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SPECIAL ISSUE

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The future pattern of psychiatric provision in England

Abstract The events that led to a reduction in both the size and number of mental hospitals in the United Kingdom are reviewed, and the mental hospitals remaining are shown to be mainly providing care in specialised units. Studies of mental hospital closure have shown that care in the community is generally preferred by patients, although for the "old long stay" the total costs are broadly similar. However, for patients with new illnesses care is undoubtedly much cheaper, and patients acquire fewer secondary handicaps of their psychotic illness.

Hospital beds are still needed for a community mental health service; and in inner city areas, where prevalence rates for psychotic illness are higher, there are often too few beds to run an efficient service so that patients needing admission may either not be admitted at all, or be admitted to a distant hospital. The allocation of funds for mental illness to local health authorities takes some account of socio-demographic indicators of illness, but authorities are free to spend more or less than their allocation on the mental illness service. One study suggests that there is an optimal number of beds for a given location and that costs of the service increase if there are either too few or too many beds available.

It is argued that for care in the community to succeed there must be adequate numbers of beds available, a range of sheltered residential accomodation in the community, as well as enought staff to provide a service for them. Future changes to the way in which the National Health Service is funded – with resource being allocated by groups of general practitioners – make it likely that there will be a shift of resources towards primary care services.

Key words Mental Health Services · Hospitals, psychiatric · Economics, hospital · Cost allocation · Health expenditures

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The historical background

The deinstitutionalisation of the mentally ill began with the work of early social psychiatrists like Rudolf Freudenberg at the Netherne, and Duncan Macmillan at Mapperly Hospital (Freudenberg 1957; Macmillan 1958). Active rehabilitation was found to decrease average length of stay, and numbers of beds required have thus begun their descent, which continues to the present day. The discovery of chlorpromazine a few years later undoubtedly accelerated this process, but it did not cause it. Changing views about the nature of mental illness, the possibility of maintaining or restoring skills, and the importance of maintaining ties between the patient and his family were more important.

In the late 1950s another important social change occurred in Manchester, with the establishment of units in District General Hospitals (Leyberg 1959; Freeman 1960; Smith 1961).

"These units were run on a shoe-string, staff were thin on the ground, and with so few staff that only the severely ill could be treated. That reduced bed needs. There was sturdy resignation among Lancastrians, they were prepared to suffer and put up with it. The policy was cheap and resulted in the run-down of some very large mental hospitals. The Ministry took note" (Rivett 1998).

Indeed, the run-down in numbers of mental beds during the 1950s was so marked, and so apparently linear, that advisers to the Department of Health predicted that no beds whatever would be required by the late 1990s (Tooth and Brooke 1961). This led the Minister, Enoch Powell, to make what became known as his "water tower" speech, since it contained the following passage:

"There they stand, isolated, majestic, imperious, brooded over by the giant water tower and chimney combined, rising unmistakable and daunting over the countryside…do not for one moment underestimate their power of resistance to our assault" (Powell 1961).

Typically, the Minister was more realistic than his professional advisers, admitting much later that he had only

really expected the mental hospitals to be reduced to about half their size (Powell 1989). Nevertheless, this "Hospital Plan" saw mental illness and mental subnormality services as part of the District General Hospital, and these were to be 600–800 bedded hospitals across the whole country (National Health Service 1962). However, since there was neither capital provided to build these hospitals nor revenue to operate them, uptake of the proposals was patchy. The government circular the following year "Improving the Effectiveness of Psychiatric Hospitals" urged hospitals to collaborate closely with local authorities, but once more offered no funds to encourage such collaboration.

The 30 years that have followed have seen a steady decline of acute psychiatric facilities within mental hospitals, with those that survive largely being used for specialised units, dealing with problems such as mentally disordered offenders, eating disorders, challenging behaviours and mother-and-baby units. At first the government offered guidance on numbers of beds required, and in the early 1970s this used to be 0.5 acute beds per 1000 population at risk. However, when it became apparent that some areas could manage on even fewer beds than this, the government abandoned any attempt to advise purchasers on this important matter and allowed events to take their course – mainly in the interests of financial expediency. Although care in the community does not cost the Treasury any less than care in hospital, it most certainly costs the National Health Service less, as many of the costs of community care fall upon local ratepayers, the police, voluntary agencies and the patients' families.

Is the DGH superior to the mental hospital?

The Manchester Schizophrenia studies addressed this problem by following cohorts of patients admitted to a good mental hospital with superior rehabilitation facilities, versus those admitted to DGH units. One cohort was studied 4 years into its illness, the other 12 years in.

Care in the mental hospital was consistently associated with longer admissions to hospital. Four years into the illness there was more chronic and residual schizophrenia among those in the mental hospital group. At 12 years there were more defect states among those treated by the mental hospital, and more of the DGH patients were free of their symptoms. Strain on the relatives was greater in those treated by the mental hospital, and social adjustment and employment better in those treated by the DGH. The economic analysis favoured the DGH at both time points – but was much stronger at 12 years than at 4 years (reviewed in Goldberg 1991). Thus, in general terms, it seemed clear that care in DGH settings produced better outcomes than care in the mental hospital.

For whatever reason – fear of institutionalisation, a belief that patients would be better treated nearer to their homes, or the need to divert scarce resources into other areas of medicine – of 130 large mental hospitals that were still open in 1960, only 14 do not intend to close by the end of the century, and the size of those remaining open is now a little over 200 beds, with a mean duration of stay of only 76 days (Rivett 1998).

Studies on patients discharged from mental hospitals

Numerous studies have been carried out across the world on cohorts of patients discharged from mental hospitals. In England the best known of these are the studies by the Team for the Assessment of Psychiatric Services (TAPS), which initially used a design in which a patient about to be discharged from mental hospital is matched with one remaining in the hospital. Similar studies have been published for 5 other mental hospitals in England, and for six hospitals in Northern Ireland (Donelly et al. 1996). The TAPS team has now published over 60 papers and has more recently dealt with special groups such as "difficult to place" long-term patients, psychogeriatric patients (Trieman, Wills and Leff 1996) and the "new long stay" patients. It would be impossible to summarise all these studies in a brief review, but the following points are relevant to our present theme. Leff (1997) reports a 5 year outcome study of a group of 235 non-demented patients discharged from Claybury and Friern Hospitals and showed that the benefits clearly outweighed the disadvantages. There had been a reduction in negative symptoms after the first year, and no accumulation of such symptoms in the period that followed. Life in the community was much freer, to which the patients responded with increasing appreciation. Their social life became enriched, and they made good relationships with neighbours and shopkeepers. Over 80% of them expressed satisfaction with their move to the community. The TAPS survey of "difficult to place" patients (Trieman and Leff 1996) showed that the most disabled patients could be placed in non-restrictive settings, but that arrangements should be made to care for "extremely disturbed" patients in a hospital.

Beecham (1997) has studied 8 successive cohorts of such patients from an economic point of view and found that average costs for later cohorts were higher than those for earlier cohorts – so that taken over the whole study, community costs were higher than hospital costs. This finding echoes an earlier paper by Häfner and an der Heiden (1991) from Mannheim, in which they showed that while costs in the community were less for many patients, that as disability increased so did the costs of community care, until a point was reached at which it became more expensive than care in hospital. This is not a surprising finding, as there are economies of scale in providing intensive nursing care in a group for highly disabled patients.

Nor should the high community costs of providing care in the community for the "old long stay" blind us to the fact that community care is almost certainly a much cheaper alternative for patients who have never been institutionalised, as the Manchester schizophrenia studies clearly show.

The development of Community Mental Health (CMH) Teams

The Care Programme Approach (CPA) became government policy in 1990, and envisages that before a patient is discharged from hospital there will be an agreed plan for after-care agreed between those responsible. For those with longer term illnesses, this will often be from a key worker who is responsible for providing day to day care, and co-ordinating other help from other agencies. In theory, at least, a social worker from the local authority should be present, and plans should be communicated immediately to the patient's general practitioner. Four years later, the Supervision Register was introduced, in an attempt to focus special care on those whose behaviour posed a threat either to themselves or others.

The requirements of the CPA have meant that integrated community mental health teams have had to be set up across the country, even if detailed arrangements, and participation by various mental health professionals, vary from place to place. Ideally, such teams comprise psychiatrists, clinical psychologists, community psychiatric nurses and occupational therapists, working closely with local authority social workers. Such teams have usually been financed by savings obtained by closing wards and re-using the resources.

Problems in Deprived inner City areas

Inevitably, in some places this process went too far, and managers found themselves having to manage on insufficient numbers of beds. This was especially likely to occur in places where the overall need for mental health care was greatest – and these are the socially deprived areas of large cities. It had been known for some time that patients with chronic psychoses were likely to congregate in such areas; our research for "Londons's Mental Health" (Johnson et al. 1997) showed that other factors are at work as well. The principal factors are high numbers of single person dwellings (54%, against 27% nationally); high numbers of homeless people (half the rough sleepers in the UK are in London); high unemployment rate (3 points above the national average); high rates of drug dependency; high numbers of mentally disordered offenders (who are very expensive indeed to care for); high numbers of Black Caribbeans (who have almost double the rate for schizophrenia) and an age structure with a higher proportion of the population in the risk years for psychotic illness.

When these factors are taken into account, it becomes easier to understand how the mental health services in London are unable to provide for the needs of Londoners, and how it comes about that our remaining wards are over-full, with long waits for both admission and discharge. The latter is because Local Authorities are also under pressure to manage on often inadequate budgets, so the expensive residential facilities that are needed in the community often are in short supply.

These problems are of course not confined to London, but they are seen at their worst in the London area.

How resource is distributed to health authorities in the UK

These problems have been known to our government for some time. The Resource Allocation Working Party was set up as long ago as 1975, in an attempt to ensure that resources were distributed equitably to health authorities on the basis of the health needs of the populations that they serve (DHSS 1976). Since these early days the process has been considerably refined, so that now different socio-demographic indicators are taken to calculate allocation of resources allocated to general and mental health services respectively (NHS-Executive 1998).

In round numbers, 64% of the health budget is reckoned to be devoted to acute medical services, 11% to psychiatric services, 11% to community services, and the remainder of the budget has until recently been "unweighted". Various social measures available from the national census are then used to weight the allocations made to individual health authorities. For acute services, the following factors are used: elderly living alone, single carer, unemployment, standardised mortality and a factor that reflects chronic illness. Thus, some allowance is made for social indicators of medical need between various areas of the country even for acute needs.

For psychiatric needs, there is then a division between "psychiatric need factors" (88% of the budget) and "community psychiatric need factors" (12%). The weighting factors for the former are elderly living alone, standardised mortality, proportion of lone parents, "community factors", those without carers, and numbers of those classified as "permanently sick". The community factors are calculated by weighting for those without a car; proportion single, widowed or divorced; lone parents and standardised mortality.

It may well be that these measures are but crude proxies for the real indicators of need: the important point is that they are generally available and appear to be the best we have for the present time.

After calculations of this complexity, it might be expected that steps would be taken to ensure that resources are actually spent along the lines of the calculation used to make the various allocations. However, such is not the case. Individual health authorities are free to spend the money in whatever way they think best to promote the health of the community they serve, providing that they remain within the guidance of central government policies.

In practice, most health authorities in deprived inner city areas are seriously over-spent, and make whatever economies they can. However, payments to private hospitals for patients referred because no NHS bed was available and payments for "medium secure" accommodation are made by the authorities before the remainder is made available for the mental heatlh services.

In inner London, the sums spent on referrals outside the catchment areas, and on mentally disordered offenders (MDOs), are so large that on average authorities are spending 1.8% more than their mental health allocation on mental health services, while elsewhere in the country deprived inner city areas are spending 2.0% less than they are given. Relatively affluent areas often spend more than their allocation (by as much as +8.25%), while depressed areas may spend far less (by as much as –9.25%). Our present government has, at least for the present, halted most mental hospital closures and has indicated that it may abandon the "unweighted" column – whose presence tended to favour affluent areas at the expense of deprived inner city areas.

Cost minimisation

A service that wishes to liberate resources for community services will be tempted to close down beds until they have rather fewer than they need, since the marginal cost of the remaining beds being "over-occupied" is actually very small, If the ward staff become mutinous, beds may be bought from the private sector: the argument being that although the cost per day is much higher, that it is nonetheless cheaper than opening a complete new ward. Thus, the overcrowded wards and patients sent to distant private beds – in the name of economy. However, although costs are bound to rise as more beds are opened, it cannot be assumed that the more beds that are closed the cheaper it gets. For example, it would be much more expensive – as well as extremely bad practice – to close all the beds and buy everything from the private sector.

There is reason to believe that beds have been overclosed in some places, partly in the mistaken belief that costs will be reduced, and partly perhaps, through the "politically correct" idea that beds are ipso facto undesirable. Such places may run more expensive services, leading Tyrer and his colleagues (1998) to speculate that there is a "U" shaped curve which relates bed numbers to total expenditure by a service upon beds. They showed that average costs per patient were much higher in a district where the numbers of beds had been reduced to only 0.28/1000, when compared with his own service, which had 0.82 beds/1000 available. They argue that in any given area there is an optimal number of beds, and services with fewer beds will incur higher costs than those with sufficient numbers.

Given a finding of this importance, it might be thought that several studies would be commissioned to investigate this state of affairs, but there is not much direct evidence to confirm Tyrer's views. A paper by Rothbard and her colleagues (1998) shows that if the only alternative to mental hospital care is acute hospital care – then after closure of a state hospital costs actually increase. She argues that for optimal cost efficient care a range of facilities is required, including "extended care", residential beds as well as ambulatory services.

The varying needs for mental illness expenditure

There is an increasing recognition that not only are acute psychiatric beds necessary; but various social indicators need to be taken into account to decide how many are necessary in a particular area. An early study by Hirsch (1988) demonstrated a threefold difference between various district in their bed needs and showed convincingly that socio-demographic factors, such as those used in Jarman's "Under Privileged Areas" (UPA) score, were closely related to these variations in need.

Glover's (1996) Mental Illness Needs Index (MINI) is a computer program which predicts the need for various sorts of residential facilities for the mentally ill using information derived from the Census, and it enables the needs of any electoral ward to be calculated. However, the range of needs for any particular facility is determined by expert opinion, and in the work for the London Commission (Johnson et al. 1997) it became apparent that the previous ranges given to us by experts for the resources needed in the most deprived areas were not sufficient to account for the variation actually observed in admission rates between different parts of London. Using revised estimates, we calculated that inner London (which had 1062 acute beds) was short by 378 beds, and outer London (which had 1,253 beds) was short by 402 beds. Some areas had almost the right number of beds, while others had great discrepancies between the number they had and the number the MINI predicted that they should have. In contrast, there were only small discrepancies between our actual and predicted numbers of medium secure and intensive care beds. There were also great shortfalls in 24-hour non-staffed accommodation, and lower support accommodation (Ramsay et al. 1997).

The situation at present

The reduction in bed numbers that have been achieved so far has been entirely by closing beds for "new long stay" patients: there has been no reduction whatever in those used for acute episodes of psychotic illness (Thornicroft and Goldberg 1998). This finding mirrors similar findings in the United States, reported by Rothbard and her colleagues (1998).

In order to move towards a more equitable system, it is necessary to remedy structural shortcomings in the system that exists at present. There should be sufficient beds in each area to cope with the likely needs of the population at risk, without having to send routine admissions to distant places. It is questionable whether expensive high security hospital places should be used for those with personality disorders: If they have broken the law, they should serve time in prison. The large numbers (about 30% of all occupied beds) of patients who could be looked after in a community setting should be moved to one – provided that such places are made available by local authorities.

It is also questionable whether mentally disordered offenders (MDOs) should be charged to the carefully calculated mental health budget – as their distribution is extremely uneven and the census data used to allocate resource does not take account of their skewed distribution (Guite and Field 1997). Thus, those areas with high rates of MDOs have much lower resources available to cover the mental health needs of the rest of their population – so that it would be more equitable to cover these costs from "top-sliced" resource. If this were to be done, it would then be necessary for health authorities and local authority social services and housing departments to be obliged to spend the resources that were allocated to them on mental health.

At present, innovation in the mental health services is made much more difficult because existing resources are in many places inadequate to provide a minimally safe service, and demands upon the service tend, if anything, to increase as each year passes. Instead of spare cash being available to develop new and more interesting services, most provider units find themselves having to make still further reductions to an already impoverished service. In particular, rehabilitation services for those with chronic disability have been greatly reduced in most inner city areas.

Where innovation has occurred, it has either been because the district spends more than its allocation on mental health or has profited from special development monies such as the Mental Health Challenge Fund, or the innovations have been made by voluntary organisations.

A third way?

The Department of Health in England is investigating a new model for the mental health services, in which additional hospital beds are provided in some areas, and secure accommodation is available for patients whose illnesses pose a threat to others in each Region of the country. This is to be combined with assertive outreach and easier access to care by telephone and from 24-hour crisis terms. More hostels and support accommodation are to be provided in the community, and a new National Service Framework is to provide guidance on the balance of services required from both health and social services in each locality of the country (Dobson 1998; Boateng 1998). The Ministers also envisage improved mental health training for general practitioners and others in the primary care team, and extra counselling services in health centres. It remains to be seen to what extent these intentions are translated into actions.

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