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A home from hospital service for older people

M Donnelly, M Dempster

Health and Social Care Research Unit, The Queen's University of Belfast,

Mulhouse Building, Grosvenor Road, Belfast BT12 6BJ.

Michael Donnelly PhD Martin Dempster PhD CPsychol

Correspondence to Dr Dempster

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Abstract

Current policy and practice emphasises much more than ever before a need for purchasers and providers to reduce appropriately the length of hospital stay. Consequently, a number of early discharge "schemes" have been developed. This paper presents the findings from an evaluation of a "home from hospital" (HFH) scheme.

The HFH service provides a maximum of six weeks intensive domiciliary care for older people on their discharge from hospital. The aim of the service is to facilitate early discharge from hospital and to assist patients to regain independence. The study reported here elicited the views and perceptions of clients and professionals involved in the HFH scheme about the quality, efficiency and effectiveness of the service.

Seventy-five clients were discharged from hospital to the HFH scheme during a two month period and those who consented to participate in the study were interviewed after discharge from the HFH service (n = 40). Participants had attended hospital for various conditions but the largest group were fracture patients. Hospital staff and community based professionals completed a questionnaire about the service.

Overall, clients and professionals perceived the HFH scheme as a beneficial service, though some minor problems existed at an individual level. Clients' dependency levels generally decreased during their time on the scheme.

Research using a controlled design is necessary in order to draw firm conclusions about the cost-effectiveness of a HFH service. Overall, home-from-hospital appears to be an effective model of an early discharge scheme worthy of further attention.

Introduction

The DHSS (NI) policy document *People First: Community Care in Northern Ireland for the 1990s*[1] (published in 1990 and implemented on 1st April 1993) emphasised further the need for joint working between hospital services and care in the community. The current *Regional Strategy for Health and Social Wellbeing* (1997-2002)[2] states that care for elderly people should be configured and developed with the aim of supporting at least 88% of elderly people in their own homes. In November 1997, a "Winter Pressures" Group was established in Northern Ireland to examine methods to deal with the problem of increased demand on hospital beds over the winter months. A "home from hospital" (HFH) service was one of the responses which purchasers and providers developed as a consequence of these (and other) factors. This paper aims to report and discuss the results of an evaluation of the home from hospital service in the Northern Health and Social Services Board (NHSSB) in Northern Ireland.

There is a scarcity of published evaluative research on the HFH model of service provision. Millar[3] described some HFH schemes which have been established in Britain; and Shepherd[4] reported mainly positive views expressed by older users of a HFH scheme and their carers in Nottinghamshire. Other authors have demonstrated how a home based rehabilitation scheme was more effective in terms of reducing disability than hospital care for older people with stroke and hip fractures.[5, 6]

The research reported here is one of the few studies examining the merits or otherwise of this type of post hospital discharge service and the use of Winter Pressures money.

The HFH service which was the focus of the evaluation is designed to provide domiciliary care to patients on their discharge from hospital for a period of approximately six weeks. The main purpose of the scheme is to enable patients to undergo rehabilitation in their own homes, in order to encourage a full and quick return to independence in an environment with which they are familiar and within which they feel comfortable. The HFH service aims also to permit patients to return home from hospital earlier than otherwise would be possible; and to avoid the need for residential or nursing home care by providing a care worker to perform personal care tasks within the patient's own home.

The primary aim of this study was to elicit the views and perceptions of HFH patients and professionals involved in the HFH scheme on the quality, efficiency and effectiveness of the service.

Method

To be considered for entry to the HFH scheme clients must be adults who were independent before admission to hospital and who are likely to regain their independence within six weeks after discharge from hospital. The potential for independence is assessed by a hospital social worker in consultation with the hospital multi-disciplinary team. During the period of the study (February and March 1998), a total of 75 clients (58 females; 17 males) entered the HFH scheme. Of these 75 clients, 40 (33 females; 7 males) were interviewed following their discharge from the HFH scheme. The participants had been admitted to hospital as a result of fractures

(28%), hip replacements (15%), myocardial infarctions (10%), stroke (5%) and various other medical and surgical procedures. Only 7/40 clients had a carer. A total of 35 clients (25 females, 10 males) refused to take part in the study, although 6 of these clients only received the HFH help for less than a week. There were no statistically significant differences between participants and non-participants in terms of age, length of hospital stay or sex, but those who refused to participate in the study had been in receipt of the HFH scheme for a significantly shorter period of time than those who agreed to participate (see Table I).

The one-to-one interviews with clients were conducted within one week after the client's discharge from the HFH scheme. All interviews were conducted by a single interviewer. The interview consisted of a mixture of closed and open questions designed to investigate the clients' opinions of the appropriateness of the help they received from the HFH scheme and how the scheme had addressed their concerns about leaving hospital. The interview also included the Barthel Index[7] which provides an indication of level of dependency. Possible scores on the Barthel Index range from 0 to 20, with 0 indicating the highest level of dependency.

Questionnaires were posted to each client's district nurse (where appropriate), community social worker and General Practitioner (GP) on completion of the interview with the client. Response rates for the postal questionnaires were as follows: social workers – 98% (39/40); GPs – 75% (30/40); district nurses – 73% (16/22). Information about hospital discharge procedures was also collected from 9 ward managers and 12 hospital consultants.

Results

Discharge from hospital

When asked if they were worried about leaving hospital, over half (56%; 15/27) of the clients responded in the positive. The types of worries they expressed were "being able to get about", "how to manage", "the type of help I will get" and "doing my shopping". Eleven of the fifteen worried clients felt that being told about the HFH scheme helped to relieve their anxieties. Clients were given a leaflet and were told about the scheme in the hospital by a social worker 2.7 days pre-discharge, on average (range = 0-7 days pre-discharge).

Leaving the HFH scheme

Over 50% (21/40) of clients received a home help service after their time on the HFH scheme was finished, although more than half of this number (12/40) had been receiving a similar service before their admission to hospital. Around 28% (11/40) of clients were anxious about leaving the HFH scheme. The most common worry related to uncertainty about being able to manage on their own. Other worries included: "...no confidence", "...problems getting dressed", "...not fit to do my housework", "...can't manage to get about and my husband has heart problems".

Changes in clients' dependency levels

At the end of their time on the HFH scheme, 36/40 (90%) clients stated that their ability to look after themselves had improved since hospital discharge. Clients who reported feeling independent at this stage made comments such as "I can manage better indoors", "I'm more confident now" and "I can look after myself better now".

In addition to the client scores on the Barthel Index at discharge from the HFH scheme (median = 19.5; range = 13-20), scores for 26 of these 40 clients at the point of their discharge from hospital were also available (median = 16; range = 13-20). For the 26 clients who were interviewed at the two points in time, a Wilcoxon statistical test suggested that there was a significant increase ($p < 0.001$) in clients' Barthel scores, indicating a decrease in dependency levels, between entry to and discharge from the HFH scheme.

Appropriateness of the HFH service for clients

The majority of clients (35/40; 88%) agreed that the HFH scheme provided them with the right kind of help. In support of the service, clients said, for example: "Its reassuring to have someone around", "It relieved the worry of my family" and "Rather do this as go to a [nursing or residential] home – you mend better in your own house". In response to the question: "how much help and support did you receive from the HFH scheme?" 27/40 (68%) clients reported "a lot", 12/40 (30%) clients reported "some" and 1 client reported "very little". When asked if they felt this amount of help and support was enough, 36/40 (90%) clients responded positively.

All but one client stated that they would recommend the HFH scheme to people who were in the same situation; and all clients but two would like to receive HFH again if they were ever admitted to hospital. Social workers, district nurses and GPs viewed the scheme as appropriate for 97.5% (38/39), 87.5% (14/16) and 97% (29/30) of clients respectively.

The contribution of HFH to early hospital discharge

Social workers deemed that 56% of clients would have remained in hospital for an extra 10 days, on average, in the absence of the HFH scheme. Ward managers judged that 60% of clients would have remained in hospital for an average of an extra 12 days. Hospital consultants recorded that, in the absence of the HFH scheme, 39% of clients would have remained in hospital for an average of an extra 13 days.

The main reasons given by the professional groups for extending a client's stay in hospital, in the absence of the HFH scheme, were that "the client could not manage on their own at home", or that "the client had poor mobility".

Discussion

Much previous research has focused on the Hospital at Home (HAH) model of provision rather than HFH. Older medical patients on HAH schemes experienced more positive outcomes in terms of recovery from illness than patients who remained in hospital longer and were not discharged to a scheme.[8] However, other research has

not found any significant differences between older medical or orthopaedic patients who were discharged on to a HAH scheme and those who remained in hospital longer.[9, 10, 11] There is also a lack of consensus about whether or not HAH schemes are more cost-effective than hospital care.[12, 13, 14]

However, HAH schemes differ from the HFH model which is the focus of this paper. HFH provides personal or social care and some nursing care (for example, changing dressings, administering injections) to clients who no longer need medical care but require assistance during a period of rehabilitation. HAH provides medical and nursing care to clients who might be described as hospital ward "outliers". Decisions about entry to and discharge from HAH schemes are usually made by a patient's GP or a senior community nurse rather than a hospital-based co-ordinator (usually a social worker) as is the case with HFH.

Overall, HFH appears to offer an effective model of organised post-discharge services for older people and, more importantly at least from the patient's perspective, contributes significantly to quality of life. There is a scarcity of research designed to investigate this largely social care model of hospital discharge services. However, the general pattern of results found in this study concur with the findings reported by others[4, 5, 6] – clients and professional groups stated that the HFH scheme worked well, clients' dependency levels decrease during their time on the HFH scheme and although there were a few individual problems, the HFH service was perceived as beneficial for clients. It is important to note that the largest group of participants in this study and in others[4, 6] had been admitted to hospital for fractures and hip replacements. The benefit or otherwise of a HFH scheme for clients with other

medical conditions is unclear and requires investigation. Previous research[11] has suggested that people with certain conditions (knee replacement) are not suitable for participation in an early discharge scheme or prefer to stay in hospital rather than be discharged early (chronic obstructive airways disease), whereas other people (with stroke) appear to benefit in terms of reduced disability in the medium term from rehabilitation at home rather than at hospital.[5]

Professional staff appeared to suggest that in many cases clients would have had to remain in hospital for a longer time because of non-medical reasons. This illustrates one of the potential benefits of HFH. Patients may complete their (non-medical) rehabilitation or recovery at home with the assistance of HFH, thereby releasing a bed for use by someone who requires medical treatment and care. However, there was some variation between the responses of professionals regarding the clients for whom this was the situation.

Any appraisal of the cost-effectiveness of the HFH service must take into account the extent to which the service facilitates early discharge from hospital, avoids the need for convalescence care in nursing homes and prevents hospital re-admission. Streamlining of discharge procedures to ensure continuity of care will reduce high levels of hospital re-admission[15] and agreement about responsibilities between hospital and social services staff in the discharge process will avoid "blocked beds".[16] These features are encapsulated and implemented in a HFH scheme. Therefore, early discharge and avoidance of hospital re-admission are more likely to be achieved by a service which has as one of its components a HFH scheme. This view is supported by the finding that substantial savings in bed days were made through an early discharge

scheme which provided supported home rehabilitation for elderly people with a hip fracture.[13] However, firm conclusions about effectiveness and cost-effectiveness can only be drawn after an investigation using a controlled research design. Nonetheless, the HFH model of post-discharge care is valued highly by service users and is worthy of further attention if not replication by other purchasers and providers. In 1997/98, the Department of Health allocated £159m to "cope with winter pressures" and there are plans to distribute similar funds in 1998/99. However, few evaluations (controlled or otherwise) have been undertaken of the apparently large number of service schemes financed under the winter pressures allocation. Clearly, this is an area which merits research and development attention in order to ensure the effective, efficient and equitable use of resources.

References

1 DHSS. *People First: Community Care in Northern Ireland for the 1990s*. HMSO, 1990.

2 DHSS. *Health and Wellbeing: Into the Next Millennium*. *Regional Strategy for Health and Social Wellbeing 1997-2002*. Department of Health and Social Services, Northern Ireland, 1997.

3 Millar B. Honourable discharge. *Health Serv J* 1998; **108**: 26-9.

4 Shepherd A. Home from hospital – the experiences of older people and carers of discharge to community care. *Res Policy Planning* 1996; **14**: 4-12.

5 Gladman J, Forster A, Young J. Hospital- and home-based rehabilitation after discharge from hospital for stroke patients: analysis of two trials. *Age Ageing* 1995; **24**: 49-53.

6 Pryor GA, Williams DR. Rehabilitation after hip fractures. Home and hospital management compared. *J Bone Joint Surg* 1989; **71**: 471-4.

7 Mahoney FI, Barthel DW. Functional evaluation: the Barthel Index. *Maryland State Med J* 1965; **14**: 61-5.

8 Donald IP, Baldwin RN, Bannerjee M. Gloucester hospital-at-home: a randomised controlled trial. *Age Ageing* 1995; **24**: 434-9.

9 O'Cathain A. Evaluation of a Hospital at Home scheme for the early discharge of patients with fractured neck of femur. *J Public Health Med* 1994; **16**: 205-10.

10 Richards SH, Coast J, Gunnell DJ, Peters TJ, Pounsford J, Darlow M-A. Randomised controlled trial comparing effectiveness and acceptability of an early discharge, hospital at home scheme with acute hospital care. *BMJ* 1998; **316**: 1796-801.

11 Shepperd S, Harwood D, Jenkinson C, Gray A, Vessey M, Morgan P. Randomised controlled trial comparing hospital at home care with inpatient hospital care I: three month follow up of health outcomes. *BMJ* 1998; **316**: 1786-91.

12 Coast J, Richards SH, Peters TJ, Gunnell DJ, Darlow M-A, Pounsford J. Hospital at home or acute hospital care? A cost minimisation analysis. *BMJ* 1998; **316**: 1802-6.

13 Hensher M, Fulop N, Hood S, Ujah S. Does hospital-at-home make economic sense? Early discharge versus standard care for orthopaedic patients. *J R Soc Med* 1996; **89**: 548-51.

14 Shepperd S, Harwood D, Gray A, Vessey M, Morgan P. Randomised controlled trial comparing hospital at home care with inpatient hospital care II: cost minimisation analysis. *BMJ* 1998; **316**: 1791-6.

15 Health Service Accreditation. *Service Standards for Discharge Care*. National Health Service, 1996.

16 Audit Commission. *The Coming of Age*. National Health Service, 1997.

Table I: Comparison of patients who participated and those who refused to participate in the study

	Patients who participated in the study (n = 40)	Patients who refused to participate (n = 35)	
Age (years) mean (SD) range	76.43 (11.91) 60-95	77.56 (12.10) 51-95	t = 0.39 p = 0.697
Length of hospital stay (days) mean (SD) range	16.74 (12.48) 2-56	19.19 (29.32) 0-130	t = 0.41 p = 0.687
Length of time in HFH scheme (days) mean (SD) range	39.05 (12.42) 18-60	25.83 (16.21) 5-42	t = -3.89 p < 0.001
Sex male : female	33 : 7	10 : 25	χ^2 = 0.75 p = 0.386