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# The role of a specialist team in implementing continuing health care guidelines in hospitalized patients

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## Abstract

**Background:** assessment of continuing health care needs is unstandardized and often undertaken by professionals not trained in the management of complex disability.
**Methods:** a 6 month prospective study to evaluate the role of a specialist team in implementing continuing care guidelines in hospitalized patients. The team was responsible for assessment and facilitation of access to continuing health care throughout the hospital between hospital and community on a non-age-related basis. It had access to six inpatient beds and a budget to purchase health care after discharge for 7 days. Patients with complex disability were referred to the team if their continuing health care needs could not be assessed, improved or provided within routine practice.
**Results:** of the 93 patients included in the study, 34 (37%) were from geriatric wards and 59 (63%) from other specialities. Twenty-six (44%) of the patients from other specialities had been inappropriately referred (no continuing health care needs) and 24 (41%) appropriate patients had not been referred because of inadequate assessments. It was possible to facilitate discharge and continuing care provision in 26 patients without transfer to dedicated beds. Thirty-two patients were transferred for further management (median length of stay 17 days). Three (9%) patients died, 20 (63%) were discharged home and six (19%) were discharged to institutional care. Three patients had to be transferred to acute care. A high level of satisfaction with support and post-discharge arrangements was reported by 26 (81%) patients, 25 (78%) carers and 26 (81%) general practitioners for patients transferred to specialist beds.
**Conclusions:** specialist intervention, using a team approach, facilitates effective implementation of continuing care guidelines in hospitalized patients.

**Keywords:** *continuing care, complex disability, specialized team*

## Introduction

The provision of appropriate continuing health care is of major concern in providing care for an ageing and increasingly frail population [1]. Early reports following the implementation of the UK's Community Care Act [2] have identified unresolved issues concerning the 'shifting boundaries between health and social services' and increased public awareness of the difference in personal costs associated with this change in philosophy of care [3]. Local variability in the type and amount of provision available may contribute to inequitable assessment of need and financial responsibility for care in different parts of the country [4].

The issue of continuing care was highlighted by the Health Service Commissioner's investigation into the discharge of a 55-year-old man with complex disability, which criticized Leeds Health Authority for failing to take responsibility for funding long-term health care [5]. These pressures have resulted in the Department of Health issuing guidelines for 'continuing care' which identify the National Health Service responsibility for arranging and funding a range of services to meet the needs of people who require such support [6].

Although these guidelines are welcome, they fall short of defining nationally uniform criteria for eligibility for 'health care' as opposed to 'social care'. The processes required for needs assessment have been left to local interpretation. The development of defined eligibility criteria, their application in routine practice

and apportionment of costs between agencies and individuals present problems in service delivery. Identification and categorization of continuing care service recipients hinges on arbitrary interactions between health and social services agencies. Determination of continuing care need is based on the unstandardized and often erroneous application of the core process of assessments by professionals not trained in the management of complex disability.

These issues need to be addressed in implementing continuing care guidelines in everyday practice. In view of this, a prospective pilot study was undertaken in hospitalized patients with complex physical disability to evaluate the role of a specialist team in identifying patients with continuing health care needs using defined criteria and facilitating access to appropriate continuing care provision.

## Methods

### The district

The study was undertaken in Bromley, a suburban outer-London district with a population of 310 000 and an above average proportion of elderly people (22 500 aged over 75 years). The local authority (local government social services) and health authority boundaries are co-terminus and the area has one major acute care and community care provider. The hospital geriatric services have an age-related policy (75 years or above) and admit over 4100 patients per year. Joint planning between the health and social care providers is well developed, with hospital-based social workers and excellent liaison between health and social services.

A joint assessment panel, composed of representatives from Bromley Health, the local authority, district nursing services, elderly medicine and psychogeriatric services, meets weekly to consider patients requiring long-term institutional care or intensive home care. There are no agreed objective eligibility criteria for various levels of institutional care or health *versus* social care needs. The institutionalization rate for hospitalized elderly patients in the district varies between 6 and 8%.

### The specialist team

The specialist team consisted of two nurse practitioners with post-qualification training in elderly medicine and rehabilitation, who worked under the supervision of a consultant physician in elderly medicine. The team provided input to patients with complex health care problems throughout the hospital, regardless of speciality or age. Their role was to assess disability and continuing care needs, evaluate rehabilitation potential in order to minimize the level of disability and continuing care needs, facilitate discharge planning from hospital to home, co-ordinate multi-agency health and social care short-term discharge arrangements and liaise with general practitioners (GPs) in the transfer of care.

The team had direct access to six beds on a ward with well-established inter-disciplinary rehabilitation practice. In addition, they had a 'spot purchasing' budget for funding short-term health care support (excluding care normally provided by social services) for a maximum of 7 days after discharge. Care was then transferred to the community services.

### Inclusion criteria

The inclusion criteria for the project were a prototype for local eligibility criteria for continuing health care needs (to be provided for by the health authority) and derived from discussions on local policy being undertaken by the local health commissioners, social services, patient and voluntary groups and the provider units in response to the Department of Health guidelines [6]. The inclusion criteria were approved by the local joint commissioning group for continuing care and used by the specialist team to identify patients with continuing health care needs. It was expected that the pilot would provide useful information and identify problems in the application of eligibility criteria before their implementation in routine practice. These criteria included:

1. Potential for slow physical or cognitive recovery following resolution of an acute medical/surgical episode, which requires additional short-term nursing or therapy input.
2. Family/patient/carer need for specialist support (education, counselling or training) to cope with new deficit or manage care needs following discharge.
3. Need for optimization of specialist nursing care (e.g. pressure sore care, wound healing, nasogastric or PEG feeding, nasopharyngeal aspiration or stoma care).
4. Need to stabilize or develop alternative care strategies in patients with unstable or chronic medical conditions such as recurrent falls, poor compliance to medical treatment, unstable diabetic control, chronic chest disease or refractory heart failure.

### Dissemination

The aims and objectives of the pilot project, details of the inclusion criteria, nature of interventions and mode of referral were widely disseminated, with presentations and discussions on inclusion criteria at directorate boards, ward managers' meetings and at the ward level. Members of staff were encouraged to

discuss referrals, eligibility criteria and interventions.

Patients were referred by the ward staff (doctors, nurses or therapists) from all specialities within the hospital if they were thought to fulfil these criteria. Referred patients were assessed by a member of the team within 1 working day. In addition, team members visited all hospital wards twice a week to identify eligible patients who may not have been referred to the team. Involvement of the social services with an undertaking to provide necessary levels of personal care and service input following discharge was a prerequisite to inclusion. As there was commitment to provide for social care needs as soon as discharge was planned, additional input by a dedicated social worker to the specialist team was not considered necessary by the social services. Patients were included in the project only after their and the treating physician's consent had been obtained. Provision was made to transfer patients developing acute illness or deterioration which required 24 h medical support back to general wards for acute care.

### Intervention

The team undertook comprehensive assessment of patients' physical, functional, psychological and social status, rehabilitation potential and continuing care needs and eligibility for inclusion using a standardized structured assessment format (patient unitary record). Patients eligible for intervention were managed either on referring wards or by transfer to the dedicated beds, as appropriate to their needs. Ward management involved helping the generic inter-disciplinary team in planning discharge, liaison with carers/families and negotiations with the community teams and GPs. The 'spot purchase' budget was used to expedite discharge by providing the health care component of the discharge arrangements in accordance with the agreed guidelines.

Patients in whom continuing health care needs were not clear or where there was potential of reducing the level of dependence by specialist medical, nursing and rehabilitation input, were transferred to beds managed by the team. Overall patient care and management plans were initiated and supervised by the nurse practitioners working closely with the consultant, who maintained clinical responsibility. Therapy and social service input were provided by existing staff. Goals were set for all patients in consultation with them and their families. Monitoring and recording of patients' progress against set goals was undertaken and discussed at regular inter-disciplinary meetings. Case conferences with patients, carers and other services were held when appropriate. The process of patient management and inter-disciplinary communication (including liaison with families, GPs and community services) were documented in the patient unitary record.

End-points included optimization of health care needs with appropriate and negotiated arrangements for continuing health care provision after discharge, achievement of stable health status and function (thus enabling discharge with existing support) or demonstration of patient/carer skills to manage identified health needs within existing resources. It was planned that these end-points would be achieved within 14 days of initial contact with the patient, but the team would continue to manage patients in whom there was potential for further improvements beyond this period. Discharge arrangements were co-ordinated by the nurse practitioners who also liaised with community and social services. Discharge arrangements were discussed with the GP by the consultant prior to discharge and the team provided support to patients and GPs for 1 week after discharge.

### Evaluation

Data were collected on the type of patients referred for specialist management and their eligibility for continuing care intervention. The number of patients who were eligible for continuing care intervention but not referred was recorded. Data were also collected on the source of referrals, processes involved and outcome. The productivity of the service (in terms of patient throughput, lengths of stay, process delays) was evaluated separately from its effectiveness (in terms of quality of care and clinical outcome). The views of the patients, their carers and GPs were sought by means of structured satisfaction questionnaires.

## Results

Ninety-three patients were included in the evaluation over 6 months. The mean age of these patients was 82.6 ± 11.6 years (age range 56–93 years) and most (70%) were female. Thirty-four patients (37%) came from the Department of Medicine for Elderly People (the district has a 75+ age-related policy whereby >90% of emergency medical admissions in this age group are admitted under geriatricians), 28 (30%) from orthopaedics, 16 (17%) from general medicine, 13 (14%) from general surgery, one from casualty and one directly from home. The median hospital length of stay before referral was 12 days (range 1–60 days). The median time between referral and assessment was 1 day (range 0–3 days).

Appropriateness of patients referred to the specialist team was audited against the defined criteria for intervention based on the guidance for developing continuing care guidelines [6]. Twenty-six patients had been inappropriately referred for management of continuing health care needs, mainly as an alternative to discharge. Inadequate patient assessment was the reason for inappropriate referral in 16 (60%) patients, in whom there were unresolved medical problems contributing to dependence and disability. Failure to

communicate with relatives or community services was seen in the other 10 patients, resulting in the ward staff being unaware of the arrangements made by the community or social services to support discharge as soon as this was considered appropriate. On the other hand, the team identified 24 patients with continuing care needs who had not been referred for specialist input. Of these, nine patients refused to participate in the project because of fears of transfer to a different ward or financial assessment by the social services. Discharge plans had not been developed for the other 15 patients, in whom an assessment of level of disability, potential for recovery, home environment and support available after discharge had not been undertaken.

It was possible to assess for and facilitate post-discharge and continuing care support in 26 patients without transfer to dedicated beds. Discharge had been delayed in these patients because of deficiencies in discharge planning on the referring ward. In most instances specialist intervention comprised co-ordination of inter-disciplinary and inter-agency input and negotiating with families for an early resolution of residual problems. Discharge was not delayed because of continuing health care needs for most patients. A few patients required specialist equipment at home before discharge, for which the 'spot purchase' budget was used. No patients were identified as requiring intensive continuing health care support during the study.

Thirty-two patients were transferred to the dedicated beds managed by the specialist team (Table 1). The median admission Barthel index [7] of these patients was 13 (range 2–19) and their median abbreviated mental test score [8] was eight (range 0–10). The median length of stay was 17 days (range 2–39 days) with 18 patients (56%) exceeding the 14 day limit. Eleven patients exceeded the planned length of stay because of continued improvement (four due to medical needs, four due to nursing needs and three due to therapy needs). Non-availability of social care or aids and adaptations provided by the social services caused four patients to stay longer than 14 days, despite these having been agreed in advance. Patient choice or logistic problems in arranging institutional care caused delay in three patients, two of whom were transferred back to the referring ward with ongoing support from the specialist team.

The unitary patient records showed the processes of inter-disciplinary care and planning with goal setting and monitoring in all patients. The outcome of inter-disciplinary assessments, management plans, team decisions, discussions with patient, family, GPs and community agencies were clearly recorded. The objectives and expected outcome of intervention and post-discharge health needs had been discussed with patients, carers, GPs and community teams in all cases. Discharge process and arrangements were documented

Table 1. Demographic characteristics and outcome in the 32 patients transferred to dedicated beds managed by the specialist team

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| **Patient characteristics at admission** | |
| Mean age in years (range) | 82.9 ± 8.8 (64–102) |
| Proportion female | 72% |
| Median admission Barthel score (range) | 13 (2–19) |
| Median mental test score (range) | 8 (0–10) |
| Median hospital length of stay prior to referral (range) | 12 days (1–60 days) |
| **Outcome** | |
| Transfer to acute care (% of patients) | 3 (9%) |
| Mortality (% of patients) | 3 (9%) |
| Discharge (% of patients) | |
| Home | 20 (63%) |
| To residential home | 1 (3%) |
| To nursing home | 5 (16%) |
| Barthel score (range)[a] | |
| Median value at discharge | 13 (2–20) |
| Median change | 0 (−6–11) |
| Median hospital length of stay on specialist unit (range) | 17 days (2–39 days) |
| Unplanned readmissions | 0 |

[a]Measured in survivors at discharge.

with information about post-discharge services and appropriate contact information. There was evidence of good liaison with the primary care team, including district nurses, care-managers and GPs, as appropriate.

Three patients died, three were transferred for acute care, 20 went home, one was discharged to residential care and five to a nursing home (Table 1). None of the patients was readmitted to the hospital after discharge. Neither the median Barthel index nor the destination of discharge was altered as a result of specialist team intervention. Depression, measured by the Geriatric Depression Scale [9], was found in six patients. This improved in the two patients with severe symptoms and in two out of the four patients with mild to moderate disease.

### Satisfaction questionnaires

Responses to satisfaction questionnaires were received from 26 patients and 25 carers or relatives. Three patients had died and three were unable to respond. Two patients had no carers and one patient did not want his relatives to be involved. Patients and carers expressed high levels of satisfaction with the care provided with over 80% of responses being strongly positive. All patients felt that their health had benefited directly as a result of the intervention. Carers felt well

supported, with 24 rating the support received at the highest level. All patients and carers felt that the discharge and post-discharge arrangements had been well organized.

Responses to the questionnaire were received from 26 of the 29 GPs involved. Twenty-five GPs felt that they had received adequate information and were happy with discharge plans and arrangements. Nineteen (73%) GPs said that the team had helped in the overall management of the patient and that they had received adequate support following discharge. One GP did not feel supported. Six did not fill in this section of the evaluation.

## Discussion

The study identified patients with unmet continuing health care needs within the hospitals. Of the 93 patients referred in the 6 month period, 67 (72%) would be appropriate for continuing health care intervention. These patients were mostly elderly (over 75 years of age) or had complex disability. Despite a well-established age-related policy for acute medical admissions, 59 (63%) of the 93 patients referred for continuing health care were located on non-elderly care wards (especially in orthopaedic wards). Our results highlight the lack of expertise available on these wards to assess disability, expedite negotiated discharges or reliably identify continuing care needs in patients with complex problems, even when defined criteria for establishing need were provided. Assessment of complex disability and continuing care needs presents few problems on elderly care wards, which have the necessary level of expertise of the inter-disciplinary team. Additional specialist input, however, will be necessary to support specialities other than geriatric medicine, where 'generic' ward teams may see comprehensive assessment or management of patients with complex needs beyond the scope of their practice.

Assessment of continuing health care needs is not an easy task as it is conceptually muddled and technically difficult [10]. The financial implications for families and the cost of erroneous assessments for health authorities against a background of finite resources places a great responsibility on professionals performing these assessments [11]. There may be advantages in developing standardized assessment procedures for administration by staff trained in the management of disability, especially in older individuals. This study suggests that a nurse practitioner team working collaboratively with a consultant and providing input across a range of settings is a feasible model for this service. Although many of the assessments and management programmes were undertaken by nurse practitioners, dedicated consultant support was essential to ensure clinical responsibility for care, accountability for continuing care assessments and discharge plans (required by the continuing care guidelines), and liaison with families, GPs and other consultant colleagues.

Limiting the study to patients with continuing health care needs significantly underestimates the number of patients in hospital in whom discharge is delayed because of overall continuing care needs and in whom such interventions could be of benefit. The divide between health and social needs in continuing care is arbitrary and artificial. Social care needs and health care needs frequently coexist in the same individual and the difficulties in disentangling the relative contribution of illness and disability to overall care needs are well known [3]. This overlap has been compounded by the willingness of the statutory and private care agencies to provide for those more confused and functionally dependent residents who would traditionally have been provided for in long-stay inpatient beds or by community health services [1]. Continuing health care needs after hospital discharge were few in patients in this study and did not cause much delay in discharge. The provision of personal care and aids and adaptations, on the other hand, are more likely to result in delays in discharge [12]. The spot-purchasing budget, which was limited to providing for 'health care' rather than overall continuing care needs, did not facilitate complex discharges and was under-used as it was required for equipment hire rather than staff costs.

The evaluation strongly supports collaborative working between health and social care organizations to reduce or eliminate border disputes between these agencies and facilitate access to continuing care as emphasized in the guidelines [6]. A continuing care strategy which does not involve health and social services jointly is not viable [13] and there needs to be commitment to joint assessment of need and provision of care supported by an easily accessible common pool of resources.

Patients with complex health care needs benefited from structured progression down a time-defined clinical pathway monitored by the inter-disciplinary team, which was capable of dealing with emerging problems or lack of expected progress. This benefit was enhanced by early inter-agency involvement in the co-ordination and implementation of the care plan and continuity between primary and secondary care, which ensured that resources were utilized optimally. Specialist team intervention did not change destination of discharge or functional abilities in patients with complex health care needs. This may be a result of limiting the study to hospitalized patients, the underlying severity and refractoriness of disability and need in these patients or the fixed variables of home environment and support. The restrictive nature of the inclusion criteria, short duration of specialist intervention and divorcing of health and social care needs may also have contributed.

The trend towards improvement in patients' psychological well-being and feedback from patients, carers and GPs suggests that specialist team input may have positive benefits but these may have been in areas other than physical improvement. The cost-effectiveness of the specialist team is unanswered in this preliminary study. Although the patients meeting inclusion criteria may have spent a longer time in hospital or had less favourable outcomes if such input had not been available, this can only be proven by undertaking randomized controlled comparisons with an appropriately sized sample.

There will continue to be considerable variations in the implementation of continuing care guidelines depending upon local circumstances and service provision strategies. This paper describes the potential pitfalls of the process and a model for effective implementation.

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## Key points

- Many elderly hospital patients have unmet continuing health care needs.
- Most of these patients are managed in specialities other than geriatric medicine.
- There is lack of expertise in these settings in identifying or appropriately managing continuing health care needs, even when defined criteria are available.
- Assessment and management of complex disability is facilitated by specialist team input.

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