Clinical Medicine 2009, Vol 9, No 4: 311–14

Timely discharge of older patients from hospital: improving the process

Philip Dainty and Jimmy Elizabeth

ABSTRACT – Elderly patients represent a large number of admissions to hospital, accounting for a disproportionate number of hospital bed days. Discharge planning can improve the safety and appropriateness of discharge from hospital, and can have a positive impact on length of stay and efficiency. Despite this, discharge planning is often neglected. This review, both evidence and experience based, is provided to aid with the safe discharge of elderly patients back into the community.

KEY WORDS: comprehensive geriatric assessment, discharge planning, geriatrics, multidisciplinary team

Introduction

Increasing numbers of emergency admissions put pressure on acute hospital services often precipitating bed crises. This is a major challenge for hospital staff who need to develop more efficient working practices. Although 'admission avoidance' receives much publicity, on-call doctors are often reluctant not to admit patients, not least because it is quicker and safer to admit rather than discharge a complex patient in whom relevant information to determine safe discharge may not be immediately available.

Timely discharge of stable patients is one way to improve bed turnover and is a skill that should be mastered by all doctors. Discharging patients can be straightforward although there are often obstacles to address, especially for older patients with multiple pathologies and disabilities who may have complex needs. Multidisciplinary assessment schemes in accident and emergency departments and assessment units can lead to rapid and safe discharge of elderly patients, as well as appropriate placement for those being admitted.[1,2]

Despite its importance, discharge planning is neglected in undergraduate and postgraduate education. This article aims to partly address this by sharing experience and practice – both evidence based and pragmatic – that can be used to improve the discharge process for older patients.

Methods

The aim of this article is to share with the reader skills gained via the authors' experience. Firstly, consideration was given to which aspect(s) of the discharge process would be examined. A literature review was subsequently conducted of relevant online databases (EMBASE, PUBMED, Cochrane) to identify studies relevant to the areas being discussed. Key words and phrases included 'discharge planning', 'elderly care' and 'comprehensive geriatric assessment'. These papers were reviewed and used to identify resources from which to develop ideas.

Philip Dainty, Specialist Registrar; **Jimmy Elizabeth,** Consultant

Department of Elderly Care, Stafford General Hospital, Stafford

What is the effect of older patients on acute services?

At any given time patients over the age of 65 occupy approximately two-thirds of general and acute hospital beds.[3] The number of hospital beds (both acute and long stay) has decreased and demographic changes resulting in higher proportions of older patients are well recognised.[4,5]

Older patients needing hospital care often have multiple problems requiring not only thorough and timely medical intervention, but also consideration of how to maximise independence, maintain health gains and avoid recurrent admission. They need to be 'pulled through' the hospital service efficiently. This is the process of discharge planning.

Discharge planning is, by virtue of the fact that it is tailor made, a highly heterogeneous process, and as such identifying specific evidence to inform it can be difficult. A systematic review of studies comparing individualised discharge plans with routine discharge care yielded mixed results, concluding that:

> *the impact of discharge planning that occurs while a patient is in hospital is uncertain on readmission rates, hospital length of stay and health outcomes. However, it is possible that even a small reduction in length of stay or readmission rate could free up capacity for subsequent admissions in a system where there is a shortage of acute hospital beds.*[6]

A neglected skill?

Despite potential gains for patients and the healthcare system, discharge planning remains largely ignored in formal undergraduate and postgraduate education. Trainees may gain some experience of discharge planning in an ad hoc fashion, absorbing skills by a process of intellectual osmosis. It is believed that discharge planning is an important generic skill that warrants formal recognition and is relevant to all patients, particularly older ones.

Improving the discharge process – hints and tips

The following sections consider areas of relevance for doctors in training, all of whom are involved in decision making and planning of patient care including the discharge process.

Box 1. Important considerations for effective discharge of elderly patients.

Points to remember:

1 Older patients occupy a majority of acute hospital beds.
2 Discharge planning can reduce hospital length of stay and optimise bed usage.
3 Discharge planning is a neglected skill.
4 Both evidence-based and pragmatic approaches can be helpful.
5 Discharge planning starts at admission.
6 Agreeing a plan and setting goals, including a provisional discharge date, is crucial.
7 Close liaison and agreement of the plan by all stakeholders is needed.
8 Knowledge of local community services is important.
9 It is often useful to discuss discharge with a patient's general practitioner, in some cases.
10 Discharges are only effective if they are safe – if in doubt the patient should remain in hospital.

These are not exhaustive, and other practitioners may have ideas of their own, but the authors have used them effectively in daily practice to improve discharge planning (see Box 1 for a summary).

'The devil is in the detail'

An essential skill for an effective geriatrician is to ensure that 'basic' elements of medical and nursing care are coordinated and performed to high standards. This should involve all stages of the patient journey, from admission through to discharge and subsequent follow-up. Junior doctors play a key role, and can impact on all of these stages by ensuring that a good clinical history is obtained (paying particular attention to the social and functional history including details of activities of daily living (ADL)), that investigations and results are processed efficiently, and that all 'loose ends' are satisfactorily dealt with and available at/for senior review.

In order to get details right it is essential to speak not only with patients but also their carers. The more promptly and accurately this is done, the more likely that discharge will be timely. Information obtained at admission is used to set goals and agree a plan including a provisional discharge date that patients, carers/family and members of the multidisciplinary team (MDT) are aware of and in agreement with. Effective discharge planning starts at admission.

Make the most of the multidisciplinary team.

Multidisciplinary working is the cornerstone of effective geriatric practice, and doctors in training are essential in, and to, the process. The mix of enthusiasm, experience, knowledge and skills of individual team members can combine to enable an effective discharge plan to be devised for even the most complex patients. Regular team meetings are beneficial and should be focused, generating actions including a review of the discharge date. The MDT should be involved as soon as possible after admission, with evidence suggesting a positive impact on patients within the emergency department potentially contributing to shortened length of stay and its benefits for the acute service (Fig 1).[7]

The British Geriatrics Society defines comprehensive geriatric assessment (CGA) as:

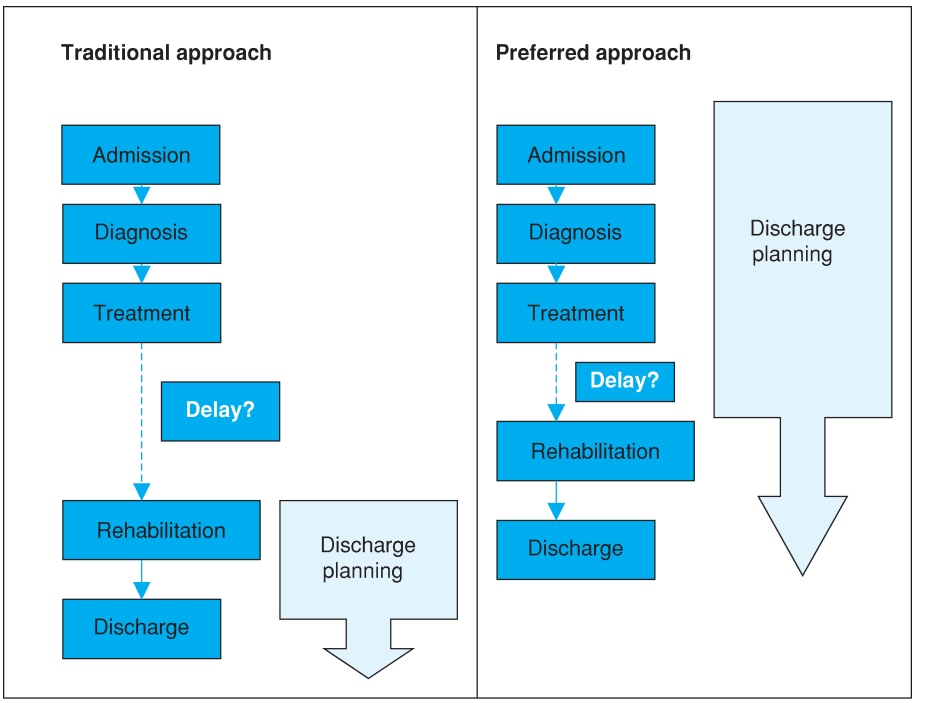

Fig 1. The modified and proactive approach to discharge planning and its potential effect on the patient journey.

a multidimensional interdisciplinary process focused on determining a frail older person's medical, psychological and functional capability in order to develop a coordinated and integrated plan for treatment and long-term follow-up.[8]

Evidence for CGA is generally supportive, suggesting that multidisciplinary assessment with post-discharge home intervention can improve functional status, reducing both the lengths of hospital stay and the rates of subsequent readmission, and also maintain patients at home.[9,10]

Multidisciplinary assessment is valuable and should be initiated as early as possible. The aim is to develop a personalised discharge plan. Occupational therapy (OT) input affords detailed assessment of a patient's functional and cognitive capabilities, and the need for provision of specialised equipment or modification of the home environment. Although inpatient OT evaluation is valuable, home visits can be particularly helpful in developing individualised discharge plans, and have been demonstrated to improve patient autonomy.[11] Close liaison between OT and social workers is essential, facilitating provision of new, and protection of existing, care packages, consideration of admission to 'step down' and other community facilities, and assistance with finances and benefits.

Physiotherapists are important in the discharge process as many conditions in the elderly manifest as immobility and falls. It is essential that an individualised approach be adopted for all patients, and that issues such as stairs assessments and transfers are not overlooked, as doing so may lead to unsafe discharges.

Although beyond the scope of this article to discuss each discipline fully, it should be remembered that many other professionals can contribute to the assessment of older patients (eg speech and language therapists, dietitians, pharmacists, incontinence specialists and community mental health services). They all may positively impact on the discharge process, as may primary care teams. Doctors often act as a focal point for interdisciplinary working and should be familiar with the skills of other team members.

Involve the patient's general practitioner

General practitioners (GPs) have detailed knowledge of a patient's medical history and social circumstances, and are often keen to participate in discharge planning.[12] For the majority of patients discharged, the usual method of communication to their GP is a discharge summary, the standard and accuracy of which may vary. Complex interventions, such as GPs visiting patients in hospital prior to discharge, have been demonstrated to improve quality of patient care, although results are less convincing for 'harder' end points, such as reduced readmission rates.[13]

Practically, such interventions seem unlikely to be pursued routinely given the number of patients involved and time restrictions. Despite this, our experience is that a short telephone conversation to establish any concerns of the primary care team and to share relevant information is highly effective, a feeling that is (at least anecdotally) supported by feedback from local GPs.

Remember that many acute medical conditions can be managed in the community

There is evidence supporting the efficacy, safety and feasibility of early discharge and subsequent community management of a wide range of acute medical conditions including chronic obstructive pulmonary disease, cellulitis and thromboembolic disease.[14–18] Research also indicates that proactive assessment and case management by a MDT can reduce rates of admission (and readmission) of the community-dwelling elderly.[19] It remains to be seen what the impact of such an approach will have for those in residential/nursing homes.

The primary concern in utilising 'rapid-response' services for early discharge is safety, and although data from studies are limited for older patients, the safety profile of such an approach is unlikely to differ if patients are selected carefully. Multiple comorbid problems or specific issues (eg cognitive impairment) may make early supported discharge unsafe. Any uncertainties should be discussed with more experienced colleagues. Get to know what is available in your locality and what the various intermediate/reablement teams offer.

Do not lose sight of the targets

In patients with complex medical problems where different professionals are involved in assessments and management, there is often a tendency for planning to become disorganised and uncoordinated. By setting specific targets and goals (always with the involvement/agreement of the patient and their family/carers), and reviewing these regularly, teamwork remains focused.

In the case of setting targets, such as a provisional discharge date, doctors are often concerned that patients may be sent home inappropriately on the date set because of a pressure on beds. Fortunately this is seldom so, as concerns are invariably raised by members of the MDT, the patient or their family/carers.

Do not assume that all older patients require rehabilitation

A common misconception among non-geriatricians is that all older patients require rehabilitation on being admitted to hospital. Although rehabilitation impacts positively in a wide range of circumstances and medical conditions, it is a costly and limited resource. Consequently, patient selection based on ADL skills before admission and potential for improvement is important, as is recognition that rehabilitation is not generic, but a highly complex and individualised intervention.

Identifying those who may benefit from rehabilitation needs experience. Research suggests that advancing age (ie 85 years and over compared with 64 years and younger) and poorer pre-morbid performance in ADL are associated with a reduced chance of a patient being discharged back to pre-admission living conditions.[20] Cognitive impairment is associated with a

poorer outcome from rehabilitation, although some patients with significant cognitive impairment do return home following appropriate rehabilitation.[21] It is reasonable in cases of uncertainty to obtain advice from a member of the geriatric MDT.

Befriend your local geriatrician

The range of services available to each hospital trust to assist with discharge varies widely. Service names, inclusion and exclusion criteria, and the services provided depend on local needs and commissioning and can be bewildering to doctors in training unfamiliar with them. For those not working within geriatrics a brief discussion with a member of the geriatric team can highlight possible options that may provide the patient with an alternative option to inpatient care. Early contact with a specialist may prevent unnecessary interventions and enable a more comprehensive plan to be determined. Knowledge of local community services is important.

Safety always

Despite concerns about length of stay, pressure on beds, early discharge and readmission rates, the overriding characteristic of an effective discharge plan (for any patient) is that it should be safe. Doctors in training should not sanction discharges if they do not have the competencies to do so, and should discuss/liaise with senior colleagues at all times if there is uncertainty. Patient safety remains paramount.

Conclusions

Supported, safe and timely discharge is a key part of a patient's journey. Discharge planning is poorly taught and often neglected despite its importance. The evidence base is heterogeneous and somewhat limited, with end points relatively difficult to determine and measure. The patient experience can be improved and bed usage optimised by effective discharge planning, a process that requires further research and more focused training.

References

1 Hardy C, Whitwell D, Sarsfield B, Maimaris C. Admission avoidance and early discharge of acute hospital admissions: an accident and emergency based scheme. *Emerg Med J* 2001;18:435–41.

2 Harari D, Martin FC, Buttery A, O'Neill S, Harper A. The older person's assessment and liaison team 'OPAL': evaluation of comprehensive geriatric assessment in acute medical inpatients. *Age Ageing* 2007;36:670–5.

3 Department of Health. *National Service Framework for older people.* London: DH, 2001.

4 NHS Confederation. *Why we need fewer hospital beds.* London: NHS Confederation, 2006. Available from www.nhsconfed.org/membersarea/downloads/download.asp?ref=1434&hash=dfab7ef7e881ac5b3985ef8ef4d0cd17&itemplate=c_toolkit_3col_search_search

5 Government's Actuary Department. *National population projections.* London: Standing Office, 1999.

6 Shepperd S, Parkes J, McClaran J, Phillips C. Discharge planning from hospital to home. *Cochrane Database Syst Rev* 2004;(1):CD000313.

7 Moss JE, Flower CL, Houghton LM *et al.* A multidisciplinary Care Coordination Team improves emergency department discharge planning practice. *Med J Aust* 2002;177:427–31.

8 British Geriatrics Society. *Comprehensive assessment for the older frail patient in hospital.* London: BGS, 2005. www.bgs.org.uk/Publications/Publication%20Downloads/Compend_3-5%20Comp%20Assessment%20hospital.doc

9 Kircher TTJ, Wormstall H, Muller PH *et al.* A randomized trial of a geriatric evaluation and management consultation services in frail hospitalized patients. *Age Ageing* 2007;36:36–42.

10 Beswick AD, Rees K, Dieppe P *et al.* Complex interventions to improve physical function and maintain independent living in elderly people: a systematic review and meta-analysis. *Lancet* 2008;371:725–35.

11 Parddessus V, Puisieux F, Di Pompeo C *et al.* Benefits of home visits for falls and autonomy in the elderly: a randomized trial study. *Am J Phys Med Rehabil* 2002;81:247–52.

12 Ranmuthugala G, McInnesE, Mira M *et al.* A pre-discharge project – does willingness equal involvement? *Aust Fam Physician* 1997;26(Supplement 2):S104–S108.

13 McInnes E, Mira M, Atkin N, Kennedy P, Cullen J. Can GP input into discharge result in better outcomes for the frail aged: result from a randomized controlled trial. *Fam Pract* 1999;16:289–94.

14 Cotton MM, Bucknall CE, Dagg KD *et al.* Early discharge for patients with exacerbations of chronic obstructive pulmonary disease: a randomised controlled trial. *Thorax* 2000;55:902–6.

15 Skwarska E, Cohen G, Skwarski KM *et al.* Randomised controlled trial of supported discharge in patients with exacerbations of chronic obstructive pulmonary disease. *Thorax* 2000;55:907–12.

16 Corwin P, Toop L, McGeoch G *et al.* Randomised controlled trial of intravenous antibiotic treatment for cellulitis at home compared with hospital. *BMJ* 2005;330:29–135.

17 Lim AH, Parr DG, Stableforth DE *et al.* Early discharge and home supervision of patients with pulmonary embolism treated with low-molecular weight heparin. *Eur J Intern Med* 2003;14:89–93.

18 Boccalon H, Elias A, Chale JJ *et al.* Clinical outcome and cost of hospital vs home treatment of proximal deep vein thrombosis with a low-molecular-weight heparin. *Arch Intern Med* 2000;160:1769–73.

19 Sommers LS, Martin KL, Barbaccia JC, Randolph J. Physician, nurse, and social worker collaboration in primary care for chronically ill seniors. *Arch Intern Med* 2000;160:1825–33.

20 Hager K, Nennmann U. Rehabilitation of the elderly – influence of age, sex, main diagnosis and activities of daily living (ADL) on the elderly patients' return to their previous living conditions. *Arch Gerontol Geriatr* 1997;25:131–9.

21 Diamond PT, Felsenthal G, Macchiocchi SN *et al.* Effect of cognitive impairment on rehabilitation outcome. *Am J Phys Med Rehabil* 1996;75:40–3.

Address for correspondence: Dr P Dainty, Department of Elderly Care, Stafford General Hospital, Stafford ST16 3SA. Email: phil.dainty@tesco.net