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SYSTEMATIC REVIEW

The communication of information about older people between health and social care practitioners

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Abstract

Aim: to provide an evidence base for strategies, and effectiveness of the transfer of patient information between hospital and community for older people with physical illness.
Design: a systematic review of qualitative and quantitative literature.
Search strategy: literature from medical, health-related and social science databases as well as work in progress from national databases, the Internet, British PhD theses and other grey literature and policy documents.
Selection criteria: literature relating to similar healthcare systems published between January 1994 and June 2000 on hospital discharge planning. Empirical studies from peer reviewed sources; theoretical papers from non-peer reviewed sources; research papers from non-peer reviewed sources and professional documents.
Data collection and analysis: extracted data from empirical studies under the headings of location, sector, research questions and study design and duration. We made structured summaries of all other data sources and used them to supply context and background. We categorized literature and analysed it in terms of method and analysis, quality and strength of evidence and its relevance to the research questions. We synthesized the results and presented them in terms of answers to our research questions.
Results: a database of 373 potentially relevant studies and of these, 53 were accepted for further analysis. Thirty-one were empirical studies, most of which were qualitative or a combination of qualitative and quantitative in design. The most effective strategy for transferring information is the appointment of a 'key worker', who can provide a point of contact for workers from hospital and community. Nevertheless, problems have arisen because both settings are under pressure and pursuing different goals. Neither setting is fully aware of the needs, limitations and pressures of the other.
Conclusion: raised awareness and the establishment of common goals are the first steps needed to bridge the divide between health and social care staff in hospital and the community.

Keywords: *communication, elderly care, inter-professional, patient discharge, systematic review*

Background

UK government initiatives such as the National Strategic Framework for older people [1] recognize that to deliver care effectively, information about older people needs to be transferred across professional and organizational service boundaries.

The effective communication of patient information underpins collaboration between health and social care practitioners as well as the efficient and safe delivery of care to older patients. Research in hospitals has shown the complexity of the communication of patient information and the diversity of ways used to compile and maintain such material, as well as its shortcomings [2].

Much research has focused on the problems associated with discharge from hospital and this has highlighted conflicts between health and social services [3].

However, this approach is too narrow to capture the dynamic nature of many older peoples' experiences, which reflect more complex patterns than a simple health and social service model. A 'care career' may at different times include statutory services such as primary health care services, local authority and hospital services, as well as voluntary and private care options.

This paper reports the main findings of a systematic review of the research literature on the communication of information about older people between health and social care practitioners.

Our aim was to undertake a systematic review that will provide an evidence base of the strategies for, and the effectiveness of, the transfer of patient information between hospital and community for older people with physical illness. We report results relating to the following questions:

1. How effective are the existing methods of transferring information across boundaries. (professional, organizational and geographical)?
2. Is appropriate information about the patient (and informal carer) provided on discharge to community nurses and social services?
3. What factors are associated with the breakdown of communication between and within professional boundaries?

We emphasized two pathways: inter-organizational (hospital to community) and inter-professional (nurses and social workers) communication of patient information. We assumed acute care in hospital and then return home (or to a nursing or residential home) in need of continuing services, with further episodes of care as necessary, rather than each admission representing a discrete event.

Review procedure

We conducted a systematic review of the literature [4] in the following stages:

- Search strategy
- Inclusion criteria
- Assessment of relevance and validity of primary studies
- Data extraction
- Data synthesis.

Search strategy

The aim of the search was to provide a comprehensive list of primary studies, both published and unpublished, which complied with the inclusion criteria. We selected databases and keywords in consultation with a specialist health care librarian and included the following: Abstracts Online for Social Science & Medicine; Alta Vista; Br Med J; BIDS; BNI; Cambridge Scientific Abstracts; (Centre for Policy on Ageing: library was closed for re-organization throughout project); Cinahl; Controlled trials register; The Cochrane Library; Ceres; DARE; Embase; EPOC register of trials; Embase; HTA programme; Kings Fund; Medline; National Research Register; PsycLIT; RCN; Regard; Theses online. We searched the following journals' content pages electronically for relevant papers: *Journal of Clinical Nursing*; *Social Science & Medicine*; *Sociology of Health & Illness*. In addition, hand searches were conducted on the following peer reviewed journals: *Journal of Advanced Nursing*; *Ageing and Society*; *Health & Social Care in the Community* and one interprofessional forum magazine, *Generations Review*. We followed up references from bibliographies and also through the Web of Science citations index. To ensure access to the 'grey' literature we contacted 'experts'.

Inclusion criteria

At the outset, we excluded no research methods or outcome measures. We focused on literature published in English since 1 January 1994 (since changes from the National Health Service & Community Care Act) to June 2000, from countries with similar health and social care systems. We excluded the United States because it had an insurance-based private health care system. Samples had to contain a majority of older people and we excluded all literature relating to mental health problems. Accepted articles addressed at least one of our research questions.

Assessment of relevance and validity of primary studies

All papers were assessed independently and disagreements resolved by the research team, who represent a range of professional and disciplinary perspectives. Identifying and assessing relevant material was hindered by the following factors:

- Obscure keywords and titles;
- Problems with entering data into electronic databases;
- Missing, incomplete or unstructured abstracts;
- The presentation of research articles—aims, research questions and methods were not made explicit;
- Combining literature from different methodological approaches.

We sometimes found that the contents of an article did not reflect the title or abstract. After assessment the methodology of each study, they were graded according to the reliability of their results [5]. We anticipated obtaining papers that used a number of different research methods, and it was therefore decided not to use conventional Cochrane study design criteria to weight studies.

Data extraction and synthesis

The research team developed a data extraction form which covered 10 areas and each area was rated on a 4-point scale from 1 (good) to 4 (very poor). The areas covered were: abstract and title; introduction and aims; method and data; sampling; data analysis; ethics and bias; results; transferability or generalizability; implications and usefulness. For each paper, it was possible to calculate a score (10 very poor–40 good) which indicated its methodological rigour. As the studies used different methods, outcome measures and samples, it was not appropriate to combine data across studies for meta-analysis.

Findings

We identified 371 papers and selected 53 for review. Three types of papers were accepted (Table 1). Papers categorized as type 3 provided background information but were not methodologically robust enough to be included in the results. We excluded 318 papers because they were irrelevant to the research questions or from the USA ($n=138$).

Details of the 33 papers that we included and the studies they report are given in Table 2 [3, 6–36]. One paper [43] arrived too late for analysis.

Table 1. Breakdown of assessed papers

	No. of papers
Identified and assessed	371
Excluded[a]	318
Included	53
Study type	
Type 1 (empirical, peer-review)	26
Type 2 (empirical, non-peer-review)	7
Type 3 (discussion/policy documents)	20
Source of data[b]	
Patients	16
Nurses	18
Carers	8
Doctors	8
Social workers	4
Type of journal in which published	
Peer-reviewed	24
Non-peer-reviewed	7
Nursing	16
Interdisciplinary	10
Medical	3
Therapy	2
Country of origin	
UK	17
Australasia	8
Canada	4
Netherlands	2
Design	
Qualitative	14
Quantitative	10
Combination	7
Cross-sectional	25
Data collected more than once	6

[a]138 from USA.
[b]Many contained data from more than one source.

Results

The results of the systematic review are presented in terms of an evaluation of the literature in relation to each of the three research questions. The evidence can be grouped into three main themes: (i) discharge co-ordination and 'key workers'; (ii) professional cultures and barriers to communication; and (iii) time. We present the questions and results under these three themes.

How effective are the existing methods of transferring information across boundaries (professional, organizational and geographical)?

Thirty-one papers, reporting 26 studies addressed the effectiveness of information transfer. Details are given in Table 3.

Discharge co-ordination and 'key workers'

We found two randomized control trials. Runciman *et al.* [26] randomized 414 older patients attending Accident and Emergency departments in Scotland (222 intervention and 192 control) to receive assessment by a research health visitor at home after discharge compared to no follow-up care (the normal practice). Four weeks later, intervention patients had received more services and were more independent. An Australian randomized control trial [22] randomized 364 older hospitalized patients (205 intervention and 159 control) to receive general practitioner input into discharge planning. There were no statistically significant differences between the groups on readmission rates, but the intervention group perceived their quality of care to be enhanced and were more involved in discharge planning.

We identified two non-randomized intervention studies. Houghton *et al.* [18] assessed three different cohorts of patients; 215 patients at baseline, 204 patients after implementation of a hospital discharge policy and a further 207 patients after appointment of a discharge co-ordinator. The discharge co-ordinator improved discharge planning but at increased costs. However, there are potential biases in comparing different patient cohorts. Using a similar study design, Peters *et al.* [25] assessed 40 patients before the appointment of a liaison nurse and 71 patients afterwards (28 of whom had this person's input). There were no statistically significant differences between the groups, but it was probably under-powered.

Table 2. Details of studies included in analysis

Study/type[a]	Score[b]	Key worker/strategy[c]
Type 1		
Armitage & Kavanagh, 1995 [6]	34	N/A
Armitage & Kavanagh, 1996a [7]	33.5	N/A
Armitage & Kavanagh, 1996b [8]	34	District liaison nurse
Balla & Jameison, 1994 [9]	24	N/A
Black, 1997 [10]	19.5	Orthopaedic link nurse; EDS
Carter & McInnes, 1996 [11]	30	Community link nurse; early supported discharge scheme
Clarke & Gladman, 1995 [12]	21.5	Occupational therapist; home visits
Closs *et al.*, 1995 [13]	30.5	Occupational therapist; early supported discharge scheme
Davies & Connolly, 1995a [14]	26	Hospital social worker
Davies & Connolly, 1995b [15]	21.5	Hospital social worker
Dukkers van Emden *et al.*, 1999 [16]	26	Liaison nurse
Fairhurst *et al.*, 1996 [17]	24.5	N/A
Houghton *et al.*, 1996 [18]	33.5	Hospital-based discharge co-ordinator
Jackson *et al.*, 1999 [19]	27.5	N/A
Leduc *et al.*, 1998 [20]	31	N/A; community services contacted from ward before discharge
MacKenzie & Currie, 1999 [21]	28	N/A; discharge summaries
McInnes *et al.*, 1999 [22]	34.5	N/A; general practitioner visit pre-discharge
Mckenna *et al.*, 2000 [23]	27	N/A
McWilliam & Sangster, 1994 [24]	34.5	N/A
McWilliam & Wong, 1994 [3]	30.5	N/A
Peters *et al.*, 1997 [25]	29.5	Liaison nurse
Runciman *et al.*, 1996 [26]	27	Health visitor; visit as soon as possible after discharge from accident and emergency
Stanley *et al.*, 1999 [27]	19.5	SSD care manager
Tennier, 1997 [28]	34	Hospital social worker
Closs *et al.*, 1995 [29]	30.5	Occupational therapist; early supported discharge scheme
Type 2		
Allen, 1997 [30]	26.5	Hospital-based liaison nurse; telephone follow-up within 48 h of attending accident and emergency
Barnes & Cormie, 1995 [31]	14.5	N/A
Connolly, 1995 [32]	17	Hospital social worker
King & Macmillan, 1994 [33]	22.5	N/A
McBride, 1995 [34]	22	N/A
Tierney *et al.*, 1994 [35]	21.5	N/A
Worth *et al.*, 1994 [36]	28	N/A

[a]Type 1, empirical, peer-review; type 2, empirical, non-peer-review.
[b]We rated 10 areas—abstract and title; introduction and aims; method and data; sampling; data analysis; ethics and bias; results; transferability or generalizability; implications and usefulness—on a 4-point scale from 1 (good) to 4 (very poor) to give a score (10 very poor–40 good) for methodological rigour.
[c]EDS, Early Discharge Scheme; N/A, not applicable; SSD, Social Services Department.

Most studies used qualitative methods, predominantly interviews and/or questionnaires, to elicit data. Some used mixed methods, for example interviews with staff combined with auditing patients records and questionnaire surveys [21]. Three studies involved audits of health care records.

The importance of key workers (called discharge co-ordinator, liaison practitioner, liaison nurse, link nurse) was demonstrated in a number of studies. They were nurses, health visitors, general practitioners or occupational therapists and were hospital- or community-based. Their presence improved discharge planning and co-ordination of hospital and community services. Even in non-complex cases where the key worker was not directly involved, the process was improved [25]. Having a hospital discharge planning policy and a designated discharge planner and/or liaison worker was found to improve communication, increase patient concordance with offered services, patient and carer satisfaction and other 'soft' outcome measures. There was little evidence that a key worker decreased re-admission rates.

Professional cultures and barriers to communication

The evidence suggested that existing methods of transferring information were poor and likely to result in delays, poor up take of services and dissatisfaction for health care workers. Transferring information across professional boundaries was problematic for social workers [14, 15]. There was less evidence about communication difficulties between nurses, doctors and therapists. In relation to information transfer across organizational boundaries, most research concentrated

Table 3. How effective are the existing methods of transferring information across boundaries (professional, organizational and geographical)?

Study	How question answered
Armitage & Kavanagh, 1995 [6]	From the perspective of community nurses; communication not always effective due to hospitals professionals lacking of knowledge of community services (what's available, what community nurses do). Also, lack of co-ordination, known contacts, little knowledge of patient's home situation etc
Armitage & Kavanagh, 1996a [7]	From perspective of hospital nurses; if full discharge planning done then can be effective but full discharge planning was only done for those who appeared to need it. Therefore effective communication occurs when necessary
Armitage & Kavanagh, 1996b [8]	Reliance on district liaison nurse to bridge the gap and to make hospital staff initiate—jogs minds; saves nurses' time and has necessary knowledge about community services
Balla & Jameison, 1994 [9]	Poor communication a result of contextual and perceptual problems. Lack of awareness of hospital staff about role of general practitioner. General practitioners' knowledge of patients and family situation not sought; felt alienated
Black, 1997 [10]	An evaluation of a system in place; orthopaedic link nurse liased with patients, carers, hospital and community staff; 24 h access to advice. Benefits of the scheme included reduced length of stay and enhanced working relationships with local community services
Carter & McInnes, 1996 [11]	Intervention following an early supported discharge scheme involved community nurses liasing with hospital nurses. Strategy effective—led to changed attitudes of hospital nurses, particularly greater understanding of role of community nurses, what community services available etc. Increased awareness led to better communication
Clarke & Gladman, 1995 [12]	Home visits organized by occupational therapists but other professionals invited to be present as well as patient and family member. A valuable but resource-intensive strategy—difficult to organize, some community services reported frequent non-attenders
Closs *et al.*, 1995 [13]	Early supported discharge scheme; reported as successful. Hospital occupational therapist involved with pre-discharge home visits, co-ordinating community services. Regular telephone follow-up calls; liaison visiting for the most vulnerable; helpline set up for community staff
Davies & Connolly, 1995a [14]	From the perspective of hospital social workers—their changing role. Issues raised about differing priorities, roles and status. Social workers who identified with the hospital reported best inter-professional communication (others felt like outsiders). Meetings of inter-disciplinary teams most advanced form of collaboration but happened rarely—time a barrier. Social workers seen as care co-ordinators and managers, supposed to visit homes but case load too heavy
Davies & Connolly, 1995b [15]	From the perspective of hospital staff (doctors and nurses); social workers seen by nurses as "our bridge to the community". Seen by elderly people as key workers in discharge planning process—"dependable agents"
Dukkers van Emden *et al.*, 1999 [16]	Need for effective discharge planning recognized. Claim that few conclusions can be drawn about time-saving or length of stay but reduces problems post-discharge. Liaison nurse increases knowledge within community of what is available in the hospital but not *vice versa*. Hospital nurses assess role favourably but no improvements in efficiency reported. All studies recommend continuation of the role
Fairhurst *et al.*, 1996 [17]	Hospital staff thought that communication with patients most important for successful d.p.—those in community thought inter-professional communication most important. Hospital-based professionals more likely to think communication effective. Liaison and communication between professions most frequently cited feature of a 'satisfactory' discharge
Houghton *et al.*, 1996 [18]	The employment of a hospital-based discharge co-ordinator improves the discharge planning process, improves documentation and reduces post-discharge problems but little impact on provision and timeliness of community services so post limited in terms of efficacy of transferring info across organizational boundaries
Jackson *et al.*, 1999 [19]	From the perspective of Aboriginal health workers; where boundaries are racial and geographical, effectiveness is reduced
Leduc *et al.*, 1998 [20]	Organizational factors have a strong effect on compliance with prescribed services. Uptake of services was increased 6-fold when ward providers helped organize services for patients—for example ward staff making appointments with general practitioner and communicating with the local community health centre before discharge. Results emphasize importance of collaboration
MacKenzie & Currie, 1999 [21]	Little agreement between hospital and community staff on whether Aboriginal patients were reliable enough to carry own discharge summaries (hospital—no; community—yes). Aboriginal patients not given discharge summaries even though patients can deliver discharge summaries more efficiently; discharge summaries often arrived late or not at all
McInnes *et al.*, 1999 [22]	Test group (general practitioner visited) more likely to be prescribed services and to report that discharge plan went well than control group (standard discharge plan). Indicates lack of information normally?
Mckenna *et al.*, 2000 [23]	Hospital and community nurses have differing views—hospital nurses think information is transferred successfully; community nurses do not think information is adequate
McWilliam & Sangster, 1994 [24]	Discharge plans frequently arrived too late, leading to lack of information when required

Table 3. (*Continued*)

Study	How question answered
McWilliam & Wong, 1994 [3]	Nursing work is fragmented—nurses pull together all the professionals involved in patient care; argued that this work goes unnoticed, is 'secret'. Argued that nurses spend the most time with patients and can assess their needs best—but their knowledge of community services is limited
Peters *et al.*, 1997 [25]	Evaluation study of usefulness of liaison nurse (community nurse, hospital-based for study); discharge planning improved in test and control groups; suggestion that liaison nurse heightens awareness of importance of discharge planning as well as actually doing it
Runciman *et al.*, 1996 [26]	Health visitor assessed needs and devised and arranged a package of community services. Refusal rates high in both test and control groups. Dependency resisted
Stanley *et al.*, 1999 [27]	Care managers not always effective as often unidentifiable. Often viewed as 'friends' of elderly patients, although aware that this not empowering or professional
Tennier, 1997 [28]	Social workers best placed to co-ordinate discharge, but not all wards have one. Social workers satisfied with the co-operation and support they get from other professionals
Allen, 1997 [30]	Where necessary, liaison nurse contacted other agencies—most common referrals were district nurse, general practitioner and social services
Barnes & Cormie, 1995 [31]	A panel of elderly users of discharge services gave their views on what constituted a 'good' discharge from their own experiences. Among other things, they mentioned timing (services should be in place on day of discharge) and that liaison nurse or other key worker should make the arrangements (taking the place of almoner)
Connolly, 1995 [32]	From the perspective of hospital nurses; social workers should be 'bridge to community'. Ideally one should be attached to each ward
King & Macmillan, 1994 [33]	Overall, documentation poor—little information about home environment recorded on hospital notes (stairs, willingness/availability of carers etc). Health details generally well documented; social details missing or poor
McBride, 1995 [34]	An examination of current arrangements in a National Health Service hospital in the East Midlands; patient satisfaction relatively high but liaison between hospital and community to discuss the needs of patient being discharged was minimal. Only 10% of discharge planning began at admission. 50% of community nurses felt they received adequate information; 40% thought they were sufficiently involved in discharge planning
Tierney *et al.*, 1994 [35]	Nursing staff made arrangements, occupational therapists sometimes took responsibility for arranging aids and services. Little written evidence of a 'named member' of team co-ordinating discharge
Worth *et al.*, 1994 [36]	Not very effective unless community nurses involved in the discharge planning process

d.p., discharge planning.

on hospital-to-home discharge for patients rather than the reverse. Within professional, but across organizational boundaries, communication was found to be difficult from hospital-based nurses to community-based nurses [6–8] and from hospital-based doctors to general practitioners [9]. Hospital staff were more satisfied with discharge arrangements than were community workers [23].

The priorities of hospital workers were centred around: (i) shorter stays (early discharge policies); (ii) pressure of work; (iii) bed availability; and (iv) reducing re-admissions.

Community professionals were concerned with: (i) assessing and arranging continuing care needs; (ii) planning to have appropriate services and equipment ready for when the patient arrives home and (iii) establishing what support is available from informal carers.

The evidence suggests that hospital nurses were often unaware of the type of information that community workers required. They had little knowledge of what community services were available and received little feedback about patients once discharged, even when things went wrong [6, 9]. Discharge planning and the transfer of information to community nurses was seen to be of low priority for some hospital nurses, especially for 'younger' and 'fitter' patients [7]. Overall, hospital-based professionals underestimated the level of knowledge of community health care professionals, especially failing to recognize their specific knowledge about patients and their families.

Difficulties in relation to information transfer across organizational and geographical boundaries were identified in two studies from Australia [19, 21]. They demonstrated the complexities and inadequacies of transferring information across services (hospital to community health clinics) and across large distances in rural Australia.

Time

The pace of hospital life—including the tendency to discharge patients 'quicker and sicker'—meant that medical and nursing staff were less likely get to know older patients and their families than in the past and often did not have the information that community nurses required. 'Sicker' patients put new pressures on community service [23]. Hospital social workers

reported heavy case loads, with little time for assessments and home visits [15].

Is appropriate information about the patient (and informal carer) provided on discharge to community nurses and social services?

Fifteen papers addressed this question, reporting on 14 studies. Details are given in Table 4.

Discharge co-ordination and 'key workers'

Evidence suggests that appropriate information is often not provided on discharge to community nurses and social services. In one audit, 18% of discharge summaries never arrived [21].

Professional cultures and barriers to communication

Community nurses and social workers preferred to do their own assessments in the patient's home and viewed information from hospital as insufficient and unreliable. It was found, for example, that details on wound dressings and prognosis were sometimes missing [6, 13, 17].

Time

The most frequent complaint related to timing. Discharge information appeared to be frequently 'too little and too late' [9], which did not allow adequate time to organize services [6].

What factors are associated with the breakdown of communication between and within professional boundaries?

We identified 26 papers relating to this question, reporting on 22 studies. Details are given in Table 5.

The main factors associated with the breakdown of communication reflect the previously highlighted points. Hospital staff gave priority to hospital needs and were often unaware of the perspectives of community workers.

Discharge co-ordination and 'key workers'

Fragmentation was a key issue. Many different professionals had some knowledge about the patient but no one person had an overview and co-ordinated the transfer of this information [13]. At the same time,

Table 4. Is appropriate information about the patient (and informal carer) provided on discharge to community nurses and social services?

Study	How question answered
Armitage & Kavanagh, 1995 [6]	Community nurses do their own patient assessments based on functioning in the home. Hospitals cannot supply such information. Hospital discharge planners can supply task-related information like dressings, injections etc
Armitage & Kavanagh, 1996b [8]	Community nurses claim that, where there is no district liaison nurse they do not receive full information
Balla & Jameison, 1994 [9]	Full information not included in discharge summaries. Inadequate notice of discharge
Closs *et al.*, 1995 [29]	Nursing staff least happy with communication (occupational therapists most happy). Timing, co-ordination and insufficient information all issues. General practitioners would have liked fuller information earlier and more warning of discharge
Fairhurst *et al.*, 1996 [17]	Shortcomings of information related to patient's condition
Houghton *et al.*, 1996 [18]	Appropriate information getting across via discharge co-ordinator—but to little effect?
Jackson *et al.*, 1999 [19]	From the perspective of Aboriginal health workers. What is 'appropriate information'? In this study white professionals did not have full knowledge of problems of ethnic minority and so could not pass on full information
MacKenzie & Currie, 1999 [21]	Aboriginal patients not trusted by hospital staff to carry own discharge summaries. Discharge summaries often arrived late or not at all; 8% had the wrong address
McInnes *et al.*, 1999 [22]	General practitioners more likely to know about patient's home circumstances than hospital staff—more appropriate and fuller information can be passed on to community services
Mckenna *et al.*, 2000 [23]	Hospital nurses think that adequate information is passed between contexts but community nurses do not think that information is adequate. Hospital nurses think information is passed in time, community nurses think it is late
McWilliam & Wong, 1994 [3]	Fragmentation by specialization amongst physicians results in misunderstandings/difficulties prescribing drugs/passing on instructions when discharging to home
Allen, 1997 [30]	Of 200 people followed-up, 40% were referred to other agencies by liaison nurse after call, indicating that not enough information had been given at discharge
King & Macmillan, 1994 [33]	Ward staff did not use a validated scale to assess functional/mental ability so little written was about this; overall documentation poor
McBride, 1995 [34]	50% of community nurses felt they received adequate information, 40% felt they were sufficiently involved in discharge planning. Little information about medication or self-care. Minimal liaison between hospital and community
Worth *et al.*, 1994 [36]	Lack of information and incomplete documentation the norm

Table 5. What factors are associated with the breakdown of communication between and within professional boundaries?

Study	How question answered
Armitage & Kavanagh, 1995 [6]	Difficult and time-consuming to get information from hospital if no known contact. Misunderstandings of role of community nurse by hospital staff means full information re-wound dressings etc not always passed on. Timing of notification of discharge often inadequate
Armitage & Kavanagh, 1996a [7]	From perspective of hospital nurses; discharge planning often has low priority (lack of time, 'busyness', pressure to release beds etc); lack of information about community services; no feedback on discharge planning; often short notice of discharge so difficult to plan
Armitage & Kavanagh, 1996b [8]	Organization of nursing into hospital and community services—separately managed and financed—impedes communication
Balla & Jameison, 1994 [9]	Lack of awareness; time ('busyness'); general practitioners feel alienated by hospital; inadequate information in discharge summaries. No details about patients' general practitioners in hospital case notes. Difficulty making telephone contact with general practitioner (lack of availability)
Carter & McInnes, 1996 [11]	Hospital nurses lack of awareness of role, services and skills offered by community nurses impedes communication
Clarke & Gladman, 1995 [12]	Home visits difficult for occupational therapists to organize; expensive and time-consuming; not everyone concerned always present (two therapists always present—issues of bureaucracy)
Closs *et al.*, 1995 [29]	Patients and carers reported that arranged services sometimes did not arrive—particularly getting equipment on time; patients and carers sometimes arranged things themselves. Issues raised: insufficient information, lack of co-ordination, timing, inadequate notice of discharge
Davies & Connolly, 1995a [14]	From perspective of hospital social workers; time is a barrier to communication. Tensions as social workers are put in new role as care co-ordinators and purchasers. Problems if they did not identify with the hospital. Time an issue—claim case loads too heavy and leave no time for home visits. Issues of status and identity can impede communication
Davies & Connolly, 1995b [15]	From perspective of hospital staff; communication impeded when lack of rapport, lack of understanding of pace of hospital and need for beds. A 'known' face important—and one who identifies with the health side ('one of us'). Hospital social workers should be accessible
Dukkers van Emden *et al.*, 1999 [16]	Hospital workers lack of knowledge of community services recognized; not improved by hospital-based liaison nurses
Fairhurst *et al.*, 1996 [17]	69% of professionals perceived that people often do not receive necessary information/advice before discharge. Most patients expressed satisfaction—have lower/different expectations than professionals; want to get home/fear compromising care
Jackson *et al.*, 1999 [19]	From the perspective of Aboriginal health workers; racism—cultural beliefs of patients not understood by professionals, which can lead to confusion (raising cultural awareness of professionals suggested); location—problems of getting services to remote areas and knowing what is available where; lack of sensitivity and empathy
MacKenzie & Currie, 1999 [21]	Racism—Aborigines not trusted by hospital staff to carry own discharge summaries; timing and co-ordination—discharge summaries arrived late or not at all, 8% had wrong address, even when faxed still arrived late
McInnes *et al.*, 1999 [22]	Control group less happy with discharge planning than test group; lack of an advocacy role as hospital staff not fully aware of home circumstances and social needs of patient
Mckenna *et al.*, 2000 [23]	Because of shorter stays and sicker discharges, hospital nurses do not get the chance to get to know their patients. Because patients sicker when discharged, community nurses need more information. Community nurses very concerned as to how hospital nurses view them
McWilliam & Sangster, 1994 [24]	Role confusion—many physicians and nurses did not understand the roles of discharge planner and case manager, resulting in misdirected discharge data. "Fragmentation by specialization"—avoiding "stepping on toes" resulted in patient centredness, continuity and effectiveness being undermined. Limited perspectives between professionals—hospital did not know what community needed and drew up home care plans requiring technology not available in the community, resulting in co-ordination problems
McWilliam & Wong, 1994 [3]	Focus on the work of hospital nurses. Fragmentation—"everybody has a little bit of knowledge but nobody has the big picture"; "you kind of stop at the door. You do not know the community organization". Notions of hierarchy also contributes to breakdown
Peters *et al.*, 1997 [25]	Notes problems in time and co-ordination between hospital and community; hospital nurses lack of knowledge about what's available in the community
Stanley *et al.*, 1999 [27]	Problems include identifying the care manager, tensions between health and social professionals over roles, status, power and rivalries. Social workers unwilling to assume the role of care manager; professionals, patients and carers unsure about the role of care manager—"the older person became the battleground for making territorial claims over resources". Lack of training
Tennier, 1997 [28]	Role confusion—not always clear where responsibilities lie, can lead to "confusion and duplication of efforts". No clearly defined discharge planning procedure. Problems include timing of discharge (little notice), lack of awareness of importance of discharge planning, lack of clear documentation, poor liaison with community services, need for more understanding of what community services can and cannot offer

Table 5. (*Continued*)

Study	How question answered
Barnes & Cormie, 1995 [31]	Problems discussed by 'panel of users' included time (inadequate notice of discharge) and co-ordination (hanging around waiting for services/services not there and assumptions made hospital staff about levels of family and neighbour support
Connolly, 1995 [32]	From the perspective of hospital nurses. Clashing perspectives: nurses critical of social workers' ideas of self-determination and respect for individuals when it involves risk-taking; expect them to understand and respect demand for beds. Social workers' delaying actions or time-consuming assessments seen as a problem
King & Macmillan, 1994 [33]	Documentation poor. Little information on home environment recorded on hospital notes; little on previous involvement with various services. Where patients have responsibility for care of others, this is seldom mentioned. Little on availability/willingness of carers. Generally, health details well documented; social details poor or missing
McBride, 1995 [34]	Notes revealed discharge planning not started early enough. Few patients given contact names and numbers. Minimal liaison between hospital and community staff
Tierney *et al.*, 1994 [35]	Problems include many patients having little recollection of being given information about discharge, many carers felt inadequately informed, much of the information given had been forgotten, no planning document used by multi-disciplinary team in any ward studied
Worth *et al.*, 1994 [36]	Lack of knowledge re-roles of community professionals. Where liaison nurse posts introduced to improve hospital/community communication, they operate in a variety of ways with little consensus about their role. Delays in receiving written discharge information—not received early enough (or, frequently, not even on same day as discharge). Insufficient preparation of home due to lack of time

assumptions were made by hospital staff about the extent and quality of family support available [33].

Some hospital wards discharged patients before the weekend, when community services were less available [28].

Although key workers are effective, there was little consensus about their role. Various people took, or were given, this role and operated in different ways [27, 28]. Key workers were regarded as saving time by hospital nurses [8] and more knowledgeable about community-based networks. There was little evidence about whether such workers should be based in the hospital or the community. Community nurses felt communication was facilitated best when it was within professional boundaries [8].

Professional cultures and barriers to communication

Practitioners had little understanding—and in some cases respect for—each other's roles. This was illustrated by hospital based professionals' views of community-based professionals, for example, in nursing [6–8], in medicine [9], occupational therapy [12] and social work [14, 15].

Lack of prioritization of discharge planning was most apparent in studies of hospital-based professionals [7], who tended to regard acute physical care as the central focus.

Time

Perceived 'busyness' was reported in all of the studies, with frequently no time to plan and little time to communicate fully. This was exacerbated by a shortage of staff [31].

Discussion

Recent policies have stressed the importance of patient choice in health care [37]. For older people, this means a respect of autonomy, achievement of optimal quality of life, choice over treatment options and place of care. This review demonstrates that despite the fact that problems associated with hospital discharge of older people are well recognized, there has been little adequate empirical research.

Shortcomings in the literature means we are unable to provide strong empirical evidence for practice recommendations, despite the increasing numbers of older people requiring care. There are problems in generalising across geographical areas and socio-political cultures. Most papers were descriptive accounts of services, local evaluations and professional opinion. There were only two randomized controlled trials and two uncontrolled intervention studies. The dissemination of research across nursing, medical and inter-professional journals means that it may be difficult for practitioners to locate recent findings. Most studies were from nursing journals; few studies were done by social workers and therapists.

Despite these limitations, this review addresses issues of importance for practitioners working with older people, although the results may not be a surprise. One approach to understanding these common difficulties may be by analysing the complex dynamics of institutional cultures, professional enculturation and

territoriality. Analysis of these fundamental aspects of organizations would benefit from sociological insights. Huntington's work with social workers and general practitioners [38, 39] demonstrated that difficulties lay within the social structures of the organizations rather than being attributable to individual professionals. So while current rhetoric emphasizes multidisciplinary team working, professional groups might seek to sustain power by developing and maintaining occupational cultures which emphasize differences and each professions 'uniqueness' [40]. Multidisciplinary educational initiatives may lessen these divisions and foster greater understanding.

Key workers from any profession, may provide the best mechanism for facilitating information transfer and continuity of care. They appear to provide a conduit for information and by being a 'broker' across organizations and cultures. It may be crucial that the key worker is able to transcend a particular professional identity or organizational affiliation. Future research needs to draw on methodologies which will adequately test and identify the components of the key worker role, as there is now sufficient descriptive evidence about their efficacy.

Other strategies which were not investigated, may improve information transfer such as common assessment procedures and shared health care records. Patient-held records may enable patients to retain greater control of information transfer and reduce unnecessary duplication. There is an assumption that the greater use of information technology will serve to reduce the burden of paper-work, though evidence within nursing fails to substantiate this claim [41, 42]. Information technology has had little impact so far on improving information transfer. There are also differences in the lexicon and terminology used by professional groups.

Conclusions

Current mechanisms for information transfer are inadequate, and have largely depended upon informal means of communication between professionals. Where 'formal' mechanisms exist, communication is improved but difficulties remain across professional and organizational boundaries. A 'known' face encourages informal communication and improves documentation [25]. There is a lack of large-scale empirical research. The most effective strategy for transferring information is the appointment of a 'key worker', who can provide a point of contact between workers from hospital and community. Both may see the key worker as "the agent on whom they depend" [14]. Even in situations where this role has been developed, problems have arisen because both settings are under pressure and pursuing different goals. Neither setting is fully aware of the needs, limitations and pressures of the other. Patients require alliances and effective partnerships across professional boundaries to support continuity of care and adequate information transfer.

Key points

- Current methods of transferring information about older patients across professional, organizational and geographical boundaries are poor.
- Community-based practitioners report that appropriate and sufficient information about elderly patients is rarely provided. Where formal documentation using discharge plans and discharge summaries is used, some is 'missing' or inadequately completed.
- Breakdown of information transfer was most likely to be associated with: time pressures, lack of role understanding, not making discharge planning a priority, lack of co-ordination, fragmentation of information and assumptions about availability of family support.
- Information transfer can be facilitated by the appointment of a key worker. However there was insufficient research evidence to determine from which professional background this worker should come and whether they should be in the hospital or community.

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