Delays in discharging elderly psychiatric in-patients

AIMS AND METHOD

The issue of elderly psychiatric patients remaining in hospitals after being declared medically fit is of concern to doctors, hospital managers and politicians alike. This article sets out the findings from a study involving elderly psychiatric patients at a district general hospital, undertaken to establish the actual lengths, reasons for and financial implications of delays in discharge. The study involved 50 in-patients, all of whom had been discharged over the 3-month study period.

RESULTS

More than half of the patients in the sample were subject to some delay in discharge and for patients waiting for Elderly Mentally Infirm (EMI) placements this averaged 50 days. Collectively, nearly 25% of the time spent in hospital was due to delay. The cost to the hospital was estimated at more than £700 000 in 1 year.

CLINICAL IMPLICATIONS

Patients are being put at extra risk in terms of their health by being delayed in hospital. Issues of institutionalisation, nosocomial infections and falls are of primary concern.

Method

We considered all elderly psychiatric in-patients discharged from Leigh Infirmary in the period between 1 October and 31 December 2005. Our initial source of information about patient admissions, discharges and transfers was the daily ward listing kept by each ward.

Once a patient was listed as 'discharged' on the daily ward listing, their file was retrieved and information classified according to the pro forma template. The template contained essential demographic data plus the following:

1. Date for the patient fit for discharge, as entered in the notes by the medical team.
2. Total length of in-patient stay (the number of days from date of admission to date of discharge, excluding time spent on medical wards (other than psychiatry wards) or in accident and emergency if the patient’s physical health declined).
3. Delay incurred (the number of days elapsed from ‘patient fit for discharge’ to ‘date of discharge’).
4. Patient destination, namely home, Elderly Mentally Infirm (EMI) unit, nursing home, residential home or sheltered accommodation.
5. Cause of delay, for example carer decision resulting in delay, non-availability of residential or nursing home, patient going out of area, medical/nursing/physiotherapy/occupational therapy delay.

Results

A total of 50 patients were discharged during the study period (five became physically unwell during their stay, whereupon they were transferred to accident and emergency and passed away; they were not included in the study). There were 32 women and 18 men in this group, aged 61–97 (mean 76.3) years old.

In terms of the conditions the patients were diagnosed with, 24 (48%) had a primary diagnosis of...
dementia, 15 (30%) depression, 3 (6%) bipolar illness, 3 (6%) psychosis, 2 (4%) had organic problems and 5 (10%) had ‘other’ problems (persistent delusional disorder, alcohol dependence and no formal diagnosis).

The discharge destination was as follows: 24 patients were discharged to their homes, 9 went to an EMI unit (5 to nursing and 4 to residential homes), 7 into sheltered accommodation, 6 into a residential home and 4 into a nursing home.

In-patient stay and delay

The total length of in-patient stay for all patients (excluding time spent on other medical or surgical wards) varied between 4 and 326 days (mean stay was 60 days). The total length of delay varied between no delay up to 201-day delay (mean delay was 14 days; Fig. 1).

There were a number of causes for the delay in discharge: an unavailable destination placement caused a total of 229 days’ delay (affecting 12 patients); a 201-day delay happened because of patient ‘out-of-area’ (only one case); carer delay accounted for 117 days (12 patients); funding issues were the reason behind 84 days of delay (4 patients); nursing and residential home assessment and feedback resulted in 59 days’ delay (5 patients); delays in patient transfer to destination cost 9 days’ delay (2 patients); and setup of homecare cost 7 days (3 patients).

Consequences of delay

These include ‘bed-blocking’, of particular relevance in mental healthcare units as patients who are in crisis in the community may not be able to access hospital care; increased carer stress; risk of nosocomial infections (Lim et al, 2006) and financial costs to the NHS.

Cost of delay

The 50 patients in the study spent a total of 2997 days on the two hospital wards being observed; the total number of delayed days arising from their stay was 706; this figure represents 23.5% of the total number of in-patient days.

The average cost of a hospital bed in the Trust was put at £250 per day, and so for 706 delayed days this equates to a cost of delay of £176,500 for the 3-month period we collected data for. If extrapolated for 12 months, over £700,000 would be spent on unnecessarily keeping patients in hospital.

For the 50 patients, the delay cost £3530 per person over 3 months; since there were 27 patients delayed 1 day or more, this brings a cost of £6540 per delayed patient over 3 months. Of the patients experiencing delay, 19 were diagnosed with dementia, 6 with depression, 1 with bipolar affective disorder and 1 with an organic illness. If we consider how the destination of the patient affects the delay, it is clear that those awaiting EMI placements are affected most, followed by those awaiting a nursing home place (Table 1).

Discussion

We found that there exists a significant delay in discharging elderly psychiatric patients. In our study, 23.5% of total in-patient stay was attributed to delay; most delay was due to non-availability of placement (especially EMI and nursing homes) and carer delay. A study looking

<table>
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<th>Destination</th>
<th>Patients (n)</th>
<th>Total number of days delayed (for n patients)</th>
<th>Average delay per patient (days)</th>
<th>Cost of delay per patient (£)¹</th>
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<tr>
<td>EMI unit</td>
<td>9</td>
<td>446</td>
<td>50</td>
<td>12390</td>
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<tr>
<td>Nursing home</td>
<td>4</td>
<td>96</td>
<td>24</td>
<td>6000</td>
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<td>Sheltered accommodation</td>
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<td>33</td>
<td>17</td>
<td>4125</td>
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<tr>
<td>Residential home</td>
<td>5</td>
<td>74</td>
<td>15</td>
<td>3700</td>
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<tr>
<td>Home</td>
<td>7</td>
<td>57</td>
<td>8</td>
<td>2035</td>
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EMI, Elderly Mentally Infirm.

¹. Calculated for each group of patients by multiplying the daily cost of a hospital bed in the Wrightington, Wigan and Leigh NHS Trust (£250) by the number of delayed days in the group and dividing it by the number of patients.
at the delays in discharging psychiatric in-patients with learning disabilities (Watts et al, 2000) found that those who remained in hospital longer were the least able and most challenging – the equivalent in patients with dementia would be those awaiting EMI placements, as they often have the highest level of care needs. It must be emphasised that timely and not early discharge should be the goal as the latter may result in the elderly patient being discharged to an inappropriate placement, potentially leading to hospital readmission.

The financial cost of delay to Leigh Infirmary over 12 months was estimated at £706,000, for elderly psychiatric in-patients only.

The demand for hospital beds is immense and one measure of the efficiency of a hospital is its throughput; therefore, when a blockage occurs in the system, it has a knock-on effect at other levels of care. Delayed discharge not only exposes the patient to health risks such as infection, social isolation, increased dependency and loss of skills (Lambourne et al, 2005) but also affects the health and well-being of those awaiting hospital admission and their carers.

Limitations
This study was conducted at a district general hospital and as such it may not be relevant to elderly psychiatric patients in other locations. Other considerations were the relatively small number of patients (n=50) and a short time frame of the study (3 months). We assumed the entries in the daily ward listing for the date a patient was medically fit for discharge had been accurate – prior to commencement of the study, an information sheet was distributed to the teams asking to pay particular attention to accuracy. Confounding factors identified in previous studies in this area which may also delay discharge such as age, severity of illness, complex comorbid physical health problems, poor mobility and informal status (Watts et al, 2000) were not taken into account in this study. It may be expected that the rate of staff turnover in social services and changes in care coordinators could have an effect on the length of in-patient stay and this would be a useful consideration for a future study.

Recommendations
Proactive discharge planning with emphasis on carer involvement should be encouraged together with the appointment of an elderly discharge coordinator to facilitate and monitor discharge.

Ways of improving inter-disciplinary communication between health and social services should be examined – our observations highlighted the importance of social worker attendance at the weekly multidisciplinary team ward reviews (the fact that social workers were based in the hospital greatly helped here); when social workers are based externally, regular updated reports from the ward (and vice versa) should be agreed upon. Assertive outreach services have been established nationwide for certain groups of adult mental healthcare users and extension to older-age clients should also be investigated. At Leigh Infirmary, a document detailing results of medical tests and investigations was completed for each patient to expedite provision of the medical report and early completion of a Part I discharge summary was widely encouraged among medical staff.

Increased care home provision is paramount if the problems of delayed discharge are to be adequately addressed (Epstein et al, 2001); another factor for consideration here would be ‘step-down’ facilities to act as a buffer between ward and eventual placement to reduce unnecessary in-patient stay.

Bed-blocking is a result of finite resources being used inappropriately. To quote Dr Andrew Murrison, MP for Westbury, ’It costs £1630 to have someone in hospital for a week and £319 for a week in a care home. Where is the sense in that?’ (Parliament Publications, 2002).

Declaration of interest
None.

References

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