No Way Out: The Delayed Discharge of Elderly Mentally Ill Acute and Assessment Patients in North and South Thames Regions

JONATHAN KOFFMAN, NAOMI J. FULOP, DAVID PASHLEY, KEN COLEMAN

Summary
We examined the characteristics of patients occupying elderly-mentally-ill acute and assessment beds in all mental health units within North and South Thames Regions; the proportion of patients defined as no longer requiring acute care (inappropriately located); and the unmet need for alternative service provision these patients required. Of the 1510 patients surveyed, 24.4% (n = 368) were defined as inappropriately located. For inappropriately located patients unable to be discharged home most (52.8%, n = 154) required residential care or nursing-home provision. A large proportion of these patients were very elderly (aged 85+ years), had dementia, and required high levels of supervision. This study indicates that purchasers, mental health service managers and social services departments should devise a more appropriate mix of inpatient and community provision. Particular emphasis needs to be placed on the greater provision of residential care and nursing homes with an appropriate skill-mix to care for this complex care group.

Introduction
The phenomenon of ‘demographic ageing’ which refers to the increasing share of the population that is elderly presents a growing challenge to health and social services in Great Britain [1, 2]. The very elderly (aged 85+) population is projected to increase by nearly 20% over the next decade [3]. One important implication of this phenomenon is that degenerative mental illnesses associated with progressive old age are becoming more common. This was most recently recognized in the Tomlinson Report, where services for the elderly mentally ill were reported as being seriously overstretched [4]. As a result of this demographic imperative, health care professionals, service planners and researchers are now examining how the limited resources available can be used effectively to provide an acceptable level of care for this growing age group.

Over the last two decades, research has revealed considerable difficulties in the discharge of elderly patients from acute hospital beds [5, 6]. Although this problem has also been described in psychiatry [7–11], older people with mental health problems, specifically, have received scant attention.

North and South Thames Regions commissioned a one-day census of all NHS acute psychiatric beds (adult acute, low-level secure and elderly-mentally-ill acute and assessment) to determine the characteristics of all acute psychiatric patients across the two regions, the proportion of these patients no longer requiring acute care, and the unmet need for alternative service provision. The Department of Public Health at Kensington & Chelsea and Westminster Health Authority was asked to carry out the survey and subsequently to analyse the data. The results were intended to inform the regional and district health authorities’ plans for the future development of mental health services.

This paper presents the data for patients occupying elderly-mentally-ill acute and assessment beds. Results relating to adult acute patients are presented elsewhere [12].

Method
A point prevalence survey of all patients occupying elderly-mentally-ill acute and assessment beds in 69 NHS and seven private units in North and South Thames Regions was carried out on 15 June 1994. Using a patient form, basic demographic data were collected by nursing staff for all patients (including those on leave). In addition, the date, method of admission, and primary diagnosis (using the ICD 10 classification [13]) were recorded.

Although tools have been developed for general acute patients to determine if a patient is appropriately located [14, 15], there is no tool to measure inappropriateness for acute psychiatric patients. Ward managers (nurses) were therefore asked to identify patients who, in their opinion, no longer required acute care. In addition, they were also asked to
identify more appropriate provision for these patients from a list of possibilities, either:

(i) services required for patients who could be discharged home, if these services were available; or

(ii) services required for patients who could not be discharged home but who still required alternative provision.

Mental health providers designated key nursing and managerial staff to attend a series of training sessions which explained how they should collect the data. These staff were sent questionnaires for their respective units. The completed questionnaires were returned to us to be entered on a Statistical Package for Social Scientists (SPSS) database.

Analysis: Data were analysed using SPSS-PC. Chi-square tests of statistical significance were performed in order to demonstrate the degree of association between variables.

Results

Survey coverage: We received confirmation from every NHS acute mental health unit and seven private units in North and South Thames Regions that data were collected for all patients on the day of the survey. The survey enumerated a total of 1510 elderly mentally ill acute and assessment patients—1507 in NHS units and three patients in private psychiatric units. Using bed base information provided by each Mental Health Trust we have calculated there was a total of 1664 elderly-mentally-ill acute and assessment beds available on the day of the survey, indicating that not all beds were occupied.

Patient characteristics: We compared the socio-demographic characteristics of the elderly mentally ill acute and assessment patient population with the overall elderly population, aged 65+ years, of North and South Thames Regions as derived from the 1991 OPCS Census. The patient population had higher proportions of females aged 65+ (p = 0.005), patients of both sexes aged 75-84 (p < 0.00001) and those aged 85+ years (p < 0.00001). The patient population also had a higher proportion of patients of both sexes aged 65+ living alone (p < 0.00001) compared with the general population of the same age group (Table I).

Table I shows that most patients within the North and South Thames Regions were female (65.8%), white (96.0%), were registered with a general practitioner (96.3%), and had a diagnosis of dementia (42.8%). Of the 647 patients with dementia, 177 (27.4%) were aged 85+.

Table II. Characteristics of elderly mentally ill acute and assessment patients admitted in North and South Thames Regions

<table>
<thead>
<tr>
<th>Patient characteristics</th>
<th>All patients</th>
<th>Inappropriately located patients</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age (years)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mean</td>
<td>77.9</td>
<td>78.8</td>
</tr>
<tr>
<td>SD</td>
<td>7.4</td>
<td>7.5</td>
</tr>
<tr>
<td>Sex</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>512 (33.9)</td>
<td>139 (37.8)*</td>
</tr>
<tr>
<td>Female</td>
<td>993 (65.8)</td>
<td>227 (61.7)</td>
</tr>
<tr>
<td>Ethnic group</td>
<td></td>
<td></td>
</tr>
<tr>
<td>White</td>
<td>1450 (96.0)</td>
<td>351 (95.5)</td>
</tr>
<tr>
<td>Black</td>
<td>19 (1.3)</td>
<td>7 (2.0)</td>
</tr>
<tr>
<td>Asian</td>
<td>8 (0.6)</td>
<td>2 (0.6)</td>
</tr>
<tr>
<td>Chinese</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Other</td>
<td>21 (1.4)</td>
<td>5 (1.4)</td>
</tr>
<tr>
<td>Homeless</td>
<td>127 (8.4)</td>
<td>48 (13.0)</td>
</tr>
<tr>
<td>GP registration</td>
<td>1454 (96.3)</td>
<td>333 (95.9)</td>
</tr>
<tr>
<td>Living alone</td>
<td>612 (40.5)</td>
<td>151 (41.0)</td>
</tr>
<tr>
<td>Main diagnosis</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dementia</td>
<td>647 (42.8)</td>
<td>207 (56.3)*</td>
</tr>
<tr>
<td>Substance misuse</td>
<td>19 (1.3)</td>
<td>6 (1.6)</td>
</tr>
<tr>
<td>Schizophrenia</td>
<td>142 (9.4)</td>
<td>31 (8.4)</td>
</tr>
<tr>
<td>Mood disorder</td>
<td>564 (37.4)</td>
<td>98 (26.6)</td>
</tr>
<tr>
<td>Neurotic/stress</td>
<td>68 (4.5)</td>
<td>11 (3.0)</td>
</tr>
<tr>
<td>Personality disorder</td>
<td>5 (0.3)</td>
<td>4 (1.1)</td>
</tr>
<tr>
<td>Learning disability</td>
<td>3 (0.2)</td>
<td>2 (0.5)</td>
</tr>
<tr>
<td>Two or more admissions</td>
<td>184 (12.2)</td>
<td>32 (8.7)</td>
</tr>
<tr>
<td>in last 12 months</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Admitted under Mental</td>
<td>189 (12.5)</td>
<td>40 (10.9)</td>
</tr>
<tr>
<td>Health Act (1983)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Supervision required:</td>
<td>231 (15.3)</td>
<td>59 (16.1)</td>
</tr>
<tr>
<td>continuous, frequent or</td>
<td></td>
<td></td>
</tr>
<tr>
<td>every 60 min</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hospital stay &gt;3 months</td>
<td>282 (18.8)</td>
<td>141 (38.3)*</td>
</tr>
<tr>
<td>Assessed for local</td>
<td>715 (47.4)</td>
<td>250 (67.9)d</td>
</tr>
<tr>
<td>authority care</td>
<td></td>
<td></td>
</tr>
<tr>
<td>management</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Inappropriately located</td>
<td>368 (24.4)</td>
<td></td>
</tr>
</tbody>
</table>

Significance of difference between patients and population in North and South Thames Regions: *χ² = 8.07, p = 0.005, 1 df; *χ² = 54.54, p < 0.000001, 2 df; *χ² = 96.22, p < 0.000001, 2 df; *χ² = 73.66, p < 0.000001, 2 df.
Patients enumerated in census  
\( n = 1,510 \)

- **Appropriate**  
  \( n = 1,108 \)  
  \( (73.4\%) \)

- **Missing**  
  \( n = 34 \)  
  \( (2.2\%) \)

- **Inappropriate**  
  \( n = 368 \)  
  \( (24.4\%) \)

- **Able to be discharged home if alternative services available**  
  \( n = 68 \)  
  \( (18.5\%) \)

- **Missing**  
  \( n = 8 \)  
  \( (2.2\%) \)

- **Unable to be discharged home, but requiring alternative provision**  
  \( n = 292 \)  
  \( (79.3\%) \)

**Figure 1.** Elderly mentally ill acute and assessment patients in North and South Thames Regions.

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years. This concurs with recent prevalence data derived from 12 European population-based studies [16].

Overall, 612 (40.5%) patients were recorded as living alone and therefore without a cohabitant spouse as a source of practical assistance and emotional and social support. Of these patients, a large proportion (74.5%, \( n = 454 \)) were female and had dementia (36.3% \( n = 222 \)).

**Inappropriate patients:** Altogether 368 (24.4%) patients were defined by ward managers across both Thames Regions as being inappropriately located (see Figure 1). Table II shows that inappropriately located patients were more likely than appropriately located patients to be male \( (p = 0.05) \), be demented \( (p = 0.00008) \), have lengths of stay greater than 3 months \( (p < 0.00001) \), and have been assessed for Local Authority care management \( (p < 0.00001) \).

Analysis of inappropriately located patients' diagnoses by length of hospital stay revealed that, of the 207 patients with dementia, 70 (33.8%) had hospital stays exceeding 3 months \( (\chi^2 = 18.07, p = 0.03, 9 \text{ df}) \). In addition, 41 (19.8%) of these patients with dementia were also more likely \( (\chi^2 = 23.27, p = 0.005, 9 \text{ df}) \) to require high levels of supervision (i.e. continuously, frequently or every 60 minutes) compared with patients with other diagnoses.

Of the 368 inappropriately located patients, 292 (79.3%) were unsuitable for direct discharge home but still required some form of alternative provision. Sixty-eight (18.5%) were suitable for discharge home if services had been available (see Figure 1).

**Alternative services required:** For the 292 inappropriately located patients unable to be discharged home, ward managers were asked to select one form of alternative provision. Of the patients in this group 154 (52.8%) required residential care or nursing-home provision. More specifically, of these patients, 64.9\% \( (100) \) were diagnosed with dementia and 25.9\% \( (40) \) were aged 85+ years. In addition, a total of 32 (12.7\%) patients required total dependency psychiatric care, most of whom \( (83.8\%, n = 31) \) were also diagnosed as having dementia (see Figure 2).

All inappropriately placed patients able to be discharged home were recorded by ward managers as needing at least three items of alternative provision, which were ranked in order of priority. Figure 3 shows the proportion of these 68 inappropriately located patients for whom various forms of provision were recorded as first, second or third priority. Professional or specialist support in the patient's home or day centre (79.4\%), practical care/support with daily living (60.2\%) and housing/more appropriate housing (41.1%) were most frequently recorded in the top three priorities.

**Discussion**

This study has identified a high proportion of elderly mentally ill acute and assessment patients as inappropriately located on the day of the census, providing evidence that best use is not being made of acute and assessment beds.

For inappropriately located patients not ready to be discharged home, but who no longer required acute care, there was a great need for residential care and nursing-home provision. A recent study in one health
authority also identified that the discharge of a large proportion (44%) of acute psychiatric patients aged over 65 years was delayed because they required the same forms of provision [11]. In the present study, this was particularly evident for patients with dementia and the very elderly. Since 1983, however, there has been a 38% decline in the number of local authority care places [17]. While there has been an increase in number of places in the private sector (320% increase since 1983 [17]), which should in theory be able to accommodate large numbers of elderly mentally ill residents, residents with dementia impose a particularly heavy workload on staff. Many residential and nursing homes within this sector consequently do not accept disruptive or highly dependent residents [18-20]. We found that a significant proportion of patients with dementia required high levels of supervision.

Provisions for the continuing care outside the private sector necessary to deal with the complexity of needs of this patient group continue to be insufficient and under-resourced. The problem is likely to intensify given that there have been significant improvements in late-age mortality. For patients who no longer require acute care and who could be discharged home, there is a need for greater support from community mental health teams as well as the need for practical care and support to help with daily living. The results of this point prevalence survey must be viewed within the following limitations: first, the definition of 'inappropriately located' is subjective and may be influenced by a number of factors including admission and discharge thresholds, as well as professional interests. A previous study found variations between professional groups in judging which patients were inappropriately located, particularly psychiatrists and social workers [11]. As part of this study, we carried out a small reliability survey in one health authority comparing three psychiatrists' opinions with that of the survey. The psychiatrists and the survey agreed on the location of 82% of the patients. A Cohen's kappa test gave a moderate level (0.58) of agreement [21]. Second, there are concerns about the generalizability of this study since it is impossible to say how representative this day was compared with others. However, given the large number of mental health units included, this survey probably provides a representative picture of the situation in the two Thames Regions.

As the process of 'demographic ageing' in Great Britain continues, it is imperative that purchasers, mental health service managers and social services departments focus their attention on this problem. This could not be more true than for those patients with dementia, who require a specialist skill-mix of care which the private sector is often unable to provide. In the meantime, perhaps it is wise both to contemplate and learn from the experiences of others. Countries such as Norway, Holland and France are now providing deluxe packages of health and social care in order to provide for the mental and physical problems encountered by their growing elderly populations [22]. So far, they have not been afraid to fund these services.

Acknowledgements

This study was commissioned and funded by North and South Thames Regional Health Authorities. We thank Jill Entwhistle in North Thames (West), Keith Wallace in North Thames (East), Jenny Horn and David Morris in South Thames (West), and John Canning in South Thames (East) for their help in setting up and running the survey. We are grateful to Christine Vise, Peter Duke and Richard Evans for conducting the reliability study. We are particularly grateful to staff in the psychiatric units and health authorities for collecting the data. We also thank Helen McKeith and Natalia Jaffey for data entry and cleaning, and Deevey Chudasaman for help with data analysis. We are grateful to Mary Piper for her helpful comments.

References


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Revised version received 28 December 1995