

‘Assessment and care management’ – a hospital perspective

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SUMMARY

Patients placed from hospital to nursing or residential homes or to home under the intensive domiciliary care scheme were compared before and after the introduction of ‘assessment and care management’ on the 1st April 1993. In geriatric medical wards there was a 69% increase in the average length of stay for patients assessed and care managed and a 52% increase in the length of stay for self-funding patients compared with patients placed before the introduction of assessment and care management. Care managed patients discharged on the intensive domiciliary care scheme had a 66% increase in their length of hospital stay compared with care managed patients placed in private nursing homes. In contrast, the length of stay for care managed patients in other hospital wards was half that for geriatric medical wards.

INTRODUCTION

The increased number of beds in private and voluntary nursing and residential homes in the 1980’s,¹ and the associated cost to the Exchequer,² were factors leading to the Community Care Act (1990)³ and the introduction of ‘assessment and care management’ on 1st April 1993.⁴ Community care is meant to be a better option, rather than a cheaper one. Its key aim is to maintain elderly people who would otherwise need institutional care at home and if the person does need institutional care to admit them appropriately. Its key principals are comprehensive multi-disciplinary assessment of clients with complex needs, and devolution of budgets to care managers who have the power to purchase whatever was assessed as being necessary from any source.⁴ ‘Assessment and care management’ is the process of how the need for care is assessed and then delivered, initially for nursing home and residential care. Through this process the Eastern Health and Social Services Board aims to reduce the level of institutional care in the elderly from 18% to 12% by 1997.⁵

Since more than 50% of clients placed in private nursing homes are admitted directly from hospital, the process of ‘assessment and care management’ from hospital is of particular importance. There have been few studies of how this process is working in hospital. A recent evaluation of care management reported no complaints about delays in assessment, discharge, or evidence of

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'blocked beds'.⁶ The present study looked into placement of patients from hospital to nursing and residential homes, or to their own home, under the intensive domiciliary care scheme for three months before and nine months after 'assessment and care management' was introduced.

METHODS

Patients admitted to the Department of Health Care for the Elderly in the Ulster Hospital, under our care who were discharged for the first time to nursing or residential homes, or to their own home, under the intensive domiciliary care scheme were studied. Patients admitted after 31/12/93 were not included. Those discharged between 1/1/93 and 31/3/93 formed group 1, and those discharged after 1/4/93 via 'assessment and care management' formed group 2. Patients discharged after 1/4/93 to nursing or residential homes but not via 'assessment and care management' (self-funding) formed group 3 and those discharged after 1/4/93 from all other wards in the Ulster Hospital (mainly medical) via 'assessment and care management' formed group 4.

To avoid bias in lengths of stay, patients receiving continuing care in hospital who were subsequently discharged were excluded. Patients who died in hospital, or who were discharged to respite or convalescent care, or to rehabilitation units, or to hospices (Beaconfield or the Northern Ireland Hospice) were also excluded. Seven patients were excluded from group 4 due to insufficient data.

Information was collected retrospectively from the full case notes, and social work records in groups 1 to 3, and entered onto a computer database. Age, sex, domicile, source of admission, type of admission, date of admission, date of commencement of comprehensive assessment ('assessment and care management') by the social worker, date of referral to the care manager, main diagnosis, discharge date and discharge placement were recorded. For patients who were self-funding and for those patients who were discharged before 1/4/93, the date of referral to relatives for placement following discussions between the social worker, patient and carer, was taken as the equivalent of the date of referral to the care manager. For group 4 patients information was drawn only from social work records. This included age, date of admission, date of commencement of comprehensive assessment ('assessment and care management') by the social worker, date of referral to the care manager, discharge date and discharge placement. All group 4 patients were care managed.

Main diagnoses were divided into systems. If no underlying cause was found the diagnoses of 'falls' and 'poor mobility' were recorded under the locomotor system. The abbreviated mental test score⁷ (maximum = 10) was recorded for groups 1 to 3, a score of less than 7 out of 10 was classified as dementia. The Barthel score⁸ (maximum = 20) was used to measure functional ability in groups 1 to 3. A score of 0 to 6 was classed as severe disability, 7 to 13 as moderate disability and > 13 as mild disability.

The data were analysed using FileMaker Pro for Windows (Database) and STATVIEW on an Apple Macintosh computer using Chi-squared, Fisher's exact test, Anova and Fisher's protected least significant difference for use with unequal sample size (for inter-group comparison).

Intensive domiciliary care scheme.

The intensive domiciliary care scheme is a scheme introduced in 1993 to provide home care to allow an elderly person to remain at home. It is not means tested at present.

Assessment and care management.

Assessment identifies needs and determines eligibility. Care management is a process of organizing the inter-related tasks of needs assessment and the design, management and monitoring of care, centred on individual requirements.⁴

TABLE 1

Admission details, mental and functional ability and completion times of different stages in 'assessment and care management' between groups. 95% confidence intervals are in italics.

Age (years)	Number	Mental test score (out of 10)	Barthel score (out of 20)	Length of stay (days)	Time from admission to referral to care manager (days)	Time from referral to care manager to discharge (days)
Group 1 – pre-April 1st 1993						
83.9	23	5.9	9.6	35.4 ^c	18.7 ^a	16.6
<i>81.2-86.6</i>		<i>4.6-7.2</i>	<i>7.9-11.3</i>	<i>27.1-43.7</i>	<i>10.8-26.7</i>	<i>12.5-20.8</i>
Group 2 – post-April 1st 1993, care managed						
82.5	76	5.6	8.7 ^a	59.8 ^d	37.2 ^h	22.6 ^j
<i>80.8-84.2</i>		<i>5.1-6.2</i>	<i>7.7-9.7</i>	<i>51.0-68.6</i>	<i>30.0-44.5</i>	<i>17.6-27.5</i>
Group 3 – post-April 1st 1993, not care managed						
84.7	18	6.2	12.0 ^b	53.9 ^e	28.4	25.4 ^k
<i>82.4-86.9</i>		<i>4.9-7.5</i>	<i>10.0-14.0</i>	<i>32.5-75.2</i>	<i>13.9-42.9</i>	<i>10.9-39.9</i>
Group 4 – post-April 1st 1993, all other wards, care managed						
81.6	31	—	—	29.4 ^f	17.6 ⁱ	11.8 ^l
<i>79.1-84.2</i>		—	—	<i>24.6-34.2</i>	<i>14.3-20.9</i>	<i>9.2-14.4</i>
ANOVA		NS	p=0.015	p<0.0001	p=0.0012	p=0.031

a b (p=0.0040), c d (p=0.0022), d f (p<0.0001), e f (p=0.0135)*

g h (p=0.0038), h i (p=0.0006)*

j l (p=0.0094), k l (p=0.018)*

* Fisher's protected least significant difference test for unequal sample size.

RESULTS

Sixteen out of 23 patients in group 1, 56 out of 76 in group 2 and 15 out of 18 in group 3 were female (NS). Fourteen group 1 patients, 69 group 2 patients and 20 group 3 patients were admitted from home (NS). Eleven group 1 patients, 50 group 2 patients and 13 group 3 patients had diagnoses relating to the locomotor or central nervous system (NS). Nine group 2 patients were admitted to hospital via a domiciliary visit compared to 1 patient in group 1 and none in group 3 (NS).

There was no significant difference in abbreviated mental test scores between groups 1 to 3. Five patients in group 1, 25 in group 2 and 1 in group 3 had severe functional disability ($X^2 = 13.686$, $p = 0.0084$). The mean Barthel scores in groups 2 and 3 were 8.7 and 12.0. There was a significant difference in lengths of stay between the different groups, with patients care managed in the other wards having the shortest length of stay. This was due to a significant decrease in the time from admission to referral to the care manager between groups and from referral to the care manager to discharge (Table 1).

In group 1, 22 patients were discharged to a private nursing home and one to home under the intensive domiciliary care scheme. In group 2, 49 patients were discharged to a private nursing home (3 of which were homes for the confused elderly), 20 were discharged home on the intensive domiciliary care scheme (9 of the 20 were male compared to 8 of the 46 discharged to private nursing home, $X^2 = 4.305$, $p = 0.038$) and 7 were discharged to residential accommodation. In group 3, 14 patients were discharged to a private nursing home and 4 to residential accommodation. In group 4, 21 patients were discharged to a private nursing home (4 of which were homes for the confused elderly), 4 were discharged to home on the intensive domiciliary care scheme and 6 were discharged to residential accommodation.

Group 2 was subdivided by placement. Group 2a consisted of the 49 patients placed in a private nursing home, group 2b consisted of the 20 patients discharged home on the intensive domiciliary care scheme and group 2c consisted of the 7 patients placed in residential accommodation. There were significant differences in the rate of dementia and degree of disability between the groups. 33 (67%) of group 2a patients had dementia compared with 13 (35%) of group 2b patients ($X^2 = 6.918$, $p = 0.0085$) and 14.3% of group 2c patients ($p = 0.0375$, Fisher's exact test). This was reflected in the abbreviated mental test and Barthel scores. Patients discharged to a nursing home had the lowest scores. There was a significant difference in the average length of stay between the groups. Patients discharged to the intensive domiciliary care scheme had the longest hospital stays. There were significant differences between the mean time between admission and referral to the care manager and between referral to the care manager and discharge between the groups. Patients discharged to the intensive domiciliary care scheme had the longest times. There was no significant difference in mean age between groups (Table 2).

For patients placed in nursing homes there was a mean length of time of 14 days (95% confidence interval 9 days to 19 days) between admission and onward referral to the social worker by the consultant geriatrician, and of 17.5 days (11.9 to 23.1) from referral to the social worker to the case being handed over

to the care manager. Equivalent figures for patients placed under the intensive domiciliary care scheme were 15.5 days (6 to 25) and 35.4 days (19.3 to 51.5).

TABLE 2

Admission details, mental and functional ability and completion times of different stages in 'assessment and care management' between subgroups of group 2 patients. 95% confidence intervals are in italics.

<i>Age (years)</i>	<i>Number</i>	<i>Mental test score (out of 10)</i>	<i>Barthel score out of 20)</i>	<i>Length of stay (days)</i>	<i>Time from admission to referral to care manager (days)</i>	<i>Time from referral to care manager to discharge (days)</i>
Group 2a – post-April 1st 1993, care managed, private nursing home						
83.5	49	4.9 ^a	7.2 ^d	50.5 ^g	31.5	19.0 ⁱ
<i>81.6-85.4</i>		<i>4.1-5.6</i>	<i>6.0-8.4</i>	<i>41.8-59.4</i>	<i>23.8-39.3</i>	<i>14.6-23.3</i>
Group 2b – post-April 1st 1993, care managed, intensive domiciliary care scheme						
80.9	20	6.9 ^b	10.1 ^e	83.7 ^h	50.9	32.7 ^j
<i>76.4-85.4</i>		<i>6.2-7.7</i>	<i>8.6-11.6</i>	<i>60.4-107</i>	<i>31.5-70.4</i>	<i>17.5-47.9</i>
Group 2c – post-April 1st 1993, care managed, residential accommodation						
80.0	7	7.3 ^c	15.3 ^f	56.5	37.8	18.7
<i>72.9-87.1</i>		<i>5.9-8.6</i>	<i>13.9-16.6</i>	<i>30.3-70.9</i>	<i>19.1-56.6</i>	<i>6.7-30.7</i>
ANOVA		p=0.0007	p<0.0001	p=0.004	NS	p=0.048

a b (p=0.0009), a c (p=0.0087)*

d e (p=0.004), d f (p<0.0001), e f (p=0.002)*

g h (p=0.0009), i j (p=0.0161)*

* Fisher's protected least significant difference test for unequal sample size.

DISCUSSION

The concept of community care for the elderly, the mentally ill and the handicapped is that individuals need to live in a community, not an institution.⁹ For 'assessment and care management' to be implemented the person at risk must first be identified.⁴ The time taken for the ward social worker to fully process a case for 'assessment and care management' is 4-5 hours, on average. This workload, which involves contact with the patient (19% of social work time) and carer (25% of social work time), liaison with the care manager (10% of social work time) and other professionals, and completion of an assessment schedule (20% of social work time) and assessment of means, has not been fully allowed for in the planning process.¹⁰ Even those patients who will be self-funding must initially be processed along the same lines as for the full care management process.

The number of subjects in the present study is small and the trends described need to be confirmed by a larger prospective multi-centre study which can better take into account the complexities of the inter-related issues that contribute to the final outcomes measured by placement and length of stay in the present study.

We found no evidence of delay in the ward social worker recognizing clients who might need 'assessment and care management'. Delays occurred when there was difficulty in obtaining adequate details from carers about the patient's financial status and social circumstances, and when carers failed to realize that care management was necessary. Confused patients who had no carers were a particular problem. The mean length of time before the consultant geriatrician referred a case for nursing home care, and for the social worker to process the case before the care manager took over, was 14 and 17.5 days respectively. This suggests that the complexity and availability of social work input into care management is an important factor in hospital stay. While an appraisal of care management³ reported no complaints about the process, the present study showed a prolonged wait in hospital for patients subsequently discharged home on the intensive domiciliary care scheme (32.7 days for intensive domiciliary care scheme compared to 19.0 days for private nursing home, Table 2). This was due in part to the slowness of some district social services in staffing this scheme and providing adequate packages of care for severely dependent patients, and also to the complexity of arranging care for such patients. The mean length of time before onward referral to the care manager for the scheme was 50.9 days, with a mean of 15.5 days before referral by the consultant to the social worker and 35.4 days before the case was handed over to the care manager by the social worker. There was no significant difference in lengths of stay between care managed patients from South and East Belfast (mean 56 days) and North Down and Ards (mean 68.8 days) community units of management.

The average length of stay in those discharged before the introduction of care management (group 1) was 35.4 days compared with 59.8 days in assessment and care management patients (group 2). Part of this difference may be explained by the favourable financial climate which existed for placing patients in private nursing homes prior to April 1993.¹¹ In self-funding patients discharged after April 1st (group 3) the mean length of stay, which should have approximated that in group 1, was 53.9 days. One effect of 'assessment and care management' has been to prolong the period between admission and the case being passed on to the care of the care manager for further assessment and placement (Table 2). This prolongation was contributed to by the reluctance of some carers to consider care management, and their reticence in attending appointments with the ward social worker. The intensive domiciliary care scheme, which is not means tested at present, requires more complex planning than discharge to nursing home care. Financial concerns, availability of relatives and disputes between them, worries about ability to cope and tardiness in looking for suitable nursing and residential homes also contributed to delays in discharge. There was an average excess waiting time of 6 to 9 days for placement of group 2 and group 3 patients compared with group 1 patients (Table 1).

These results compare with a report from Bath where the mean length of stay of patients discharged for the first time to nursing and residential home care was

55.3 days in 1992 and 59.8 days post-April 1993, slightly greater than the equivalent length of stay in the present study. The numbers in the Bath study were small, it lacked any patient details, and no patients were reported as having been discharged on the intensive domiciliary care scheme.¹¹ In the present study lengths of stay in hospital for elderly patients care managed in other wards (mainly medical, group 4) was *half* that for patients care managed in geriatric wards. This was associated with earlier referral to the care manager (similar to pre-April 1st, group 2) and a *halving* of the waiting time for placement. Mental test and Barthel scores were not available for these patients but nearly all were discharged to nursing home care and were therefore significantly disabled. There are some differences in selection of patients admitted to general medical wards compared with geriatric medical wards¹² but it would seem that care managers, ward staff and carers place more emphasis on early discharge from general medical wards than geriatric medical wards. General medical wards have much lower numbers of patients requiring assessment and care management and this may have contributed to the shorter hospital stay in this group.

In geriatric medical wards, geriatricians need to identify patients for referral to the care manager promptly, and ward social workers need to gain access to carers more rapidly to provide information for the whole process to be initiated. In doing so it is still important to provide adequate rehabilitation and not to rush the patient out to high dependency care in order to avoid 'bed-blocking.' For those patients who underwent assessment and care management from geriatric medical wards the Barthel and abbreviated mental test scores provide evidence of correct placement in nursing and residential homes. Patients placed at home under the intensive domiciliary care scheme were much more dependent than patients placed in residential accommodation.

Very few patients were placed in a private nursing home for the elderly mentally infirm, the policy being to place confused patients in ordinary nursing homes unless they have behavioural problems. In this area there is an excessive waiting time for elderly mentally infirm private nursing home places, now more than two months for some patients.

This study suggests that the process of 'assessment and care management' has led to longer lengths of stay in geriatric medical wards. The cause for this is multi-factorial, including the availability of packages of care, co-operation of carers, delays in referral to the care manager, complexity of the procedure, funding difficulties, and delay in the care manager facilitating discharge. At the time of writing there are over 30 patients in the Department of Health Care for the Elderly at the Ulster Hospital awaiting placement. Rationalization and simplification of the present number of forms required for assessment and care management is needed, along with the provision of adequate social work time. 'Assessment and care management' should be considered from the first day of admission of an elderly patient.

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