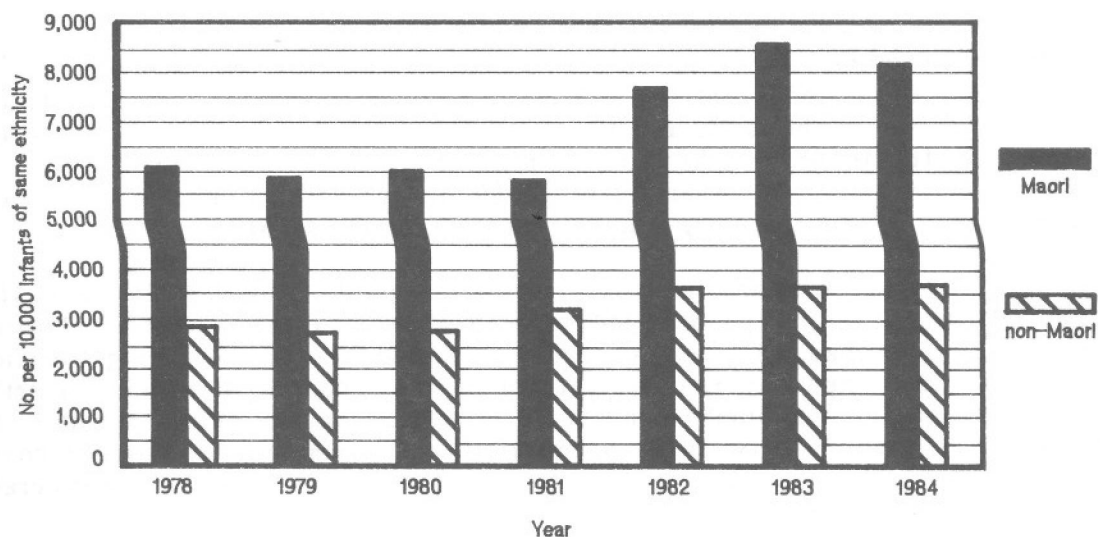
Maori	0-5 yrs	5-14 yrs	15-24 yrs	25-44 yrs	45-64 yrs	Total (0-65)
No. of admissions	10,251	6,024	17,798	15,029	6,230	55,332
No. of admissions per 10,000 people of same age and ethnicity	3,094	822	2,526	2,053	1,878	1,953
Percent of all Maori admissions	18.5%	10.9%	32.2%	27.2%	11.3%	100.0%
Non-Maori	0-5 yrs	5-14 yrs	15-24 yrs	25-44 yrs	45-64 yrs	Total (0-65)
No. of admissions	33,711	27,141	62,142	104,502	60,961	288,457
No. of admissions per 10,000 people of same age and ethnicity	1,540	551	1,178	777	1,101	1,091
Percent of all non-Maori admissions	11.7%	9.4%	21.5%	36.2%	21.1%	100.0%
Admission rates Maori : non-Maori	2.0 : 1	1.5 : 1	2.1 : 1	2.6 : 1	1.7 : 1	1.8 : 1

Sources: Department of Health, Hospital and Selected Morbidity Data 1984,
Department of Statistics, Population Estimates 1984.

The rate of Maori infant admissions to public hospitals is alarming. Infogram 2.2 shows that the Maori infant admission rate has consistently been twice the non-Maori rate for a number of years, and has been increasing. In 1984, for instance, for every 10,000 Maori infants (less than one year of age), there were over 8,417 hospital admissions (as opposed to 3,726 for every 10,000 non-Maori infants). Maori infants represented 24% of admissions in 1984 but made up only 12.2% of the total population aged less than one year. Maori admission rates are even higher for certain conditions, particularly acute respiratory infections, pneumonia and chronic obstructive pulmonary diseases (including asthma).

After the first year of life the rate of hospitalisation drops dramatically for both Maori and non-Maori children. However, considerable differences between the Maori and non-Maori rates persist. Maori children remain more likely to be hospitalised, and this applies for almost all conditions.

Infogram 2.2 PUBLIC HOSPITAL ADMISSIONS OF INFANTS AGED LESS THAN 1 YEAR (By ethnicity, 1978-1984)



Sources: Department of Health, Hospital and Selected Morbidity Data 1978-1984, Department of Statistics, Population Estimates 1978-1984.

Respiratory disorders are major reasons for the admission of young children to hospitals. In 1984 acute respiratory infections, pneumonia and chronic obstructive pulmonary disorders accounted for 17% of all admissions of children aged between 0 and 14 years. With increasing age however, accidents, fractures and lacerations are more frequently the reasons for admission. Together these incidents account for almost a quarter of the children aged between 5 and 14 years admitted to public hospitals.

Research has shown that the likelihood of hospital admission is much higher for children living in families which experience high levels of stress (Beautrais et al, 1982). This is because of the strain such experiences place upon the parents. Their ability to provide adequate care for their children decreases, and the susceptibility of their children to illness increases. The amount of stress seems to be more important than common familial or social factors, such as family size or income, in explaining the likelihood of hospital admission.

For almost all conditions, since 1974, there has been a substantial shortening of stay with an average decrease of 1.5 days (21%). Maori children are kept in hospital considerably longer than non-Maori children. In 1984, Maori children (aged 1-14 years) stayed in hospital for an average of 5.8 days compared to 4.5 days for non-Maori children. Given that they are there for the same conditions, there is no obvious reason why this should be so. It may reflect doctors' perceptions of the quality of care the children are likely to receive upon their return home. Alternatively it may be a result of a tendency by Maori people to consult doctors later than other ethnic groups (Mackay, 1985). This may lead to a

more serious condition at the time of hospital admission and therefore to a longer stay.

Though the numbers involved are small, some girls aged less than 15 years are admitted to hospitals as a result of pregnancy. In 1984 there were 55 such admissions to public hospitals, usually for delivery.

New Zealand teenagers or young adults have a high fertility rate relative to their peers in other developed countries. Rates in New Zealand are approximately four times those in the Netherlands and twice those in Scandinavia. The New Zealand abortion rate for 16 to 19 year olds is high and has increased steadily over the past years with the result that during 1983 almost 25% of known pregnancies amongst women in this age group were terminated (Sceats, 1985).

In all, about 7,500 abortions were carried out in public hospitals in 1984. Half of these abortions were to people aged between 15 and 24 years, with 45 abortions to girls aged less than 15 years. Changes to the legislation governing abortions in 1977 and 1979, and the requirement for hospital boards to provide abortion facilities, has meant the number of abortions carried out in public hospitals has increased by about 30% between 1978 and 1984. However, not all hospital boards provide facilities for abortions and so some women have to travel considerable distances in order to obtain an abortion (Sceats, 1985).

Changes in the collection of health statistics, notably the inclusion of maternity figures in hospital admissions following 1981, makes it difficult to identify patterns in admissions for young adults and for women in particular. However, it is clear that, as age increases, pregnancy is a major reason for hospitalisation. In 1984, men aged between 15 and 24 were admitted to public hospitals at a rate of 747 per 10,000 and women at the much higher rate of 1,955 per 10,000, reflecting the significance of pregnancies. Large differences between the admission rates of Maori and non-Maori people continue and are in part due to major ethnic differences in fertility rates and patterns of illness. The Maori admission rate for 15 to 24 year olds during 1984 was 2,526 per 10,000, which was over twice the non-Maori rate of 1,178 per 10,000. The differing admission rates may also reflect differing cultural definitions and responses to illnesses, and the fact that primary and preventive medical services are often less readily available in the areas where most Maori people live (Davis, 1986).

For older women (those aged between 25 and 44 years), conditions related to pregnancy remain the most common reason for hospital admission. For these women, however, child bearing is more likely to be planned. The vast majority are non-Maori (88%), reflecting the tendency of non-Maori women to bear children at a later age than Maori women. Beyond 45 years few women enter hospitals for conditions related to pregnancy: only 62 did so during 1984.

Of the 51,897 babies born during 1984, 99% were delivered in hospitals. This has not always been the case, particularly for the Maori. In 1959, 9.5% of Maori births occurred other than in hospitals but by 1984 the proportion was negligible (0.02%).

For the non-Maori there has been a shift in place of birth from private to public hospitals. Private hospitals in 1945 provided almost 50% of the available maternity beds but by 1984 provided only 2% (44) of the available beds. By contrast the number of available maternity beds in public hospitals grew in line with the "baby boom" of the 1950s and 1960s. Public maternity beds peaked at

2,979 in 1972. Since then there has been a gradual reduction in number to 2,121 in 1985 (Department of Health, 1985c). This recent reduction has particular characteristics. Most notable has been the closure of small maternity units whether attached to larger general hospitals or existing as independent institutions.

Since 1972 there has been a decline in the time women spend in hospital following birth. A study of maternal and infant care in Wellington showed that whereas 31% of women stayed in hospital for more than nine days following delivery in 1972 only 18% did so in 1978 (Briggs and Allan, 1983). By 1984 the average length of stay following birth was 6.2 days (Department of Health, 1984b).

For men aged between 15 and 24 years, accidents, injuries and poisonings make up 50% of hospital admissions. For women the rate is much lower, about 17% of admissions (when admissions related to pregnancy are excluded). This reflects differences in lifestyle, attitudes and opportunities. For both sexes, however, this is the period of life during which traffic accidents (Ministry of Transport, 1985) and criminal injury to the person is most likely to occur. For men this is the period during which suicide and attempted suicide is most common (Taylor and Cummings, 1986). Accidental and intentional forms of injury lead to considerable numbers of hospital admissions and show little indication of becoming less significant.

As further ageing occurs, admissions resulting from injuries and poisonings continue to represent a significant proportion of all admissions to hospitals (10% of admissions of people aged between 25 and 64 years). During 1984, 12,697 people aged between 25 and 44 years and 6,061 people aged between 45 and 64 years were admitted as a result of these conditions. The bulk of those admitted were men (approximately 70%) and the largest single cause of injuries (approximately 30%) was motor vehicle accidents. Accidental falls (13%) and criminal injuries (7%) were also significant for men, whilst for women injuries or poisonings resulting from complications of surgical and medical care (18%), and attempted suicide and self-inflicted injury (13%), were of concern.

Admissions for injuries and poisonings are often avoidable, especially those related to the consumption of alcohol and to unnecessary risk taking. Accidents arising in the workplace can be minimised by better training of workers in addition to the installation and use of safety equipment and procedures. Although it is not possible to determine the number of admissions resulting from work-related accidents, the results of a survey of one accident and emergency unit showed that 45% of men aged between 15 and 64 years attended it as a result of work-related accidents (Hyslop et al, 1983). Surprisingly, employers still argue that too great an emphasis upon safety may endanger the profitability of a business and cause unemployment (Rowe, reported in *The Dominion*, 7 June 1986).

For people aged more than 45 years, and over 65 years in particular, degenerative conditions such as diseases of the circulatory system (including heart disease, blood pressure and strokes), cancers, diseases of the digestive system, injuries and poisonings, and diseases of the respiratory system are the leading reasons for hospitalisation. Such conditions typically result in longer periods of hospital stay, and require more intensive care, than the conditions associated with the admissions of most younger people. Such conditions accounted for 65% of the 85,956 admissions of over-65 year olds in 1984. Admission rates of people aged 65 years or more have been steadily increasing since 1964. Their 1984 admission rate of 2,607 per 10,000 was almost twice that of the total population for the same

year.

Because of their greater representation in the older age groups and the cumulative effect of degenerative conditions, women have a greater likelihood of disability and consequent vulnerability. Women aged more than 75 years have a disproportionately high admission rate overall and, in particular, are over-represented amongst people admitted as a result of strokes, conditions related to high blood pressure, and falls and fractures.

Degenerative diseases are often related to hypertension (high blood pressure), inadequate exercise, cigarette smoking, and obesity, all of which tend to be related to environmental conditions and social structures. For example, the hazards of cigarette smoking have been investigated and are known, yet an estimated 28% of people aged between 15 and 19 years, 38% of those aged between 20 and 29 years, and about 33% of those in their forties continue to be cigarette smokers. This situation continues in part because of a social order which can, on one hand, allocate significant resources to campaigns aimed at alerting people to the dangers of cigarette smoking and yet, on the other hand, continue to allow far greater resources to be channelled into the promotion of cigarette smoking. An example of the significance of environmental conditions is provided in a study by Dryson (1986). He surveyed 1,342 working men and concluded that high blood pressure, inadequate exercise, cigarette smoking and obesity tend to occur together, and are often related to stress which may itself be related to working environments.

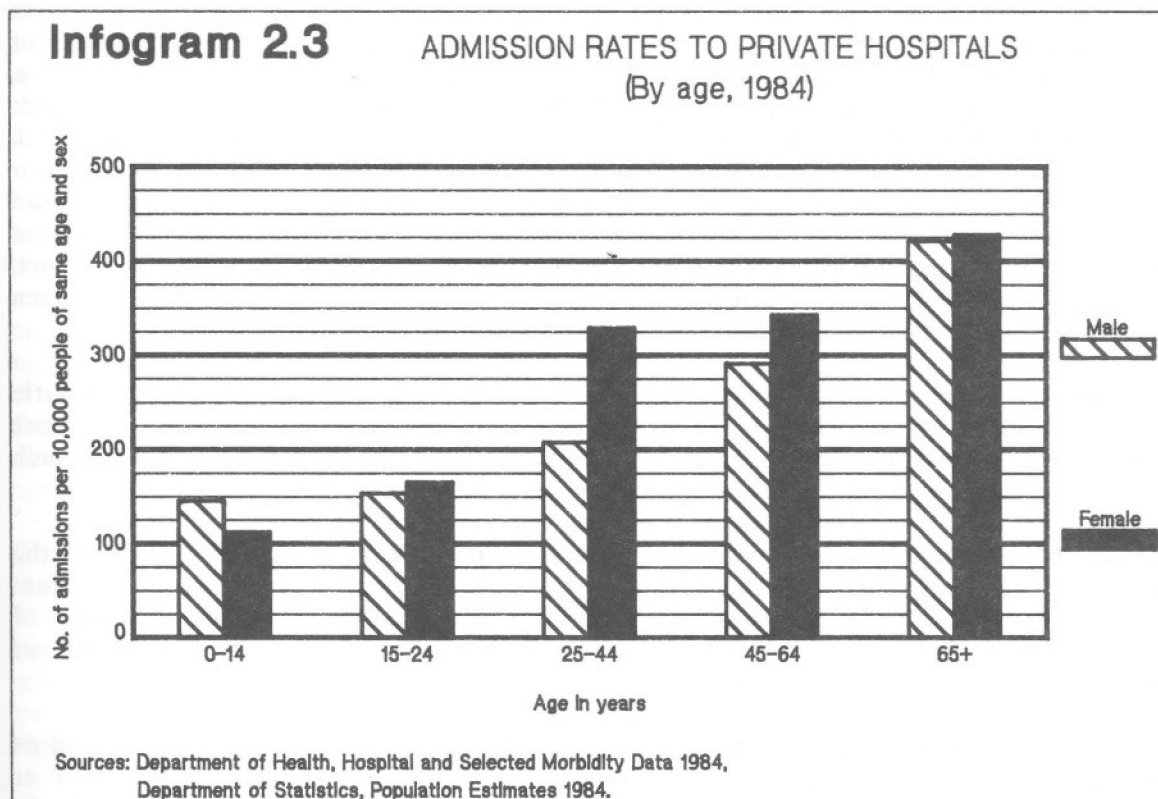
Private hospitals

Rates of admission to private hospitals have increased in recent years. In 1979 there were 207 admissions per 10,000 people but by 1984 the rate had increased to 238 per 10,000. Both male and female rates increased, the male at a somewhat greater rate than the female, though women continued to be more likely to be admitted than men. Unlike public hospitals, however, private hospitals are one of the few institutions in which Maori people are unlikely to be found. Of the 64,489 people who had operations in private hospitals during 1984, only 1,650 (2.6%) were Maori.

As with public hospitals, age is closely related to admission rates. Infogram 2.3 shows how increasing age is associated with an increasing likelihood of admission to a private hospital bed. The reasons for admission and the types of beds to which people are admitted also change with age. For most people aged less than 65 years, admission is for a surgical procedure. Such admissions are frequently for operations which are relatively simple, elective, and involve short periods of stay.

In contrast, a large proportion of people aged more than 65 years, and more than 75 years in particular, are admitted into geriatric long-stay beds. The length of stay for such patients may have more to do with social and family circumstances than actual medical conditions. Geriatric long-stay beds are one of the subjects dealt with in detail in Chapter 8. It is, however, worth noting that there has been a change in private hospital bed usage over the last 20 years, which has seen a dramatic decrease in the provision of medical, maternity and psychiatric beds and a corresponding increase in surgical and especially geriatric beds. About 75% of the beds provided by private hospitals in 1984 were geriatric long-stay beds. This shift in bed usage may, however, only represent a more accurate recording of

usage. It is likely that many of the beds recorded as "medical" in the past were actually used as geriatric long-stay beds. The decrease in maternity and psychiatric beds is, however, real.



The chance of receiving treatment in a private hospital at any age depends, largely, upon access to private medical insurance and to Accident Compensation Corporation payments. Such access, for medical insurance in particular, is related to sex, socio-economic status and ethnicity (of either the individual or their guardian). This relationship sees few Maori people in private hospitals.

Almost all admissions of children to private hospitals are for surgery, especially for myringotomies, or operations on the ear, (35% of admissions in 1984) and tonsillectomies (20% of admissions in 1984). Private hospitals are performing an increasing proportion of these operations. In 1979, 40% of tonsillectomies were performed in private hospitals and this rose to 45% in 1984. Of myringotomies, 51% were performed in private hospitals in 1979 and 58% in 1984. The likelihood of children undergoing elective surgery and undergoing that surgery in a private hospital is greatly increased if their family holds medical insurance. Fergusson et al (1985) have shown that having medical insurance is a more important factor in determining whether children have ear, nose or throat surgery than the child's history of infection or their social or economic circumstances (social and economic circumstances may well determine access to medical insurance, however).

As well as the already-noted shift of birth services from the private to the public sector, there has also been a similar shift in abortion services and in services relating to reproduction and development. Contraceptive management and examinations, in private hospitals decreased 25% from 8,801 admissions during 1977 to 6,612 during 1984. Similar admissions to public hospitals increased by 41%

over the same period of time.

The decline in admissions for contraceptive management and examination, abortion and childbirth has been compensated for by increasing numbers of admissions for disorders of the musculoskeletal system and for injuries and other conditions resulting from accidents and poisonings. Such admissions more than doubled for both men and women between 1979 and 1984. Many of the admissions of young people, especially young men, were attributable to accidents incurred on the sports fields and on the roads. Most commonly, these injuries included fractures of the skull, sprains and strains of joints and adjacent muscles, and the late effects or complications of injuries. For older adults, disorders of the joints and especially problems with the knee were significant. Of the 14,782 people admitted for these conditions during 1984, 57% were men. On average, admission was short, typically about three days. For admissions of this type the cost of care is often paid, at least in part, by the Accident Compensation Corporation.

Also termed diseases of the musculoskeletal system are a variety of arthritic conditions which result in a large proportion of admissions of people aged more than 45 years to private hospitals. With increased age the frequency of such admissions rises, replacing admissions for sport and road accident injuries.

Diseases of the genito-urinary system (including disorders of menstruation, of the uterus and of the breast) and hernias are the most frequent reasons for admissions of people aged between 25 and 64 years to private hospitals. The majority of those admitted for these conditions (74% in 1984) were women, with periods of hospitalisation being brief (on average 4.8 days).

Hernias are the most frequent reason for admissions of men aged between 45 and 64 years to private hospitals. During 1984, 87% of the 3,990 people admitted to private hospitals for the treatment of hernias were men. When a hernia results in surgery, the cost of the procedure is often paid for by either the Accident Compensation Corporation or private medical insurance. Of all people treated for hernias during 1984, 45% were treated in private hospitals.

Over the last ten years, private hospitals have come to play an increasing role in the hospital care of the elderly. Since 1978 the percentage of geriatric beds provided by private hospitals has dramatically increased, from 34% of the total in 1978 to 54% in 1984.

As people grow old they are admitted in increasing numbers to private hospitals, especially for diseases of the nervous system and supplementary classifications (which are discussed in Chapter 8). Admissions to private hospitals for diseases of the nervous system have increased from 10.7% of admissions in 1974 to 16.4% in 1984. Frequently such admissions are for surgical procedures relating to disorders of the eye and length of admission is brief. However, a significant proportion of admissions result in long or permanent periods of hospitalisation and are dealt with in Chapter 8.

Hospices

As of March 1986 there were six hospices operating in New Zealand (Department of Health, 1986a). Statistics are not readily available for all and when available vary in quality from hospice to hospice.

The hospice movement in New Zealand is still in its formative stages but, unlike the majority of other institutions, hospices have a clearly defined philosophy and objectives. They are planned to provide care and support to the terminally ill. In caring for these people, hospices have the objectives of relieving physical symptoms (pain in particular) and emotional problems which are of distress to the patient. Such care can be active or passive. The most appropriate form of care is that which provides the maximum relief coupled with the greatest possible quality of life for the patient. Prolonging life is not regarded as a priority if it infringes upon quality of life.

Though in the formative stages, there appears to be emerging a system of dual hospice provision, with hospices being provided both by, and independently of, hospital boards. At present most hospices offering inpatient care are operated by religious organisations and community trusts. None charge formal fees to the people they care for. Independent hospices are heavily reliant upon community support for funds and ancillary staffing. In at least one case some of the costs of providing beds are met by the local hospital board on a contractual basis (New Zealand Private Hospitals Association, 1985). In addition to discrete hospice units, the hospice philosophy is being applied to terminal care in some public hospitals where special facilities are being provided.

The type of care provided in hospices is not necessarily the usual institutional type. Indeed inpatient care may be incompatible with the objectives of the hospice movement if it detracts from the patient's quality of life. It has been emphasised by workers involved in the hospice movement that "given their choice, most patients facing death would prefer to die in their own bedrooms at home, but we must ensure that they die in dignity and free from pain" (Wright-St Clair, 1983 p.50). However, inpatient care becomes necessary when difficulties are being encountered in relieving symptoms, and to provide necessary relief for the carers of the dying person. When patients are admitted as inpatients the period of stay tends to be brief (8.6 days during 1983/84 at Te Omanga hospice).

The majority of people cared for by hospices are over 65 years of age and are cancer patients. At the Mary Potter hospice in Wellington, 62% of the patients treated in 1981/82 were more than 65 years of age. The hospice estimated that included amongst these people were half of those to die of cancer in Wellington during the year.

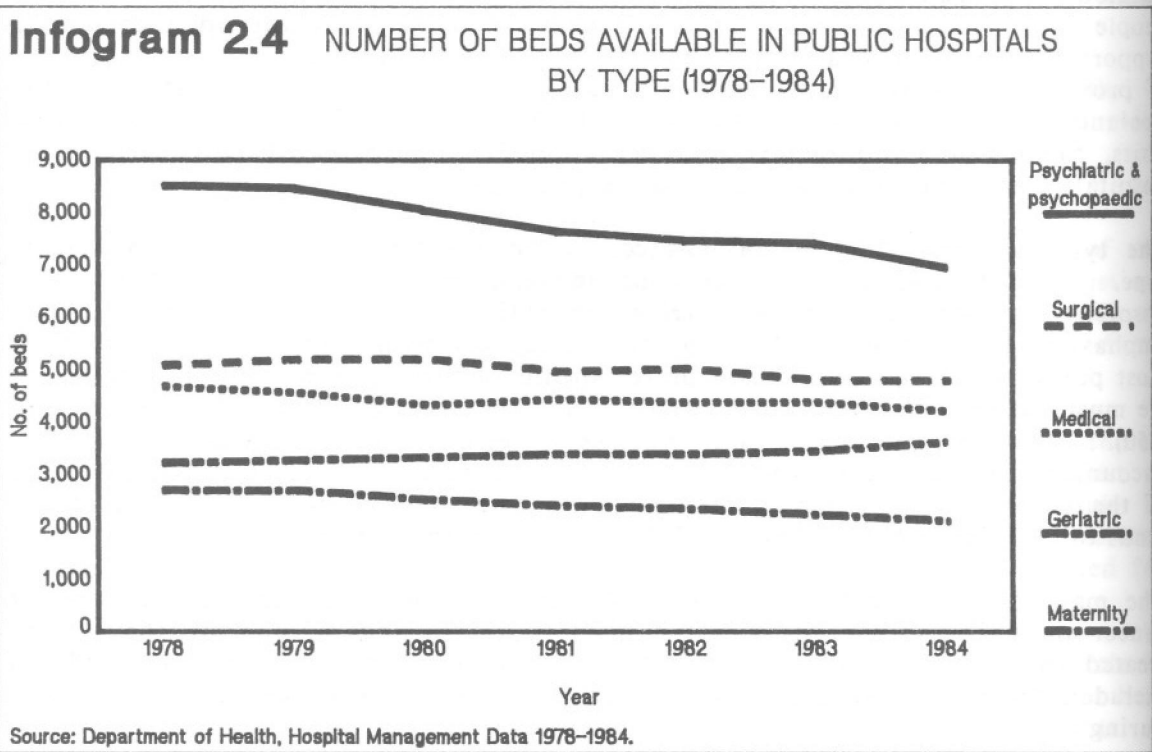
Resource usage

The proportion of health funding spent on institutions is reported to have increased from 64.5% in 1960/61 to 69.5% in 1979/80 (Hyslop et al, 1983). Total public health expenditure declined, in real per capita terms, by 13% between 1982 and 1986 (Cooper, 1986), but it is not possible to determine how much that decline affected spending on institutions, as opposed to spending on primary and community care. Monies are distributed to hospital boards by the Health Department but the accounting procedures used by boards do not allow determination of whether the money has gone to institutional or non-institutional services.

Funds are apportioned to boards according to their population, with adjustments for structural elements of the population such as the number of people within certain age groups, and with some allowances for special services that may be provided. The population-based funding formula, in being applied at a regional level, takes account of all hospital services in the region. In assessing each

area's needs, public and private hospital provision is considered. This process has resulted in a reduction in the total number of hospital beds available from 32,552 in 1978 to 30,999 in 1985. The decrease has not, however, been uniform in all service areas or between public and private service providers.

The most marked decrease in bed numbers in public hospitals has been in the numbers of psychiatric and psychopaedic beds, which are discussed elsewhere in this report. Reductions in the birth rate and in the length of time mothers spend in hospital following birth have also led to a decrease in the number of maternity beds provided (Infogram 2.4). The demand for maternity beds is, however, likely to continue, and possibly increase, in the immediate future as the children of the "baby boom" years continue having children themselves.



The way maternity services are delivered has also changed with a move away from small maternity hospitals. A study in Christchurch found that in the five years following the closure of the only small public maternity unit in that city, deliveries by general practitioners fell from 1,400 per year to 760. Deliveries carried out by specialists rose from 250 to 670. Attributing this change to decreased numbers of beds available to general practitioners in maternity hospitals and to the low rate of the maternity benefit, Kerr (1986) questions the use of specialist resources where general practitioners previously operated at less cost.

Changes in therapeutic procedures, coupled with the desire to reduce costs, have led to a shortening of average stays in New Zealand hospitals. For almost all conditions the length of stay has dropped, by as much as 70% in some cases. For a few conditions there has been an increase in length of stay, notably for people with disorders related to the circulatory system.

The average length of stay in New Zealand hospitals is relatively long by international standards. In the United States of America, for example, the average length of stay in 1982 was 7.1 days. The OECD, in reporting such differences in stay, points out that a short stay is not necessarily more cost-effective than a longer stay as recovery may be slower without full hospital care and there may be an increased possibility of relapse and consequent readmission.

The cost per patient-episode is mostly determined by length of stay. Pugh (1985) showed that, at \$275 per day, the daily cost of surgical care in hospitals administered by the Otago Hospital Board was almost twice that of geriatric care and three times that of psychiatric care. However, the length of stay for surgery is much shorter than for the other conditions and means the cost per patient is much less.

Pugh's work is a rare example of the costing of particular services. Even where charges are made for public hospital services, mostly to non-New Zealand citizens, the amounts charged are derived from historical charges, periodically adjusted on an ad hoc basis, rather than from calculated costs.

It is difficult to draw firm conclusions about the efficiency of public hospital services because of the lack of information, especially information about finance. However, there are clear signs that hospital administrators have become more concerned about the efficiency of their systems and that changes are occurring. Better information systems should soon be in place, allowing more extensive assessments of procedures to be undertaken. It seems particularly important in a system where non-administrative professionals have most control of resources (for example, doctors prescribing pharmaceuticals and determining length of stay) that they are aware of the costs they incur in their use of those resources.

The number of beds available in private hospitals has risen and the number available in public hospitals has declined. In 1976 the private sector contributed just over 17% (5,119) of all hospital beds but by 1985 it provided almost 19% (5,918) of beds. The type of health care offered by private hospitals changed during that time. The numbers of beds available for the treatment of medical disorders declined dramatically but were replaced by increases in surgical beds. This shift reflects changes in sources of funding. Surgical bed increases are a response to private medical insurance and to funds from the Accident Compensation Corporation (ACC), both of which spread the individuals' costs over all contributors, making access to private treatment easier. In other words, the services provided by private hospitals have developed where financial support is most readily available.

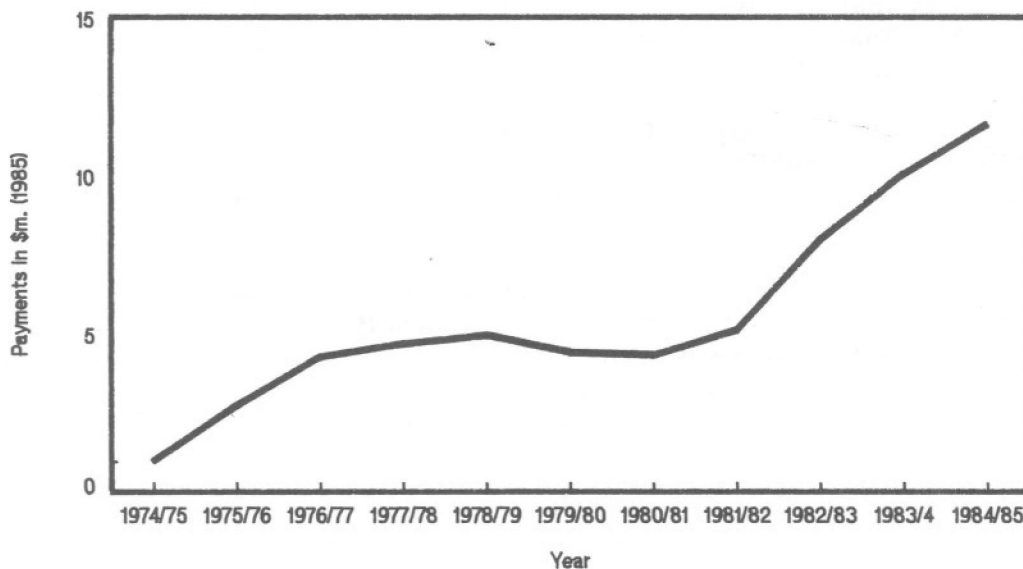
The ACC's methods of data collection do not allow the inferences above to be fully tested. However, during the period 1974/75 to 1984/85 (financial years) there was a tenfold increase in payments by the ACC to private hospitals (Infogram 2.5).

It has been estimated that in total 46% of private surgical costs are paid from medical insurance, 22% from ACC payments, and 18% from state subsidies and benefits, with only 14% of costs coming directly from patients (Smith, personal communication 1986). Further, it has been found that, of the people who do have private medical insurance, 15% have their premiums paid by their employers as an employment-related benefit (Cooper, 1986). People who are unemployed, who have a low level of educational achievement, who are full-time parents, who hold low status jobs or come from a background of low socio-economic status are the people least likely to be covered by medical insurance, and consequently least likely to

have access to private health services (Chetwynd et al, 1983).

Infogram 2.5

ACC PAYMENTS FOR TREATMENT IN PRIVATE HOSPITALS (1974/75-1984/85)



Source: Accident Compensation Corporation, unpublished data.

The Public Service Association argues that if all government grants/subsidies to private hospitals are included, then more than 48% of the private system's costs are met from public funds. This money, they suggest, could be better spent in the public sector on the provision of essential services (Public Service Association 1985).

Effectiveness

Outcomes of hospital treatments are not easy to assess. The goals of hospital services are more often assumed than expressed, especially in the long-established services. Furthermore, critical attention paid to the results that hospitals achieve, relative to other styles of care, is often clouded by considerations of cost and of professional dignities.

The appropriateness and effectiveness of hospital care for physical conditions has been questioned in a number of areas. Maternity care has been the arena of most continuing debate on the appropriateness of hospital, as against home-based, services (Donley, 1986). There has also been a great deal of debate about the type of hospital service which can most effectively provide maternity services.

The closure of small hospitals has been argued on the grounds of efficiency (Advisory Committee on Small Hospitals, 1983). However those arguments have been challenged by recent research which shows that small hospitals are as safe as larger units (Rosenblatt et al, 1985). There has been strong argument for the retention of small maternity hospitals with suggestions that the real reasons for centralisation of maternity services lie not in concerns about greater safety, but in the wish of specialists to maintain and even increase their control over the birth process (Coney, 1984).

It has been suggested that large maternity hospitals over-employ high technology (Davis, 1981). The Mental Health Foundation of New Zealand has argued that this may be a causal factor in postnatal depression, and that home births attended by midwives may be more effective in this area (Mental Health Foundation of New Zealand, 1986).

A concern about the appropriateness of hospital care has also been extended to other areas of health care. One of the most dramatic examples is in the care of heart attacks, where it has been shown that home care is as effective as hospital care and less disruptive to the individual (Mather et al, 1976).

Concern has been expressed at the incidence of iatrogenic disorders (conditions caused by the treatment for other disorders) associated with hospitalisation. Complications resulting from surgical and medical treatment are responsible for 14% of admissions of women aged between 25 and 64 years (Department of Health, 1984b). Further, there is evidence which suggests that the hospitalisation of elderly people increases their likelihood of being admitted to some form of long-term care (see Chapter 8).

The provision of new or extra services, especially those with high technological and professional components which absorb large amounts of health monies relative to the number of people they serve, has led to wide debate and controversy. Recent examples of this include facilities for heart surgery and for the treatment of people with fertility problems. In effect, a decision has to be made about the importance and priority of providing an ever-expanding range of services. The political influence of those suffering from particular disorders is likely to be significant in such discussions, as is the "glamour" associated with the competing claims of different services. Thus the image of surgery as a life-saving measure may engender more sympathetic attention than the less spectacular role of community-based nursing services which have an important preventive role.

In defence of private hospitals, Moore and Frater (1986), in a study of private and public hospital surgical care commissioned by the Southern Cross Medical Care Society, showed that patients stayed for a shorter time in private than in public hospitals. They suggested that this is indicative of greater efficiency in the private sector. However, as was noted earlier in this chapter, length of stay does not necessarily indicate efficiency in terms of either cost effectiveness or patient outcomes. Furthermore, although the study sought to compare equivalent operations in both sectors, there is some doubt about whether the situations were fully comparable. For instance, whether a family holds medical insurance is a more important determinant of whether children receive surgery in private hospitals than the seriousness of the conditions suffered (Fergusson and Harwood, 1985). This may extend to other age groups and indicates that the two sectors may treat conditions which are different in degree of both severity and urgency. To be definitive, a study of the two systems would need to assign patients randomly to treatment in either the public or private systems so that differences between

people and conditions can be controlled.

There are substantial amounts of public money going into the private health sector, as well as into the public sector, yet there is a lack of information about what it is spent on and who receives the benefits. Because the public has a right to know how its resources are being spent, the accounting systems of both public funders and public and private recipients need greater clarity.

Acceptability

It is a measure of the control professionals have of general health services that there is no statutory requirement for independent review of processes in public hospitals. The Patients' Rights Movement has campaigned for those in hospital care to be told more of what is proposed to be done to them, so that they can make more informed choices. One result of this has been the practice, in many hospitals, of giving patients a statement of their rights upon admission.

Much recent comment on the acceptability of various treatments has come from women who themselves, and in their roles as mothers, are major users of health services. The debate over acceptable practice in maternity care has already been referred to. This is a field of practice where women's questioning of such routines as episiotomies has led to changes. Significant questions remain, however, especially those relating to the use of technology in the birth process and the woman's right to have control over what happens during that process.

The differences in rates of hospitalisation between Maori and non-Maori groups are alarming, particularly for the very young and for young adults. In relation to infant health, public attention has focused on infant mortality rates (the incidence of deaths) rather than on infant morbidity rates (the incidence of sickness). The former tends to show a convergence of Maori and non-Maori rates which is not the case with morbidity, as indicated by hospital admissions.

The discrepancy between Maori and non-Maori rates of infant hospitalisation is not a new phenomenon. Given the persistence of the trend, there is a surprising lack of available information that explores contributory factors. The material that is available tends to explore differences in rates and effects of particular clinical conditions rather than the social, economic and environmental circumstances surrounding them.

Clearly New Zealand has a major problem in the field of infant health, especially Maori infant health. It is difficult to explain the differences in admission rates without more information on the incidence of particular disorders in the total population. Genetic factors may account for some of the differing health outcomes. It has, for instance, been suggested that Maori people have a genetically-based susceptibility to respiratory disorders (Mackay, 1985). This is, however, unlikely to be a sufficient explanation. Lifestyle factors, arising from the social and economic conditions and the physical environments in which children live, are important (SMG, 1985; Pomare, 1980; MacKay, 1985). There are also problems arising from inequitable access to medical services, and the appropriateness of medical services vis-a-vis Maori cultural attitudes.

The Health Department has responded to issues of infant mortality and morbidity by targeting resources through its "priority area" health teams. These groups work in areas of social and economic disadvantage to encourage preventive health

measures such as immunisation. There has also been support given to community-based health programmes aimed at providing more culturally acceptable health services to the Maori people. In rural areas, efforts have been made to establish clinics on or near marae.

Infant ill health is clearly associated with social and economic disadvantage and it is only when such obstacles are neutralised, or at least reduced, that major progress can be expected. If there is no political or social support for change, greater resources directed into the field of infant health generally, and Maori infant health in particular, may be of some immediate benefit.

Concerns about practices which are culturally insensitive have been highlighted recently and have, in some instances, led to changes in hospital practices. Examples of this are the treatment and release of bodies after death and of the placenta after birth, both of which are particularly important to the Maori. The issue of greater cultural sensitivity in dealing with Maori patients highlights the more general need for those who run health services to be sensitive to the individuality and particular needs of all their patients.

A continuing problem in achieving change in these areas is the capacity of health professionals to recognise the rights of people to make decisions and the role and importance of non-physical matters in the maintenance of good health. An example of this is in the provision of facilities for parents to stay with their children when they are admitted to hospital. Though this is widely recognised as a desirable practice, there is evidence that it is not accepted by all professionals and that some may make the parent feel an intruder (Fergusson et al, 1980).

Key Points

- * The average length of stay in public hospitals is decreasing. However, numbers of total admissions and readmissions are increasing.
- * Maori people are twice as likely as non-Maori people to be admitted to public hospitals. Of particular concern is the extremely high rate of admission for Maori infants. Maori people are, however, less likely to be admitted to private hospitals. Unequal access to medical insurance is a contributing factor.
- * There have been major shifts in the type of services provided by both public and private hospitals but the changes have been most dramatic in the private sector where there has been an increase in geriatric and surgical beds in recent years.
- * The services offered by the private sector are those for which reimbursement and state subsidisation are most readily available.
- * It is difficult to assess the efficiency of hospital services in both the public and private sectors because of the lack of information.

CHAPTER 3: INSTITUTIONS FOR THE MENTALLY ILL

Introduction

This chapter examines the three main types of institutions providing care for the mentally ill in New Zealand. Psychiatric hospitals provide care for both the mentally ill and the intellectually handicapped (the latter are included in the next chapter). Psychiatric units in general hospitals provide acute care for the mentally ill, and a variety of voluntary bodies such as the Salvation Army provide specialist alcohol treatment facilities, additional to those provided within psychiatric hospitals.

These are not the only institutions to which people suffering from mental illness are admitted. Many of the elderly, for example, who are suffering some degree of degenerative neurological disorder such as Alzheimer's disease, are admitted to public hospital assessment and rehabilitation units, to old people's homes or to private hospitals but information on these people cannot be separated out for inclusion in this chapter.

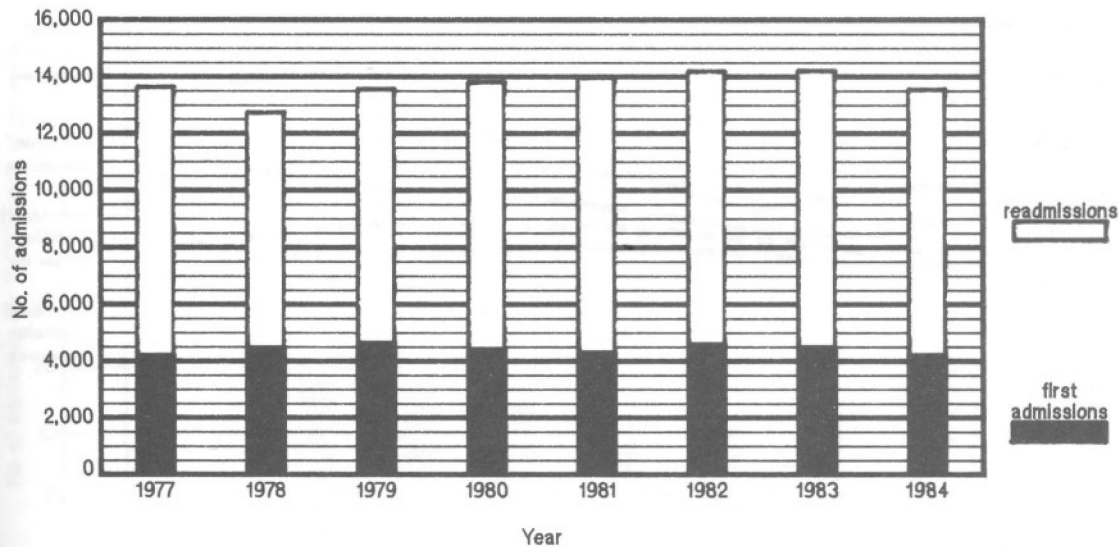
Admissions to institutions for the mentally ill

Between 1977 and 1983, total admissions to institutions for the mentally ill increased by a little over 4%: from 13,614 in 1977 to 14,182 in 1983 (excluding admissions attributable to intellectual handicap). Recently, however, there has been a significant decrease in total admissions, with only 13,521 in 1984. This decrease in actual numbers of admissions has been paralleled by a decrease in population-based rates of admission from 44 per 10,000 in 1977 to 41 per 10,000 in 1984 and suggests a real reduction in the use of psychiatric institutions. The reduction has occurred because of lower numbers of admissions to psychiatric hospitals (8,681 in 1984 compared with 9,543 in 1983), in spite of increasing total admissions to psychiatric units (4,211 in 1984 compared with 3,998 in 1983). In 1984, 62.5% of total admissions were to psychiatric hospitals, 30.3% to psychiatric units and 7.2% to alcohol treatment centres.

To identify whether the number of individuals entering psychiatric institutions is increasing or decreasing, it is necessary to break the number of total admissions into first admissions and readmissions (Infogram 3.1). First admissions represent individuals entering a psychiatric institution for the first time. The incidence of first admissions increased slightly between 1977 (4,156 admissions) and 1984 (4,171 admissions). They did, however, peak in 1979 and have declined since, especially between 1982 and 1984. As with total admissions, the recent decline in first admissions is because of a decrease in first admissions to psychiatric hospitals (2,370 in 1984 compared with 2,673 in 1983), in spite of an increase in first admissions to psychiatric units (1,525 in 1984 compared with 1,506 in 1983) and alcohol treatment units (310 in 1984 compared with 298 in 1983).

Readmissions are admissions of people who have previously been admitted to a psychiatric institution but are in need of further institutional care. The number of such admissions has declined slightly between 1977 (9,458 admissions) and 1984 (9,350 admissions). This decline is related to a decline in first admissions rather than a reduced incidence of readmission. Readmissions have consistently accounted for slightly more than two out of every three admissions to psychiatric

Infogram 3.1 ADMISSIONS TO INSTITUTIONS FOR THE MENTALLY ILL (Numbers by type of admission 1977-1984)



Note: Admissions attributable to Intellectual handicap are not included.

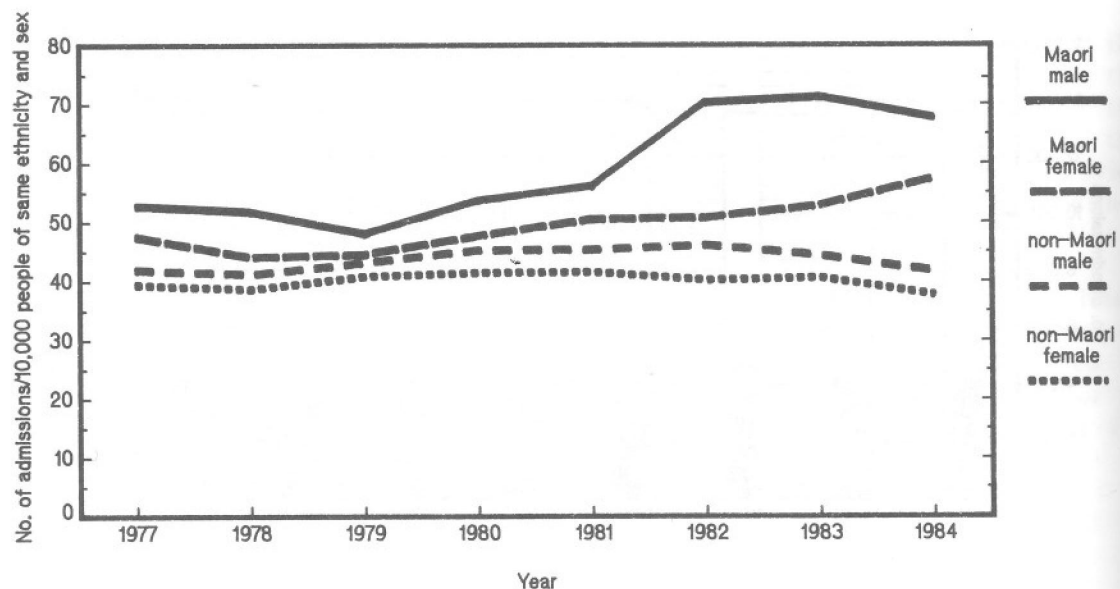
Source: Department of Health, Mental Health Data 1977-1984.

institutions. Patients admitted to psychiatric hospitals are more likely to have had a past history of institutional psychiatric care (73% of total patients admitted in 1984) than those admitted to either alcohol treatment units (69%) or psychiatric units (64%).

The recent decrease in total admissions may be a one-off occurrence rather than a sign of continuing change. It is, however, related to a change in the proportion of Maori and non-Maori admissions which has been developing for some years. The decrease in total admissions during 1984 was solely due to a reduction in non-Maori admissions, with Maori admissions for that year continuing an upward trend evident since 1979. During this period the number and rate of total Maori admissions has markedly increased from 1,317 (50 per 10,000) in 1977 to 1,814 (62 per 10,000) in 1984. Over the same period the non-Maori admission rate has stayed reasonably stable with a slight decrease over recent years (Infogram 3.2).

Despite the importance of ethnicity, age is the factor which has the most significant relationship to numbers and rates of admission. Few children are admitted to psychiatric hospitals or units, but rates of total admission increase rapidly with increasing age. First admissions typically occur at a relatively young age when psychiatric disorders are first diagnosed. Total admissions peak in number and rate at ages 25 to 34, after which they gradually decline (Infogram 3.3). With increasing age, a greater proportion of admissions are readmissions, reflecting the difficulty of curing psychiatric disorders. In fact most disorders

Infogram 3.2 ADMISSIONS TO INSTITUTIONS FOR THE MENTALLY ILL (Rates by ethnicity and sex, 1977-1984)



Note: Rates do not include admissions attributable to intellectual handicap.

Sources: Department of Health, Mental Health Data 1977-1984,
Department of Statistics, Population Estimates 1977-1984.

have recurring symptoms, meaning more than one admission is often likely. With advanced age (over 65 years), first admissions again increase because senile psychotic conditions result in new institutional admissions of people aged more than 65 years. Such admissions are often long term or permanent, this being the explanation for why the rate of readmissions proportionately declines for the elderly.

Infogram 3.4 shows the major psychiatric disorders leading to institutional admissions for treatment. Collectively the psychoses represent the main causes of admission, with schizophrenia being the major single cause of admissions for almost all age groups.

Admission rates tend to decrease with age for schizophrenia and other personality disorders (these include such conditions as anorexia nervosa). The decrease in admissions for the personality disorders may reflect the fact that many of them are closely related to age, such as adolescent disorders. For instance, the reduction with age in rates of admission for schizophrenia reflects longer stays in hospital for some patients as ageing occurs, making readmissions less frequent. For other patients there may be a lessening in the severity of symptoms as ageing occurs, as a result of the disorder running its natural course. More effective treatment regimes have also resulted in a less frequent need for readmission.