

Patients' and health professionals' perceptions of teamwork in primary care

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ABSTRACT

INTRODUCTION: Effective teamwork in primary care settings is integral to the ongoing health of those with chronic conditions. This study compares patient and health professional perceptions about teams, team membership, and team members' roles. This study aimed to test both the feasibility of undertaking a collaborative method of enquiry as a means of investigating patient perceptions about teamwork in the context of their current health care, and also to compare and contrast these views with those of their usual health professionals in New Zealand suburban general practice settings.

METHODS: Using a qualitative methodology, 10 in-depth interviews with eight informants at two practices were conducted and data analysed using inductive thematic analysis.

FINDINGS: The methodology successfully elicited confidential interviews with both patients and the health professionals providing their care. Perceptions of the perceived value of team care and qualities facilitating good teamwork were largely concordant. Patient and health professionals differed in their knowledge and understanding about team roles and current chronic care programmes, and had differing perceptions about health care team leadership.

CONCLUSION: This study supports the consensus that team-based care is essential for those with chronic conditions, but suggests important differences between patient and health professional views as to who should be in a health care team and what their respective roles might be in primary care settings. These differences are worthy of further exploration, as a lack of common understanding has the potential to consistently undermine otherwise well-intentioned efforts to achieve best possible health for patients with chronic conditions.

KEYWORDS: Primary health care; chronic disease; physicians; nurses; patients; patient care team

Introduction

Effective collaborative practice is a key principle of health service delivery in primary care;¹ interdisciplinary teamwork is an essential component of best practice chronic conditions care.^{2,3} Over 60% of all clinical work in New Zealand (NZ) primary care involves patients with ongoing chronic conditions.⁴ Both general practitioners (GPs) and practice nurses (PNs) are usual on-site primary care providers within general practices. Understanding the nature of teamwork is increasingly important.

Positive effects of good teamwork are well documented, but much less is known about the nature of chronic care teams in primary care settings. While much has been made of patient-centred approaches to care⁵ in the last 20 years, an extensive literature review found few studies about patients' views of team care, and no empirical research where both patients and health professional views were directly compared. However, patients are known to report different elements than clinicians in relation to patient satisfaction,⁶ suggesting that there may also be divergent views about teamwork.

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Collaborative teamwork occurs along a continuum, with not all care requiring high level alliance.⁷ Multidisciplinary teamworking (where health professionals work alongside one another each undertaking aspects of care, but with little interaction) is at the minimal end of the continuum, and for many types of episodic care, entirely appropriate. Interdisciplinary teamworking implies mutually respectful engagement between health professionals in planning and implementing care together.⁸ Transdisciplinary teamwork lies at the maximal end of the continuum, occurring when all members have excellent knowledge and appreciation of everyone's roles within a common reference framework. Such complex shared care runs smoothly because team members have the ability to act quickly in accordance with shared interprofessional objectives using shared skill sets.⁹ In primary care, the busy, diverse nature of clinical practice means collaboration varies along this continuum; for patients with complex conditions, interdisciplinary and transdisciplinary teamworking are essential to achieving best possible patient outcomes.

To be effective, teamwork must also be visible to, and valued by, patients.¹⁰ There is increasing evidence of the health benefits of effective teamwork, but there has been little research investigating patients' perceptions of the value and make-up of health care teams, or of their own place within such teams. Limited evidence available suggests that many people with long-term chronic conditions value a 'partnership' between patient, health care professionals and carers.¹¹ Patient knowledge about health professional roles is uncertain. In recent NZ studies,^{12,13} patients reported only a vague understanding of the PN's role, and "frequently spoke interchangeably about nurses, receptionists and technicians".¹²

Perceptions about the nature and value of teamwork vary among health professionals. There is often poor understanding of roles and tasks of other professionals,⁸ which makes the value of teamwork at best implicit, often invisible to the inexperienced.

Consistent government policies, regulatory frameworks and funding models that foster

WHAT GAP THIS FILLS

What we already know: People with complex health conditions benefit from a team approach to their health care with, and from, a range of health professionals. Teamwork in health care is often assumed, but much less often realised.

What this study adds: There appear to be some important differences between patient and health professionals' perceptions about teamwork in health care, particularly in relation to CarePlus. Whereas health professionals perceived themselves to be working in health care teams with defined roles and explicit outcomes, patients appeared largely unaware of the nature of health professional teams or their own role in their care.

collaboration are essential.^{7,14,15} During the past decade there has been emphasis in the NZ health system on primary health care, including expectation of effective interprofessional teamwork and integration across primary and secondary care.¹⁶

The CarePlus programme was introduced by the Ministry of Health in 2004 to fund systematic management of patients with two or more chronic conditions (approximately 5% of the general practice population). CarePlus encourages goal setting by patients and well-informed self-management.¹⁷

Our previous work suggests that, despite nurses and doctors sometimes being perceived as having poor interprofessional relationships, there are notable examples of excellent collaborative relationships in primary care settings.^{18,19} However, this is not universal practice; principles of chronic care management are often poorly understood.²⁰ Despite 'teamwork intention', little is known about nurses', doctors' and patients' perceptions of collaboration and teamwork in NZ primary care workplaces.

This study aimed to test the feasibility of undertaking a collaborative method of enquiry as a means of investigating patient perceptions about teamwork in the context of their current health care, and also to compare and contrast these views with those of their usual health professionals in NZ suburban general practice settings.

Method

A qualitative methodology based on principles of naturalistic enquiry²¹ was chosen as appropriate to explore patient and health professional perceptions about teamwork in ongoing patient care. Because no previous comparative studies of this nature have been conducted, either in NZ or in a comparable health system, it was necessary to test the feasibility of a collaborative data collection and analysis process. Data were collected from patients and their usual health care professionals using very similar flexible interview schedules. Practice–researcher collaboration was required to set up interviews in a manner acceptable to patients and health professionals. Two researcher–interviewers conjointly collected data and undertook analysis.

Two medium-sized general practices in Wellington NZ, recognised as using a ‘team-based’ approach in their management style, were purposively selected. One was a suburban-rural practice with many younger patients (18–30 years), the other an urban practice with more middle-aged and older patients (over 40 years). Both were situated in densely populated areas with a diverse cultural and ethnic mix. Ten interviews were conducted in 2009 with four health professionals and four patients; two patients undertook a second interview. A semi-structured schedule was developed to guide the interviews with key topic areas relating to participants’ understanding of teamwork within health care, barriers and facilitators to such teamwork, who is or should be included in a patient care team, team member roles, appropriate leadership of a patient care team, and additionally for patients—perceptions about their own health care team(s), roles, leadership their own place in the team, and knowledge about the CarePlus scheme.

Ethics approval

This study was approved as two inter-related substudies by the Central Regional Ethics Committee, NZ (CEN/08/42/EXP and CEN/08/43/EXP).

Recruitment, data collection

A health professional at each participating practice (one PN, one GP) nominated 10–12 patients within the CarePlus programme who fitted inclusion criteria. Patients were eligible for selection if they had two or more chronic conditions that necessitated regular, frequent interaction with more than one health professional at the practice. It was accepted that patients selected in this way would more likely be satisfied with their care. Although the health professionals provided the initial list of possible patients, they had no knowledge of which patients were subsequently approached and/or interviewed. Patients were telephoned by receptionists and asked if they would be agreeable to being interviewed. This process continued until a balanced sample was achieved of male/female and older/younger patients living with a range of chronic conditions (see Table 1).

Two patients from each practice were interviewed face-to-face at a location of their choice. Two interviewers worked conjointly; LT as interviewer, CB as observer/technical supporter. Two of the four patients also participated in a follow-up phone interview two weeks later, to extrapolate on previous topics or voice new ideas. Health professionals (one PN and one GP from each practice), were interviewed (after completion of the face-to-face patient interviews) to obtain their different perspectives on the same work environment. At first contact, health profession-

Table 1. Patient characteristics

| Practice | Participant | Gender | Age in years | Ethnicity* | Chronic condition |
|----------|-------------|--------|--------------|-------------|-------------------------------|
| 1 | P1 | Male | 48 | NZ European | Type 2 diabetes |
| | P2 | Female | 27 | NZ European | Depression, neurofibromatosis |
| 2 | P3 | Male | 88 | NZ European | Asbestosis, COPD |
| | P4 | Female | 33 | NZ European | Tuberculosis |

* Ethnicity identified using NZ census question pertaining to ethnic identification.

als were provided with a brief explanation of the study objectives and process of maintaining confidentiality.

All those invited (patients and health professionals) readily agreed to be interviewed. Workplace interviews took place at different times for each participant, with care taken to ensure each interview was confidential and uninterrupted (CB interviewer, LT technical support).

All respondents completed a short form to collect data on age and ethnic group, signed a consent form, and agreed to audio recording of the interview using digital voice recording. Interviews lasted 30–60 minutes (patients) and 20–30 minutes (health professionals). Interviews were transcribed in de-identified format by a professional transcriber.

Data analysis

Each set of transcripts was analysed initially by the principal interviewer. Transcripts were read vertically; responses to main lines of questioning were summarised and tabulated. Commonalities, discrepancies and outliers within and between transcripts were identified via subsequent horizontal analysis. Following this initial phase, inductive thematic analysis²² was undertaken, with transcripts critically read and re-read to identify themes which did not arise explicitly from direct lines of questioning. Each stage of analysis was rechecked by the whole research team. Finally, themes identified underwent third-tier interpretive analysis by all researchers to derive a set of conclusions and recommendations.

Findings

This study has tested the feasibility of undertaking a collaborative method of qualitative enquiry as a means of investigating patient perceptions about teamwork in the context of their current health care. Given that this research question has not been examined before, the study demonstrated that, with attention to anonymity, it is possible to undertake successful individual patient and health professional interviews in the same general practice setting.

Furthermore, the data acquired and subsequently analysed through a collaborative and conjoint process has provided comparable information about patient and health professional perceptions regarding teams, team membership, and team members' respective roles.

Confidentiality for patients and health professionals was successfully maintained, despite multiple relationships between each patient and their key health providers. Patients and health professionals spoke freely about positive and negative aspects of team care. First interviews with all participants provided data suitable for analysis, but two second interviews with patients yielded little new material.

Five key themes were identified:

- Perceived value of team care
- Qualities facilitating good teamwork
- Roles
- Leadership, and
- Chronic care, CarePlus and self-management.

Patient and health professional perceptions were well aligned for the first two themes. However, patients and health professionals had different understandings about roles of each team member, team leadership, and knowledge or otherwise of the CarePlus programme.

Perceived value of team care

For patients, the principal value of team care lay in tangible benefits such as the greater amount of time and attention a nurse could provide, and avoiding vulnerabilities that might arise where only one professional is knowledgeable about the complex medical history typical of most patients with chronic conditions:

"I'm in a win-win situation. There's no way I'd get the care and attention from...[the GP] who's very busy that...[the nurse] can give me... I'm the benefit, a recipient of teamwork." (P1)

Health professionals took a broader view, with teamwork perceived to benefit team members and improve the overall quality of care delivery by drawing on the skills and knowledge of multiple health professionals:

"A team is many different people, and with many different qualifications and backgrounds, and contributions to make... it gives you... a pool of skills for any one problem... no individual can provide a complete service..." (GP2)

Qualities facilitating good teamwork

Good communication was identified by patients and health professionals as a key quality facilitating teamwork. The patient participants especially valued regular contact, as well as information sharing and coordination between members of the primary care team:

"...they've always got the practice nurse and the doctor working together for my benefit. The nurse has got how it is, because they put it on computer... so I often see the nurse, but I don't see the doctor." (P3)

Health professionals similarly highlighted good communication as a vital ingredient of successful teamwork, but focused more on the value of regular meetings, good co-worker relationships, and a willingness to listen and debate issues:

"The old GPs are the ones that struggle with the team... but these doctors here... well, they're young, which helps, but they're also willing to listen to what we have to say and they're willing to work together with nurses." (PN2)

A second key quality identified was trust. Patients put store on being able to trust that their health professionals would work as a team and seek help when needed:

"[Most patients] would want their doctor to be reliable, and to be somebody that they trust... should anything serious come up, they will go through the right channels, and work as part of a team." (P4)

Health professionals spoke of the need for developing mutual respect and interprofessional trust, which included sharing workloads amongst team members and recognising different skill sets and limitations:

"We need to have mutual respect for each other... We need to have an understanding of each other's roles and... what people are capable of." (PN2)

Conversely, there was some concern among patient participants that being cared for by a team might result in a loss of patient-doctor trust:

"They'd be... because you can have quite a personal relationship with your doctor. So to be kind of palmed off to someone else feels like being palmed off." (P1)

Roles

All the health professionals identified clearly defined roles as a prerequisite for effective teamwork. All described a doctor's role in primary care as most often dealing with acute situations (including acute care for those with chronic conditions). All felt that current management of chronically ill patients, as with the CarePlus initiative, now fell mainly within the role of a nurse:

"Most patients would see the doctor at least once a year... But a lot of the time in between it's a nurse consultation." (PN2)

In contrast, patient participants appeared vague about the roles of each health care professional in their team. Patients lacked awareness about nursing capabilities. Nurses were not seen as holding responsibility for autonomous clinical decision-making:

"Well, obviously the doctor is [the leader]. I mean, the nurse is just a sort of a reporter, isn't she, for the doctor." (P3)

Patients considered the role of the GP was to have a certain overall knowledge and expertise, prescribe new medications, carry out examinations and to refer patients to specialists. As this participant explained:

"...you have to rely on the doctor for all the [clinical] expertise." (P1)

The role of the patient was variously perceived. The two doctors viewed the patient as a recipient of a service being offered by a professional team, whereas both nurses perceived the patient to be a member of the team. All four patients wanted to be part of their own health care team, with three considering this was currently the case.

Leadership

Patients and health professionals held different views regarding who should take on the role of leader of the health care team for a particular patient. All the health professionals expressed the view that leadership was shared and skill-set dependent:

“...We are all clinically accountable for the decisions we make, if they are seen by a nurse then the nurse is accountable for the decisions they make... decision-making, we are all responsible for our own.” (GP2)

However, three out of four patient participants considered that their doctor (GP or hospital specialist) was the leader of their health care team. In one case, the patient concluded that either the doctor or he himself should take the leading role, as defined by who took ultimate responsibility for decision-making:

“Leader... I think ultimately the responsibility comes back to myself. I’m sort of tossing up between whether it should be... it would either be [the doctor] or myself...” (P1)

None of the patients considered the nurse as their health care team leader, even though three saw their nurse most often, and explained how the nurse coordinated care, communicated concerns to the GP and made necessary changes to medications or management:

“I’ve had quite a lot to do with my nurse of late; I see or hear a lot more from her than I would my GP.” (P1)

Chronic care, CarePlus and self-management

The health professionals agreed that effective management of chronic conditions required a strong team-based approach, and readily identified CarePlus as the programme now in place to foster a proactive, team-based approach. Respondents suggested that this team-based approach promoted individualised care of patients with chronic conditions:

“Each member of the team has got different skills to offer, and they complement each other... you’ve got

to use your team skills to provide the best service for those patients’ needs... if you all work together, you can often find things that are useful to that individual patient...” (GP2)

However, patients seemed unclear about the intent of the CarePlus programme, what it provided and who was involved in delivering the programme. Concepts of patient self-management were almost absent from the talk of patients. There was lack of recognition that this is one of the primary goals of CarePlus. Patients largely saw CarePlus as a reminder service or a (subsidised) tool for staff to check up on them:

“...it can help prompt you with things that you may have previously thought about... it’s offered me a lot of peace of mind, knowing that it’s every three months, and yes, that it’s scheduled in...” (P4)

“I think it means that I get a bit of a [payment] concession...” (P1)

However, patient participants recognised that, in general, the type of care necessary for those with chronic conditions needed to be different from those who were otherwise well, with teamwork being an essential component:

“I think it [teamwork] is necessary. Especially for people who have long-term conditions that need to be monitored on a regular basis... if there was somebody that just had day-to-day health issues, they probably wouldn’t see the need for a team to be overseeing their health care.” (P4)

Discussion

The introduction of an overtly team-based CarePlus model in NZ primary care has crystallised the need for better understanding of effective teamwork by both patients and health professionals. Significant changes in primary care delivery, and resulting changed roles of both nurses and GPs in caring for patients with chronic conditions, seem invisible and unexplained to patients.

The existing literature suggests that teamwork in NZ primary health care is underdeveloped.²³ The health professionals interviewed for this study perceive that they are working in well-function-

ing teams. The reality probably lies somewhere in between. While the health professionals interviewed placed considerable value on good teamwork, and liked and respected their colleagues, their descriptions of practice did not often equate to working in a fully-fledged transdisciplinary team;⁹ rather, they described working collaboratively to varying degrees.

As in an Australian study,¹¹ patients in this study wanted to be part of their own health care team, and actively involved in decision-making. Common goals for health care teams, developed with patients, not only foster teamwork but also improve efficiency and maximise limited resources.^{7,24} Even experienced health professionals would benefit from teamwork training to effectively achieve these goals. For some patients, especially within the CarePlus programme, major

was little elaboration on how this knowledge was best applied to their care.

In contrast, health professionals recognised the importance of understanding each other's team roles and responsibilities, particularly in relation to successfully utilising the funding allocated to general practices for NZ's CarePlus programme. They described how their practices were now organised to utilise the skills of both nurses and doctors, resulting in many CarePlus patients being principally managed by experienced practice nurses with GP back-up.

The patient sample was obviously biased towards patients with whom health professionals already had a functional professional relationship. However, this bias is most likely to have produced concordance between patient views

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gains may be possible from adopting a more intentional team approach where the patient is clearly identified as a team member, if not the team leader, and where self-management is an explicit goal.

Although the patient participants were clear about their desire for participation, they were much less clear about what their own role might entail, or what the respective roles of each of 'their team' of health professionals was or could be. Despite the pivotal role of nurses in CarePlus programme delivery, patients found it difficult to detail the role of 'their' nurse, appearing to lack understanding of nursing capability and skills, results similar to other recent NZ studies.^{12,13}

Patient descriptions of the GP's and/or the hospital specialist's role was a little clearer, described as 'an expert with special knowledge', but there

and health professional views. That this was not the case suggests greater discrepancies between patient and health professionals' views are likely if this research were to be extended to other practice settings.

It is also possible that patient and health professional perceptions would be different among Maori and at Maori provider practices. Other ethnic groups, and rural communities, may approach chronic condition management and collaborative practice differently.

Because this was a preliminary study with a small number of participants, findings must be regarded as tentative and in need of corroboration with a larger number of participants in a wider variety of practices. The feasibility of directly collecting data from both patients and their health professionals

has been tested and found to be a successful method of investigating the nature of teamwork in a primary care setting.

Conclusion

There appear to be important differences between patients' and health professionals' understandings about current collaborative health care practice in primary care settings. These warrant further investigation if the goals of modern chronic conditions care, with its emphasis on teamwork and effective self-management^{25,26} are to be realised. The challenge now is to corroborate these preliminary findings and find ways to appropriately incorporate health professionals and patients into functional, enduring health care teams.

References

- World Health Organization. Alma Ata Declaration. In: International Conference on Primary Health Care; 1978; Alma Ata, USSR; 1978.
- Wagner E. Meeting the needs of chronically ill people. *BMJ*. 2001;323:945–6.
- World Health Organization. Innovative care for chronic conditions: building blocks for action. Geneva: World Health Organization; 2002.
- National Health Committee. Meeting the needs of people with chronic conditions. Wellington: Ministry of Health; 2007.
- Stewart M, Brown J, Weston W, McWhinney I, McWilliam C, Freeman T. Patient-centred medicine transforming the clinical method. Thousand Oaks, California: Sage Publications; 1995.
- Sitzia J, Wood N. Patient satisfaction: a review of issues and concepts. *Soc Sci Med*. 1997;45:1829–43.
- Oandasan I, Baker G, Barker K, et al. Teamwork in health-care: promoting effective teamwork in health care in Canada. Ottawa: Canadian Health Services Research Foundation; 2 June 2006.
- Hall P, Weaver L. Interdisciplinary education and teamwork: a long and winding road. *Med Educ*. 2001;35:867–75.
- Vyt A. Interprofessional and transdisciplinary teamwork. *Diabetes Metab Res Rev*. 2008;24:S106–S9.
- Rothman A, Wagner E. Chronic illness management: what is the role of primary care? *Ann Intern Med*. 2001;138:257–62.
- Infante F, Proudfoot J, et al. How people with chronic illnesses view their care in general practice: a qualitative study. *Med J Aust*. 2004;181:70–3.
- Carrier J, Snell H, Perry V, Hunt B, Blake J. Long-term conditions care in general practice settings: patient perspectives. *N Z Fam Phys*. 2008;35:319–23.
- Kenealy T, Docherty B, Sheridan N, Gao R. Seeing patients first: creating an opportunity for practice nurse care. *J Prim Health Care*. 2010;2:136–41.
- Pullon S, McKinlay E, Dew K. Primary health care in New Zealand: the impact of organisational factors on teamwork. *Br J Gen Pract*. 2009;59:191–7.
- Sibbald B, Shen J, McBride A. Changing the skill-mix of the health care workforce. *J Health Serv Res Policy*. 2004;9 Suppl 1:28–38.
- King A. The Primary Health Care Strategy. Wellington: Ministry of Health; 2001.
- Primary Health Care—Care Plus Funding. 2009. [Cited 2009 April 17]. Available from: <http://www.moh.govt.nz/mohnsf/indexmh/phcs-funding-careplus>.
- Blue I, Fitzgerald M. Interprofessional relations: case studies of working relationships between registered nurses and general practitioners in rural Australia. *J Clin Nurs*. 2002;11:314–21.
- Pullon S. Competence, respect and trust: key features of successful interprofessional relationships. *J Interprof Care*. 2008;22:133–47.
- McKinlay E, McBain L. Evaluation of the Palliative Care Partnership: a New Zealand solution to the provision of integrated palliative care. *N Z Med J*. 2007;120:1263.
- Lincoln Y, Guba E. Naturalistic enquiry. Newbury Park: Sage Publications; 1985.
- Seale C. The quality of qualitative research. London: Sage Publications; 2000.
- Waitemata DHB. Interdisciplinary teamwork in primary health care. In: Paper presented at the CPHAC Meeting; 2008.
- Wagner E, Glasgow E, Davis C, et al. Quality improvement in chronic illness care: a collaborative approach. *J Qual Improv*. 2001;27:63–80.
- Grumbach K, Bodenheimer K. Can health care teams improve primary care practice? *JAMA*. 2004;291:1246–51.
- Wagner E, Austin B, Davis C, Hindmarsh M, Schaefer J, Bonomi A. Improving chronic illness care: translating evidence into action. *Health Aff (Millwood)*. 2001;20:64–78.

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COMPETING INTERESTS

None declared.