



original papers

Psychiatric Bulletin (2001), 25, 376–378

GYLES R. GLOVER AND JONATHAN BINDMAN

Out of area hospitalisations – the view from current routine statistics

AIMS AND METHOD

To examine what current routine statistics could show about the extent to which patients are admitted to hospital beds 'out of area', a quality indicator proposed in the National Service Framework.

RESULTS

Available data record that, on average, at least 6.9% of acute

general psychiatry admissions in the English NHS happen outside the normal catchment area arrangement of a patient's health authority. However, deficiencies in the calculation – arising from lack of data, mainly about private sector admissions – and the absence of a central registry of NHS trust catchment

areas suggest this is a substantial underestimate.

CLINICAL IMPLICATIONS

The most useful way for this issue to be examined is from year to year for individual trusts.

The Department of Health's National Service Framework for mental health services (NHS Executive, 1999) proposes in a headline target that individuals needing admission to hospital should be treated as close to home as possible. This "allows family and community links to be sustained" and improves the prospects for integration of hospital and community phases of care. The main reason why people are admitted to hospitals out of their area at present in England is a shortage of available local beds. The NSF sets a "steady reduction of inappropriate out of area treatments" as a milestone, and indicates that the routinely collected Hospital Episode Statistics (HES) will be used to monitor this.

This paper explores what current HES data show on this issue and considers how this could be enhanced.

Method

The central HES database at the Department of Health stores a record for each episode of consultant in-patient care (<http://www.doh.gov.uk/hes/>). From this, the statistics division supplied the number of episodes in the 'general psychiatry' speciality for the year from April 1997 to March 1998, cross tabulated by the two relevant available fields; the NHS trust of admission and the health authority of the patients' residence. The speciality designation excluded admissions of children, adolescents and elderly people with mental illness, and admissions for psychotherapy, forensic or learning disabilities care.

Responsibility for providing general adult in-patient psychiatric care is generally assigned to NHS trusts on the

basis of geographic catchment areas. However, at the time to which the data relate, the details of these arrangements were organised by health authorities. No overall national map was, or is, maintained. While we were unable to establish whether the exact location of a patient's residence lay within a hospital's catchment area, we were able to determine whether the health authority area in which the patient lived had a normal contractual arrangement with the trust providing care. 'Out of area admissions' were thus operationally defined as those where this was not the case.

For the study, an initial mapping of hospitals to health authorities was established using an additional field in the data; health authority of treatment. This mapping was checked and supplemented in consultation with NHS Executive staff in each regional office. Where uncertainty remained or results appeared notably deviant, local health authority or hospital staff were consulted. Admissions where either the hospital or the patient's health authority of residence were uncoded were omitted from analysis.

Results

In the year concerned, England had 100 health authorities. Figures for six, covering 3.2 million population (6.6%), were excluded as admission rate figures were clearly seriously deficient. In the remaining authorities, the overall admission rate for adult psychiatry was 283.9 per 100 000 total population (130 261 admissions). Of

original
papers

Table 1. Overall proportion of out of area admissions, and numbers of health authorities categorised by proportion of out of area admissions for each region and for England as a whole

Region	Overall per cent of admissions out of area	Proportion of out of area admissions						Total
		0–4%	4.01–8%	8.01–12%	12.01–16%	16.01–20%	20.01%+	
Eastern	5.4	2	5	2	–	–	–	9
London	8.9	1	6	2	2	2	–	13
North and West	8.8	5	3	5	1	1	1	16
North and Yorkshire	6.0	5	3	5	–	–	–	13
South and West	3.9	4	4	–	–	–	–	8
South Eastern	8.1	2	5	2	3	1	–	13
Trent	4.8	4	4	–	1	–	–	9
West Midlands	5.9	3	7	2	1	–	–	13
Total	6.9	26	37	18	8	4	1	94

admissions, 6.9% occurred in hospitals not linked to the patient's health authority of residence.

Table 1 shows that just over a quarter of health authorities had no more than 4% of admissions out of area, and two-thirds had no more than 8%. Thirteen authorities (14%) had more than 12%. While at first sight this group seemed clustered in a few regions, this pattern did not reach statistical significance by one-way analysis of variance.

Discussion

The analysis presented here should be seen as no more than exploratory. As we shall describe below, the figures clearly substantially understate the extent of true out of area admissions. As such they make it clear that this is a substantial issue, associated as it is, with disruption to patient care and waste of clinician time. Thus, indicators of progress towards resolving it are important.

The figures presented have two major omissions. First, when patients cannot be admitted to local NHS facilities because of bed shortage, NHS beds elsewhere (in Scotland or Wales) or independent sector acute beds are often used. None of these admissions appear in the Department of Health HES data (Department of Health, 1999). Cross border flow may not be substantial. Detailed data for Scottish hospitals indicated only 126 admissions of patients normally resident in England, eight of these from West Cumbria Health Authority, located next to the border. Anecdotal evidence suggests that use of independent sector beds may be more quantitatively important, but it proved impossible to establish the extent to which this provision was really tertiary care (for example for secure or substance misuse facilities).

Second, the study was confined to establishing whether there was a normal contract between the hospital and the health authority where the patient lived. This failed to identify situations where an individual was admitted to the wrong catchment area hospital, although still one within, or having a normal relationship with his or her health authority. Two common situations give rise to this. First, the wave of health authority mergers of the early 1990s created many situations where a single authority encompasses two or more functional mental health service units. Second, in many areas, local

geography makes it sensible for a small conurbation on the edge of one health authority area to use services in a larger town located nearby but in a neighbouring authority. Since overspill admissions are commonly sent to neighbouring NHS hospitals, either situation may substantially mask out of area admissions as defined for the study. To develop a proper measure of the 'out of area' concept would require the collation of a formal specification of each hospital's catchment area.

Several factors complicate the issue further. Until recently most trusts have operated in-patient services from one main hospital location. Hospital and trust catchment areas would thus be effectively equivalent. The current round of provider trust mergers raises questions about what the unit of analysis should be. In many areas two or more hospitals with historically discrete catchments are merging to form large trusts. It seems probable that many will continue to operate from several in-patient bases, each with their own catchment area reflecting the historical pattern. Overspill admissions in this situation happening to another of the new trusts units, designated to serve a different catchment area, would not be apparent in trust-level analysis.

Innovations in practice style leading to the development of 'slightly specialised' facilities, such as gender specific wards, women's safe houses or acute home-based treatment teams are likely to have an effect. As these function within the broad compass of general adult acute services, they presumably reduce the number of ordinary general admission beds required per unit population. Where managers have a view of a critical minimum size for viability of an in-patient unit, such provision will increase the population the remaining unit is considered to need to cover. On the other hand, some trusts are developing service strategies based on locating small complements of local beds alongside each community mental health centre. This increasing diversity of service style suggests that no simple numerical indicator will be able faithfully to reflect local practice and to provide wide comparability between trusts.

Improvements in the scope of HES data will permit a different approach to analysing this question. Records now include a field for the actual trust site to which admissions occur. Using available postcode mappings this will allow routine calculation of the 'crow's flight' distance



original papers

from patients homes to the hospital in which they are treated and comparison of this with the distance to the nearest location in which the relevant type of care is available. However, while this will provide a useful further dimension to analysing the basic question of whether patients are treated locally, this approach is still imperfect for two reasons. First, patterns of public transport and natural obstacles like rivers and mountains sometimes mean that the nearest hospital as the crow flies is not the easiest to reach. Second, as the patient's care after discharge is dependent on a catchment area team, in the wider perspective proximity to the community team may be more important than to the hospital.

The Department of Health could take two major steps that would help in exploring this issue. First it could establish and maintain a central listing of hospital catchment areas. The current mental health service mapping exercise could provide an initial set of data for this. If this were defined in terms of established administrative geography (probably local authority electoral wards), this would allow automated identification of the hospital catchment area patients live in directly from their post-code, using the directory already maintained by the Department's Organisational Coding Service. Second, it could initiate a requirement that independent sector hospitals providing care funded by the NHS should make standard returns detailing these for inclusion within the HES.

Conclusion

The concept of local as opposed to out of area admissions is an intuitively appealing one. It broadly reflects the way English services are structured, and has evident relevance as a marker of service quality. Its operationalisation is, however, far from simple. As a benchmark figure, it will be principally useful for local year to year comparison.

Acknowledgements

The author is grateful to Drew Hird of the Statistics Division in the Department of Health, to John Loudon and Lindsay Young of the Scottish Executive and to Sally Taber of the Independent Healthcare Association, for their assistance.

Reference

- DEPARTMENT OF HEALTH (1999) *Hospital Episode Statistics: English Financial Year 1997–98, Vol. 2. Finished Consultant Episodes. Administrative Tables*. Blackpool: Department of Health.
- NHS EXECUTIVE (1999) *National Service Framework for Mental Health, Modern Standards and Service Models*. London: Department of Health.

*Gyles R. Glover Professor of Public Mental Health, University of Durham, 15 Old Elvet, Durham DH1 3HL, Jonathan Bindman Senior Lecturer in Psychiatry, Health Services Research Department, Institute of Psychiatry, De Crespigny Park, Denmark Hill, London SE5 8AF

Psychiatric Bulletin (2001), 25, 378–381

JAMES STALLARD AND EILEEN JOYCE

The impact of olanzapine on attitude to medication and quality of life in schizophrenia

AIMS AND METHOD

This study aimed to compare the subjective quality of life and attitudes to medication between groups of patients with schizophrenia taking either olanzapine or traditional antipsychotic medication.

RESULTS

The two groups were matched for age, gender, length of illness and

antipsychotic group demonstrated more extrapyramidal side-effects (EPS) and akathisia. Within this group, those with EPS scored lower on the affect balance scale of the Lancashire Quality of Life Scale than those without. More patients in the olanzapine group reported that medication was taken to prevent symptoms returning.

CLINICAL IMPLICATIONS

These results lend support to the hypothesis that the presence of EPS impairs quality of life and suggest that olanzapine therapy may improve patients' attitudes to medication.

Poor rates of compliance are a problem for the treatment of schizophrenia and have been estimated to be between 11% and 80% (Kane, 1989). One of the many possible factors that can influence compliance is adverse medication effects and reduction of these may have a favourable effect on compliance rates (Barnes, 1989).

Since the reintroduction of clozapine (Kane *et al*, 1988), a number of antipsychotic drugs have been produced that attempt to mimic its pharmacological profile – the so-called 'atypical' antipsychotic agents. One such compound is olanzapine. This drug has been shown in several large trials to be as efficacious at