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Acknowledgements

This study was funded by The Australian Primary Health Care Research Institute (APHCRI) Research stream: The relationship between subacute and primary health care (2013-2015).

There are no competing interests. The funding source did not have any role in the study design, data collection, analysis and interpretation, writing the article or the decision to submit the manuscript for publication.
Improving care coordination for community-dwelling older Australians: a longitudinal qualitative study

Abstract

Objective

The aim of this study was to describe the care transition experiences of older people who transfer between subacute and primary care and identify influencing factors. A further aim was to identify ways to enhance the Geriatric Evaluation and Management (GEM) model of care and improve local coordination of services for older people.

Methods

An exploratory, longitudinal case study design involving repeat interviews with 19 patients and carers, patient chart audits and three focus groups with service providers.

Results

Patients and carers experienced care transitions as dislocating and unpredictable within a complex and turbulent service context. The experience was characterised by precarious self-management in the community, floundering with unmet needs and holistic care within the GEM service. Patient and carer attitudes to help seeking, quality and timeliness of communication and information exchange, and system pressure influenced care transition experiences.

Conclusion

Further policy and practice attention including embedding early intervention and prevention, strengthening links between levels of care by building on existing programs and educative and self-help initiatives for patients and carers is recommended to improve care transition experiences and optimise the impact of the GEM model of care.
Key Question Summary

What is known about the topic?

Older people with complex care needs experience frequent care transitions due to fluctuating health and fragmentation of aged care services in Australia. The GEM model of care promotes multidisciplinary, coordinated care to improve care transitions and outcomes for older people with complex care needs.

What does this paper add?

The study highlights the crucial role of the GEM service but found there is a lack of systemized linkages within and across levels of care that disrupts coordinated care and impacts on care transition experiences. There are underutilised opportunities for early intervention and prevention across the system including the Emergency Department (ED) and General Practice.

What are the implications for practitioners?

Comprehensive screening, assessment and intervention in primary and acute care, formalised transition processes and enhanced support for patients and carers to access timely, appropriate care is required to achieve quality, coordinated care transitions for older people.
Improving care coordination for community-dwelling older Australians

Introduction

Older people represent the fastest growing age group of Australia’s population\(^1\) and their hospital admission rates are increasing rapidly.\(^2\) Due to complex and fluctuating health needs, their pathway through the hospital system\(^3\) and across the health system as a whole\(^4\) often includes multiple care transitions, creating uncertainty and bringing them into contact with numerous health care professionals.\(^5\) Care transitions (“periods of time when an individual either moves to a new care setting or changes levels of care within a setting”)\(^6\) typically comprise a complex set of activities.\(^7\) As such, transitions involve risks that can compromise service safety and quality and patient outcomes.\(^7\)-\(^9\) In Australia, the aged care system is difficult to navigate with services poorly coordinated across different levels and locations of care.\(^10\)

Since 2010, the Australian government has invested substantially in subacute care and implementation of GEM services. This geriatrician-led service model promotes a multidisciplinary, coordinated solution to improve care transition experiences and outcomes for older people.\(^11\) Delivered in a dedicated ward area, the GEM model is effective in reducing functional decline, mortality and discharge to residential aged care.\(^11\) The objective of the GEM model is to plan and provide medical, psychosocial and rehabilitative care tailored to the patient’s specific needs and to ensure coordinated discharge planning.\(^11\) However, implementation of complex service delivery innovations such as the GEM model can be difficult to achieve in specific contexts.\(^12\) The response of patients and health care professionals, as well as factors within the local context can have a bearing on how implementation progresses.\(^13\) In this case, the fragmentation of aged care services and the complex needs of older people following discharge pose particular challenges.\(^14\) Formative evaluations based on diverse data sources can therefore be beneficial in revealing factors in the local context that inform successful implementation.\(^13\)
This formative evaluation aimed to: 1) describe care transition experiences from multiple perspectives and identify influential personal, systemic and local factors; and 2) identify applied solutions to enhance implementation and capacity of the GEM model.

**Methods**

**Design and setting**

An exploratory, longitudinal case study design was used to address the aims. This involved repeat interviews with patients and carers, patient chart audits and focus groups with service providers. Case study research is suited to in-depth investigation of patient journeys over time and across the continuum of care. Study rigor was derived by triangulation of multiple data sources, data collection methods and researcher perspectives during analysis, prolonged engagement between researchers and participants, and an audit trail of decisions and procedures.

The location of the study was a regional Queensland hospital. At the time of the study two specialised Older Persons Evaluation, Rehabilitation and Assessment (OPERA) units were progressively replaced by a 32 bed purpose built OPERA ward. The model of care, based on principles of Geriatric Evaluation and Management was consistent across all settings. Ethics approval for the study was obtained from the Human Research Ethics Committee of the appropriate institution (HREC/12/QCH/76-802).

**Participants and recruitment procedure**

A criterion sampling approach was used to recruit patients of the GEM service with a Mini Mental State Examination score ≥ 20, and a nominated carer (excluding privately paid carers). As data ata were collected and reviewed, purposive sampling was adopted so that the sample reflected variation in preadmission history, carer circumstances, length of stay, postacute service eligibility, demographic characteristics and relevance to the emerging analysis. All patients were recruited on admission to the OPERA ward. Following completion of patient and carer interviews, service providers from hospital, primary care, nongovernment health and social care services were purposively recruited via
professional networks. All participants were provided with an information sheet and signed a consent form.

Twenty patients and their carers were recruited and one patient withdrew. A total of 97 semi-structured interviews, 56 with patients and 37 with carers were conducted. One patient was not available for the postdischarge interview because of ill health and one carer was not able to be contacted for a predischarge interview. Table 1 details patient and carer characteristics. Patient hospital service use is summarised in Table 2. Details of the 23 service provider participants are shown in Table 3.

Data collection and analysis

Data collection occurred across multiple settings in line with the longitudinal design. Patients were interviewed on admission to the OPERA ward, predischarge and at one month postdischarge. Carers were interviewed predischarge and one month postdischarge. The location of postdischarge interviews was negotiated with participants. All except four interviews were conducted face to face. Interviews explored events leading to the ED presentation, pre and post admission self-assessed management, GEM service experience and expectations, processes of care, hospital discharge and postdischarge experience.

One hospital staff focus group and two nonhospital provider groups were conducted to capture a diverse sample. Discussions focused on providers’ experiences and perspectives on coordination of care transitions, subacute service provision and capacity for service integration.

With consent, interviews and focus groups were recorded and transcribed. Data analysis involved a within and across case analysis of patient and carer interviews, thematic analysis of focus group data and descriptive statistics (frequencies, mean, range) for data extracted from medical charts. NVivo17 was used to store and manage the qualitative data set. Two researchers independently coded five patient cases, three researchers reviewed the codes and developed a coding framework which crystallised recurrent themes and sub-themes.18 Using the framework, two researchers coded half the transcripts each. Data were synthesised by one researcher to develop a thematic storyline for each
case. Focus group data were coded, classified, sorted and synthesised by one investigator to identify major themes and subthemes. The final integrated analysis and key messages were derived during a workshop involving five members of the research team.

**Findings**

In addressing the study aims, the main themes relating to patient, carer and provider perspectives on care transitions are presented. This is followed by a synthesis of the main factors which influenced care transition experiences. Selected quotations coded to represent either a patient (P) or carer (C) in the numerical order of recruitment (1-20); and hospital (HFG) and community (CFG) perspectives are included to illustrate these themes and factors.

**Patient, carer and service provider perspectives on care transitions**

Overall, the discussions of patients, carers and providers described dislocating and unpredictable transitions occurring within a complex and turbulent service context. This included descriptions of multiple service providers and difficulties associated with unspecified pathways and no central reference point for patients, carers or providers. Providers highlighted the unpredictability of care pathways due to sudden changes in health. The general experience of providers was: “there isn’t a steady, predictable improvement trajectory … they are up and they are down” (HFG) which made it difficult to detect change early. For these reasons, some providers perceived that the ED was a vital opportunity to implement good transitions: “we should be looking at where is the patient sitting in ED, what are the potential risks and what are the potential areas we need to be planning on working with them to safely transition them back into the community.” (HFG) The dislocating and unpredictable transitions could be compounded by a complex and changeable service landscape. A carer whose family member accessed multiple private and public providers said: “We seem to go from one health professional to another one who will refer us to another one and we go the rounds … and then back again to a GP.” (C17)

Self-management in the community was often precarious despite frequent and routine interactions with GPs and contact with the hospital and community providers. In some cases patients described
reaching a threshold which marked the need for change in their current care arrangements. For example, a participant who described having preexisting back pain, two chronic diseases and declining eyesight said she was: “managing very well” at home but then: “I felt that I got to the stage where I did need help so they got the ambulance”. (P2) Although in many cases a network of support was important to older people in the community, it was carer support that was critical to care transitions by addressing gaps and following up changed care arrangements. As one provider recounted: “I’m waiting … assuming … the carer will then look at an appropriate length of [time before booking an] appointment for follow-up once they’ve come out of hospital.” (CFG) However, older people frequently expressed concern about the high expectations of carers: “I was her carer. Now she has become my carer but there’s no one caring for her.” (P12)

Postdischarge, both patients and carers described situations where they were floundering with unmet needs. This situation often arose where follow-up care did not commence, or was delayed, and when patients and carers were unprepared for managing health and social care issues which emerged post hospital discharge. Several patients and carers were uninformed about who to contact when this occurred: “Yeah the plan is going well and all that … Only the knee is the worry, what can I do?” (C3) and: “We’re in a bit of a grey area. We don’t know what to do.” (C10) Providers stressed the potential of the GP in care coordination to help navigate the service landscape and avoid a presentation to the ED: “[GP] … knows someone for 30 years … far better that person presents to their GP to have things sorted out than they present to the ED.” (CFG) However, on the whole, patients and carers perceived that GPs had a peripheral role in care transitions, particularly hospital transitions: “his GP, I don’t think he can do much more. He [GP] says if he is bad just call the ambulance and go into hospital.” (C19)

For patients, carers and providers, the GEM service played a critical role in responding appropriately and holistically to complex needs. Holistic care processes and an inclusive goal-oriented approach aligned with many patients’ and carers’ expectations of recovery: “they listened and they treated the whole person not just her actual thing that she went in for”. (C9) Less positive processes including
rushed discharges and information confusion or breakdowns were also described and seen as
disruptive: “Well the decisions about going home have been very staggered … one day it’s you’re
going home and the next day it’s the next day … and all of a sudden now it was Wednesday” (P14)
Tailored, inclusive strategies such as a predischarge family meeting, home visits and the personal
contact and coordination provided by the Transition Care Program (TCP) were valued by patients and
carers for facilitating a seamless transition from hospital to home: “they’ve been exceptional really,
because today we went into my house and had a look. A nurse went with me … just to see what I had
at home.” (P2) Likewise from a GP perspective the: “TCP are generally good at keeping me involved
when I need to be.” (CFG) For providers there was a general sense of relief that patients would
receive comprehensive and appropriate care from the GEM service: “but once they [patients] get to
the specialist service, for example [GEM service] then they [patients] can really relax and appreciate
the fact … that it’s actually being properly worked up”. (CFG) However, this perception was
tempered by discussion about complex referral processes dependent on hospital admission and lack of
awareness of the service: “I suspect most GPs don’t know enough about [GEM services] … don’t
know how to access it.” (CFG)

Factors influencing care transitions

Patient and carer attitudes and beliefs in relation to help-seeking influenced the timing and type of
service they accessed, which in turn had implications for care transitions. Patients often described a
‘wait and see’ approach which in some instances delayed further investigation or precipitated a crisis:
"No, don't ring the ambulance. I'll be right till the morning." It'll only be a bit of bruising.” (P1) Most
patients displayed stoicism, self-reliance and independence, often exhibited by resistance to offers of
help: “They asked did we need any help and I explained that my wife and I are quite capable. We’re
not real old.” (P1) Carers were less reluctant to present to hospital, describing a judicious use of
hospital services contingent upon their own capacity and the current health issue: “I’d done
everything possible to keep him healthy before this admission so I knew it was out of my hands.”
(C20)
The quality and timeliness of communication and information exchange between patients, carers and providers and between providers influenced care transitions. Hesitancy or inability on behalf of patients and or carers to clarify perceived rushed discharge planning or lack of community follow-up contributed to poorly managed care transitions. It was often unclear how communication would be initiated and by whom. In relation to postdischarge follow-up one participant responded: “No I haven’t bothered because I thought well they will tell me or contact me.” (P13) By contrast those who were proactive were more able to have needs met: “I think I just asked a lot of questions with doctors, Ozcare, all the different people that I thought could help me.” (C20)

Providers discussed the delayed, sporadic and varying quality of information exchange between hospital and community sectors particularly in relation to discharge plans: “they [patient] may be home a week before anyone has actually told us.” (CFG) Providers related that in the absence of systems of communication, they relied on chance encounters. However frequent changes made it difficult to establish good working relationships and keep up to date: “six months ago, whoever the contact person or whether that service was needed … could quite easily have changed.” (CFG)

Providers emphasised system pressures as influential factors. This included performance targets for ED and pressure to discharge patients within specified periods. These were compounded by unknown referral pathways and service specific assessments which dispersed responsibility across the system, potentially delaying transitions or causing flow-on effects. Concern was expressed that these factors encouraged a focus on premature referral to the next transfer destination rather than a focus on the patient’s coordinated journey through the system and blanket referrals as a way to manage pressure and uncertainty: “at the moment you hedge your bets … cast a wide net [of referrals] for all of them.” (HFG) Patients and to a lesser extent carers were generally tolerant of wait times and intrahospital transfers because they anticipated and trusted expert help: “Well they’re only doing it for my good.”(P15)

Discussion
The main finding of this study is that from a patient, carer and provider perspective, the experience of transferring between primary and acute care via a GEM service was unpredictable and dislocating due to the involvement of multiple disconnected providers and unspecified care paths. Baillie16 has also reported experiences of unclear care paths and unexpected and disruptive intra and interhospital transfers in an integrated acute and community hospital setting in the UK. We found that transition unpredictability was also linked to the tenuous nature of self-management in the community involving varying levels of support. These findings resonate with Nicholson et al’s19 description of frail older peoples’ experiences of increasing dependency and accumulating losses while striving to maintain functional capacity at home. Older people in this study delayed or avoided seeking help, which can be related to maintaining a sense of independence or fearing loss of independence such as precipitating residential care.4 Carers felt ill-equipped to manage an escalation in needs and associated responsibility. Strategies to improve care transitions will need to address help seeking preferences of patients and carers. One option consistent with maintaining independence is customised preventive in-home visits coordinated from primary care which have been implemented in Europe20-22 and found to be effective in preventing falls and hospitalisation.21 This option would require the possible reluctance of older people to participate in preventive and health promotion activities21,23 to be addressed and strategies to assist GPs to adopt prevention activities as part of routine care.24

Providers in this study identified ED as an opportunity to identify risk and make appropriate community referrals. Almost a third of patients in this study had presented to ED in the previous six months, almost half presented to ED in the six months postdischarge and yet all had regular contact with a GP. An Australian study trialled comprehensive, multidisciplinary screening, assessment and referral to community services for older people presenting to ED. The authors concluded that this was a safe and appropriate option for managing discharge when the decision whether or not to admit is finely balanced.25 The ED presents an important and underutilised opportunity for early intervention and coordination across the system.

Other important factors impacting on care transitions experiences were communication and care coordination issues. The quality and timeliness of information has been identified in the care
transitions literature\textsuperscript{3-5,16,26-28} as has coordination of multiple providers.\textsuperscript{3,4,26,28} Patients in this study were hesitant or ambivalent about proactively seeking information in response to perceived rushed discharge planning or when care plans went astray. Toscan et al\textsuperscript{3} and Walker et al \textsuperscript{28} found that some older patients felt overwhelmed by the number of providers involved and perceived that they had a passive role in care transition processes. One strategy to address the negative impact of multiple transitions and uncoordinated service provision is care navigator roles\textsuperscript{9} which have been applied in a range of sectors, but are relatively new in aged care.\textsuperscript{9}

The GEM service was crucial in preparing and positioning patients and carers to manage the transition home beyond short term medically focused care. It was clear that providers considered the comprehensive, multidisciplinary approach of the GEM service the most appropriate model for restorative care and preparing older people to return home and this was extended through access to the TCP. The findings affirm previous research that intermediate care can counteract system pressures for untimely and unplanned discharge and enhance preparedness for discharge.\textsuperscript{29} Patients valued being informed, respected, cared about, valued and included and similar to previous research, experiences varied based on these principles.\textsuperscript{30} The findings affirm previous research that including patients and families in care transitions is vital.\textsuperscript{16}

The findings of this study must be considered in regard to the local context. There is wide variation in the availability and distribution of primary care services,\textsuperscript{30} subacute care,\textsuperscript{31} TCP \textsuperscript{32} and community-based postdischarge support programs\textsuperscript{33} across Australia. There is also reported variation in the method of delivery of GEM services.\textsuperscript{34} The local service context may therefore impact upon the transferability of the study findings to other locations.

**Conclusion**

The study confirms the potential advantages of the GEM service, but further policy and practice attention is warranted to improve care transitions. This includes early intervention and prevention through improved screening and comprehensive assessment in primary and acute care, building on
existing programs to strengthen links between levels of care, improved discharge planning processes and trial of care navigator roles.

References


doi:10.1016/j.ijnurstu.2012.01.006

doi: 10.1007/s10433-007-0059-z


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OPERA, Older Persons Evaluation Rehabilitation and Assessment; TCP, Transition care Program; NUM, Nurse Unit Manager; GP, General Practitioner; CNC, clinical nurse consultant; ACAT, Aged care assessment team; HACC, Home and community care; NGO, nongovernment organisation.