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This is the authors’ version of an article published in
Australian Journal of Primary Health. The original
publication is available by subscription at:
http://www.publish.csiro.au/

doi: 10.1071/PY13087
http://dx.doi.org/10.1071/PY13087

Please cite this article as:


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Barriers and enablers to good communication and information-sharing practices in care planning for chronic condition management

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Abstract. Our aim was to document current communication and information-sharing practices and to identify the barriers and enablers to good practices within the context of care planning for chronic condition management. Further aims were to make recommendations about how changes to policy and practice can improve communication and information sharing in primary health care. A mixed-method approach was applied to seek the perspectives of patients and primary health-care workers across Australia. Data was collected via interviews, focus groups, non-participant observations and a national survey. Data analysis was performed using a mix of thematic, discourse and statistical approaches. Central barriers to effective communication and information sharing included fragmented communication, uncertainty around client and interagency consent, and the unacknowledged existence of overlapping care plans. To be most effective, communication and information sharing should be open, two-way and inclusive of all members of health-care teams. It must also only be undertaken with the appropriate participant consent, otherwise this has the potential to cause patients harm. Improvements in care planning as a communication and information-sharing tool may be achieved through practice initiatives that reflect the rhetoric of collaborative person-centred care, which is already supported through existing policy in Australia. General practitioners and other primary care providers should operationalise care planning, and the expectation of collaborative and effective communication of care that underpins it, within their practice with patients and all members of the care team. To assist in meeting these aims, we make several recommendations.

Additional keywords: care plan, collaboration, interdisciplinary care, primary health care, self-management.

Introduction

Implementation of person-centred care in Australia has involved the development and maintenance of chronic condition\textsuperscript{1} management care plans (National Health Priority Action Council \textsuperscript{2}2006). These plans are intended to coordinate care and facilitate communication across the health-care team, which includes patients themselves and their carers (Thille and Russell \textsuperscript{2}2010).\textsuperscript{2} However, research reveals that general practitioners (GPs) rarely discuss care planning with other health professionals, and patients do not generally expect to participate in these discussions, which detracts from the possibility of genuine collaboration (Shortus et al. \textsuperscript{2}2007). Little is known about why care planning has been of limited success or what the barriers and enablers are to effective communication between health-care workers, patients and carers (Simon et al. \textsuperscript{2}2008; Jowsey et al. \textsuperscript{2}2009; Lawn et al. \textsuperscript{2}2009; Mathers et al. \textsuperscript{2}2011).

\textsuperscript{1}We have used the term ‘condition’ to include diseases and conditions such as cardiac and respiratory diseases and mental disorders.
\textsuperscript{2}We define ‘communication and information sharing’ as the transfer of information between patients and their PHC workers, or among workers. This may occur via formal processes, such as consultations and letters, or via informal means, such as impromptu conversations. Within this definition, we make the assumption that effective communication and information sharing is when each stakeholder within the interaction perceives that their views have been heard and included as part of decisions made about how care should proceed.
What is known about the topic?
- Care plans aim to facilitate communication, information sharing and collaboration between health-care teams, patients and carers; however, these processes continue to be problematic within health-care delivery.

What does this paper add?
- This paper identifies barriers and enablers to effective communication and information sharing in care planning, from patients’ and health-care workers’ perspectives, and suggests strategies to improve the effectiveness of care planning.

This research sought to address these knowledge gaps by examining patients’ and primary health-care (PHC) workers’ perceptions of the enablers and barriers to effective communication and information sharing.

Methods
This study used a mixed-method approach.

Qualitative components

Approach and setting
Multiple methods were applied, including semi-structured interviews with patients, focus groups with PHC workers and field observations of actual care planning (Liamputtong and Ezzy 2006). We purposefully selected five health-care services that: provided a diversity of characteristics and experience, were located in rural and metropolitan areas across two Australian states, used different care planning systems, and cared for a variety of patient groups. None of the services declined to participate. The selected services consisted of:
- Two metropolitan community-based aged care health services
- One rural Aboriginal health service
- One rural general practice
- One community primary health centre co-located within a rural hospital

We worked with a contact person at each service to recruit patients for interviews and to determine what practice events we would observe. Patient participants were purposefully sampled through inclusion of those who had had a care plan for less than 1 month, between 6 and 12 months and more than 12 months.

Three care planning systems were used across the services: GP Management Plans (GPMPs) (Department of Health and Ageing 2012), the Flinders Chronic Condition Self-Management Care Planning Program (Flinders Human Behaviour and Health Research Unit 2012) and the Goal Attainment Scale (Turner-Stokes 2009). GPMPs are linked to the Medicare Benefit Schedule. This Schedule provides patients on GPMPs with funding for up to five allied health service visits per year. The other care plans do not provide funding benefits.

Ethics approval was obtained from the human research ethics committees responsible for each service.

Interviews
Patients were recruited via a contact person at each site, who made the initial approach and sought permission from patients to share their contact details with the researcher, who then contacted them directly to explain the study. This resulted in the recruitment of 24 patients, who participated in 47 interviews (five interviewed once only) during 2011. All patients were interviewed by the same member of the research team. The five who participated in a single interview did so because their deteriorating health or family commitments prohibited them from committing to subsequent interviews. The patients had a range of chronic health problems (e.g., diabetes, arthritis and depression) and were aged between 40 and 89 years (most were between 55 and 70 years). Eighteen patients were born in Australia with the remaining six born in Europe. Four patients self-identified as Aboriginal and/or Torres Strait Islanders.

Patient participants were asked about their perceptions of receiving care via a care planning system. This included: how they interacted with, and responded to, primary health-care providers as a result of their plans, what features of this care planning process enhanced or hindered their participation and navigation through systems of self-management support, what they thought about the way the plans are developed, shared and monitored, and how these care plans affected the way they managed their conditions.

Observations
Data from 56 observation sessions across the five sites were collected. The researcher observed interactions between patients and PHC workers during patient exercise groups and consultations, and interactions between workers during staff meetings and impromptu gatherings (such as in the lunch room). This allowed the researcher to gain a sense of the verbal and non-verbal interactions and processes that acted as enablers and barriers to communication and information sharing. Notes were taken after each observation using a pre-prepared guide. Consistent with the emergent nature of qualitative research, however, the observation guide was not used as a rigid tool. Instead, when new aspects of communication and information sharing processes were observed, new categories were added to the guide so that it remained flexible and relevant.

Focus groups
A total of 41 staff participated in six focus groups. Two focus groups were undertaken at one of the health services due to the inability of all interested staff to attend one session. PHC workers who participated had various professional backgrounds, including management, nursing, social work, physiotherapy and dietetics. All had some role in managing or administering care plans, either in a clinical or administrative capacity. The purpose of the focus groups was to delve deeper into the findings of the observations and interviews, to elicit insights into the clinical culture and care planning practices within it.

Qualitative data analysis
Qualitative data was analysed using both thematic analysis (Liamputtong and Ezzy 2006) and discourse analysis (Fairclough 2003; Liamputtong and Ezzy 2006). The use of two qualitative analysis methods allowed triangulated (Liamputtong and Ezzy
2006), deep exploration of both the explicit and more subtle aspects of communication and information-sharing processes. All qualitative data was imported into NVivo 9 (QR International Pty Ltd, version 9, 2010) for management and analysis. Regular collaborative analyses among all authors were undertaken to cross-check coding and interpretation.

Quantitative phase: PHC worker survey

The most commonly arising issues from the qualitative thematic analysis were used to design a survey that was piloted with seven PHC workers and then refined by the authors. The final survey consisted of 40 questions: 18 provided rating scales, 17 provided multiple choice options, three provided yes/no/unsure options, and two elicited open-ended responses. The questions collected information about how PHC workers communicate and share information with their patients and colleagues, and what they view as barriers and enablers to this. The survey was launched on the Internet and advertised to PHC workers who had a care planning role via 21 primary health-care organisations across Australia. The survey link was distributed to PHC workers by these organisations through electronic mailing lists and paper-based newsletters. In total, 580 PHC workers who had some involvement in care planning processes responded to the survey. Of these, 83% were female and 64% had been practising for 15 years or more. Tables 1 and 2 identify the locations and professions of the respondents.

Quantitative data analysis

Initial survey analysis involved simple descriptive statistics of responses to each item (frequency distributions, measures of central tendency and dispersion). Differences in responses across sample characteristics were tested using t-tests and analysis of variance for continuous data. All open-ended question responses were reviewed and descriptively analysed using a separate coding frame, which was developed collaboratively by the research team.

Triangulation

Triangulation of the results from each data collection method enabled an in-depth understanding of the phenomenon, aiming to add rigor, breadth, complexity, richness and depth (Liamputtong and Ezzy 2006) to the enquiry. This involved the authors undertaking a series of analysis meetings in which themes from qualitative methods (interviews, observations and focus groups) and significant findings from quantitative methods (survey) were compared with determined areas of agreement as well as areas of potential divergence. The triangulation process was complemented by the authors’ use of relevant literature to explain the findings generated from the analysis methods (Liamputtong and Ezzy 2006).

Results

There were multiple and interdependent enablers and barriers to communication and information sharing (Table 3).

Enablers

Valuing communication

Patients who perceived communication and information exchange as valuable were more likely to be proactive in ensuring that it occurred. For example, one patient explained that he had checked that each of his PHC workers had a record of all the other people involved in his care because:

<table>
<thead>
<tr>
<th>Table 1. Location of respondents</th>
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<tbody>
<tr>
<td>Australian state/territory</td>
</tr>
<tr>
<td>Victoria</td>
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<tr>
<td>South Australia</td>
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<tr>
<td>New South Wales</td>
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<tr>
<td>Tasmania</td>
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<tr>
<td>Western Australia</td>
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<tr>
<td>Queensland</td>
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<tr>
<td>Northern Territory</td>
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<td>Australian Capital Territory</td>
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<table>
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<th>Table 2. Professions of respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Professions</td>
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<tr>
<td>Nurse</td>
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<tr>
<td>GP</td>
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<tr>
<td>Occupational therapist</td>
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<td>Social worker</td>
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<td>Physiotherapist</td>
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<td>Dietician</td>
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<td>Psychologist</td>
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<td>Podiatrist</td>
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<tr>
<td>Psychiatrist</td>
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<tr>
<td>Rehabilitation worker</td>
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<tr>
<td>Respite worker</td>
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<tr>
<td>Other</td>
</tr>
</tbody>
</table>

Table 3. Overview of factors that influence the effectiveness of information sharing

PHC, primary health care; GPMPs, GP Management Plans

<table>
<thead>
<tr>
<th>Enablers</th>
<th>Barriers</th>
<th>Both enablers and barriers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Valuing communication</td>
<td>Different perception of purpose of care</td>
<td>Consent</td>
</tr>
<tr>
<td>Patients informed about extent of help available</td>
<td>Closed communication</td>
<td>Free visits linked to GPMPs</td>
</tr>
<tr>
<td>Patient knowledge about PHC worker communication</td>
<td>Fragmented communication</td>
<td>Suspicion</td>
</tr>
<tr>
<td>Care continuity</td>
<td>Overlapping care plans</td>
<td>PHC worker and patient relationship</td>
</tr>
<tr>
<td>Involvement of patients in decisions</td>
<td>Belittling, sabotage, put downs, snide comments</td>
<td>Knowledge of care plan</td>
</tr>
<tr>
<td>Negotiation</td>
<td>Railroading</td>
<td>Role definition within the team</td>
</tr>
<tr>
<td>Emphasis used in conversation</td>
<td>Varied understandings of terminology</td>
<td>Team definition</td>
</tr>
<tr>
<td>Openness and accessibility of care plans</td>
<td>Time</td>
<td>Patient ownership</td>
</tr>
</tbody>
</table>
It’s very important for the workers to communicate. It means they can interlock, like what one finds out could affect what decision the other makes. (61-year-old man, patient, metropolitan service)

Valuing information sharing and understanding its benefits also operated as motivators for PHC workers:

Researcher: How important is it for you to share information with other workers?

Physiotherapist: Very important so we can make sure that it’s all being collaborative with each other; we’re all on the same wavelength.

Nurse: You can enhance the care you give to a patient if, for example, you’re talking to their counsellor . . . you can obviously pass on messages from other workers as well. (Focus group, rural service)

Patients informed about extent of help available

Patients who possessed knowledge about the operation of the health system, and were informed about the range of services available to them, actively engaged with the information-sharing process. Such knowledge facilitated patient communication with PHC workers because it allowed them to request referral to particular services or ask informed questions. Some patients had even approached a PHC worker to initiate a care plan, thereby demonstrating an informed approach (Adams 2009).

Involvement of patients in decisions

From the PHC worker perspective, greater participation by patients in making decisions and plans around their health allowed for a more equal flow of information, which assisted in the generation of positive outcomes:

It’s important to provide an opportunity for the patient to participate in their care. If it’s written down for them sometimes they actually are very proactive, they start to self-initiate. (Nurse, rural service)

The survey results also supported patient involvement as an enabler to effective communication and information sharing. Seventy-two per cent (n = 418) of respondents agreed or agreed strongly that one purpose of a care plan is to engage patients in managing their condition, and 70% (n = 401) stated that patients making decisions about their health care is the best indicator of care plan success.

Barriers

Closed communication

Patients recounted experiences where they perceived that communication and information sharing was devalued by PHC workers’ use of closed questioning. This was perceived as a significant barrier to communication and information sharing as it left important patient concerns unexplored:

A nurse asked me these questions; it was almost like A, B or C and she didn’t want to hear anything else. When I started to say – “No, no” she said ‘I want an answer, I want A, B and C’ . . . but I don’t really fit in with that. We don’t all fit in a box do we? (80-year-old woman, patient, metropolitan service).

Fragmented communication

Fragmented communication was a central barrier identified. This term is used to group together instances of gaps and breakdowns in communication and information sharing, occurring through a range of processes including ineffective handover, ineffective referral systems and one-way communication around referrals:

Often we refer to external agencies and hear nothing back, therefore we are completely unaware if the patient attended or what the outcomes were. (Physiotherapist, metropolitan service).

Survey data further supported these findings, with 9% (n = 53) of survey respondents reporting never receiving feedback from the PHC workers that patients were referred to, 18% (n = 104) of respondents reporting that they received feedback some of the time, and only 7% (n = 41) reported receiving feedback often. Frustrations regarding fragmented communication expressed during focus groups were also replicated in the survey, with 35% of respondents (n = 203) reporting dissatisfaction when they did not receive feedback on their referrals.

Overlapping care plans

Another barrier to communication and information sharing was the existence of overlapping care plans. Instead of one comprehensive care plan being developed with each patient, we identified many instances in which patients received separate plans from each PHC worker involved in their care. This resulted in unnecessary duplication, particularly where PHC workers were performing similar assessments, and it created miscommunication, which led to uncoordinated care efforts across services. It also led some workers to perceive cross-disciplinary communication and teamwork as tokenistic and of little value to their day-to-day role with patients. The potential for PHC workers to be unaware of who else is implementing a care plan was highlighted by 21% (n = 120) of survey respondents who reported that they never check if their patients have other active care plans.

Elements that operate as both enablers and barriers

Consent

Some patients were unsure if they had given consent to their PHC workers to share information. Similar uncertainty also existed for some PHC workers. The importance of clarifying consent before information sharing is highlighted by the finding that some patients did not want aspects of their personal histories shared. Three patients recounted experiences where they had felt anxious and ashamed as a result of workers sharing information they considered personal or embarrassing. Therefore, patients valued being able to provide selective consent so that only certain parts of their information were shared by their PHC workers. However, in three of the five services, patients’ selective consent was not possible. While selective consent was available to patients at a large portion of the services (66%) that survey respondents worked at, the services of 15% of respondents did
not provide this option, and 17% (n = 101) were unsure about whether selective consent was offered. Electronic templates used in the services also made it difficult for full patient histories not to be shared due to the automatic insertion of histories onto referral letters.

Funding structures, suspicion and dissatisfaction

Patients identified benefits from the five allied health services that were provided to them at no monetary cost if they had a team care arrangement as well as a GPMP. During the focus groups, however, several PHC workers explained that this funding arrangement created barriers to effective care planning and information sharing. Nurses at one health service reported patients’ impatience with workers’ attempts to engage them in collaboratively determining their care plan because they ‘just want the freebies’. Furthermore, during two focus groups, nurses expressed their suspicion that financial reward, rather than true collaboration, was the main motivation of GPs who put all of their patients on GPMPs.

Data collected during the observations and focus groups revealed that several nurses were dissatisfied and reluctant to collaborate with the care planning process because, under current systems, they perceived that they were responsible for the greatest workload in regard to GPMPs, yet were rewarded with the least remuneration. Nurses were observed to be primarily responsible for developing and updating GPMPs, while GPs usually reviewed the plans and provided brief sign-off once they were written. Despite this, the item number nurses claimed from Medicare provided ~90% less remuneration than that claimed by GPs (Department of Health and Ageing 2012).

Current funding systems also appeared to encourage duplication of care plans. Patients could have multiple care plans funded through different service providers and through different care packages (e.g. the different Medicare item numbers provided for chronic disease, mental health, Aboriginal and Torres Strait Islander care packages). At some services, it was observed that the generation of a new care plan was a requirement of service provision, even when a current plan already existed. This made the duplication of care plans necessary so that patients could receive the services they needed. Furthermore, discussions during the focus groups revealed that some primary health-care services were not reimbursed for collaborating with others in administering an existing care plan, and that they needed to create a new care plan to be eligible for funding. Together, these funding circumstances created suspicion, dissatisfaction and rifts within and between health-care teams, which could then damage the quality of communication and information sharing.

Discussion

Care planning for chronic conditions in primary care could provide an important mechanism for improving communication and information sharing while enhancing patients’ engagement in self-management and health worker’s collaboration (Shortus et al. 2007; Martin 2008). However, patients’ lack of involvement, lack of clear patient consent, inadvertent sharing of sensitive information through the use of generic templates, overlapping care plans, multiple and competing funding mechanisms and misaligned funding systems were common problems.

Fragmented communication was identified as a particularly strong barrier to effective information sharing and collaboration. These findings challenge emerging assumptions in primary health-care literature (Ginsburg 2008) that co-location is necessarily effective in improving or increasing information sharing. For this problem to be resolved, workers need to see the value in communicating with other health-care providers, an issue identified by other studies (Shortus et al. 2007; Martin 2008), to change how they communicate with each other and the patient to construct the care plan and operationalise it. More interprofessional education and professional development opportunities, including those specifically targeting chronic condition management, offer one potential solution (Nancarrow et al. 2013).

To sustain and build patient involvement as a central value and practice in developing care plans, information should be routinely provided to patients and carers to explain the aims of care planning, the processes involved, and to build their expectation of their involvement (Shortus et al. 2007). They should be consulted in the development of this information, especially those from different social and ethnic backgrounds who may have difficulty interpreting health-related information (Ozolins et al. 2010). Also, making the routine provision of this information a requirement that service providers meet in order to receive funding at the State and/or Commonwealth level would help to embed it across their practice.

Consistent guidelines that stipulate what information PHC workers can share if they have patients’ full consent are also needed. Embedding these into national policy frameworks would help to ensure patient privacy and confidentiality and to protect PHC providers from professional liability claims. Including the option for patients to provide selective consent could also enhance patient control over their information, and facilitate their empowerment within their encounters with PHC workers and systems of care (Lawn et al. 2013).

The findings also reveal that complex funding systems exist, providing potential for ineffective use of resources, which in turn, creates potential for miscommunication or non-communication. The requirement for a new care plan to be developed for all patients, regardless of whether it is needed at the time, is an example of this. A shift in funding structures may address these barriers.

The findings highlight that the full potential of the care plan as an inter-professional and interagency communication tool was not realised. One solution would be an expanded care planning and coordination role for practice nurses to allow them to facilitate the collaboration of multidisciplinary teams and, in doing so, reduce overlaps and fragmentation in patient care and care planning. The Coordinated Veterans’ Care Program is one example of system initiatives moving in this direction (Department of Veterans’ Affairs 2013). Medicare Locals could also identify areas of service and care plan overlap in their regions through their clinical governance committees, and make recommendations for consistent care plan assessment, referral pathways and communication protocols between providers to optimise the benefits that might be achieved through current funding.
By documenting the specific enablers to effective communication and information-sharing processes, these findings also demonstrate some of the elements that need to be introduced, supported and maintained within current PHC systems.

### Conclusion

Throughout this paper, multiple barriers and enablers to good communication and information-sharing practices in care planning for chronic condition management have been identified. Discussion of these barriers and enablers has revealed several strategies that may be used to improve current practices. The findings reinforce the importance of open and effective communication within multidisciplinary teams and with patients, both at the broader system level and in the context of one-on-one practice. In order to attribute more value to information sharing, adequate time and resources must be allocated to PHC workers, to provide adequate opportunities for information sharing, and to promote the message that this is an important and respected aspect of chronic condition management. Optimising communication and information-sharing effectiveness in care planning offers benefits to patients and workers within multidisciplinary health teams. It also provides the potential for optimising the effectiveness of PHC spending. To address current barriers and to capitalise on our understanding of the factors that enable effective communication and information sharing, a review of funding mechanisms, inter-professional education, expanded roles for practice nurses and a more explicit role for Medicare Locals under clinical governance frameworks have been proposed.

### Conflicts of interest

None declared.

### Acknowledgements

The authors thank the organisations that allowed us to undertake our research at their primary health-care sites, and the staff and clients who participated in the project. The research reported in this paper is a project of the Australian Primary Health Care Research Institute, which is supported by a grant from the Australian Government, Department of Health and Ageing under the Primary Health Care Research, Evaluation and Development Strategy. The information and opinions contained in it do not necessarily reflect the views or policies of the Australian Government, Department of Health and Ageing.

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