

# Teamwork—general practitioners and practice nurses working together in New Zealand

Mary P Finlayson RN, B Soc Sci (Hons), PhD;<sup>1</sup> Antony Raymont MB BS, PhD<sup>2</sup>

<sup>1</sup>Research Centre for Health and Wellbeing, Faculty of Engineering, Health, Science and the Environment, School of Health, Charles Darwin University, Darwin NT, Australia

<sup>2</sup>Health Services Research Centre, Victoria University of Wellington, New Zealand

## ABSTRACT

**INTRODUCTION:** Teamwork in primary health care has been encouraged in New Zealand and in the international literature. It may improve work satisfaction for staff, and satisfaction and outcomes for patients. Teamwork may be classified as being multi-, inter- or transdisciplinary and is likely to be influenced by the nature of the work and the organisational context.

**AIM:** To describe and analyse teamwork between general practitioners and practice nurses in New Zealand.

**METHODS:** Data were drawn from a survey of general practices and from interviews with primary health care staff and management.

**RESULTS:** Doctors and nurses in general practice in New Zealand see themselves as a team. Evidence suggests that the nature of the work and the business context most often leads to a multidisciplinary style of teamwork. Some providers have adopted a more intense teamwork approach, often when serving more disadvantaged populations or in caring for those with chronic illnesses.

**DISCUSSION:** Concepts of teamwork differ. This article provides a classification of teams and suggests that most general practice teams are multidisciplinary. It is hoped that this will help personnel to communicate their expectations of a team and encourage progressive team development where it would be of value.

**KEYWORDS:** Teamwork; primary care; practice nurses; general practitioners

## Introduction

Good teamwork in business improves staff and client satisfaction, and contributes to innovation; there has been significant recent work to improve teamwork in health care. This paper aims to examine the teamwork between general practitioners (GPs) and practice nurses (PNs) in New Zealand general medical practices (GMPs) and to discuss the nature of effective teamwork in primary health care.

Data collected during the evaluation of the New Zealand Primary Health Care Strategy (PHCS) are used; this evaluation was carried out between 2003 and 2009 by the Health Services Research Centre, Victoria University of Wellington and CBG Health Research Ltd of Auckland, and

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## Background

A number of studies have shown a positive connection between health service teamwork and outcomes. An Australian study of general practices found that a better team climate predicted job satisfaction for staff and satisfaction with care for patients.<sup>2</sup> A US study found that the physical and mental health of Medicare beneficiaries was better at primary care practices with higher team function,<sup>3</sup> another documented improvements in two settings where high team cohesiveness was achieved,<sup>4</sup> and a third showed better health

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### CORRESPONDENCE TO: Antony Raymont

Senior Research Fellow,  
Health Services Research  
Centre, Victoria University  
of Wellington, PO Box 600,  
Wellington, New Zealand  
raymonts@vodafone.co.nz

care outcomes with multidisciplinary teams.<sup>5</sup> A systematic review found that multidisciplinary teamwork improved outcomes in managing chronic disease and complex cases.<sup>6</sup>

The 2001 PHCS<sup>7</sup> encouraged greater teamwork in primary health care and supported a wider role for PNs. It changed the government subsidy for primary health care from GP-based fee-for-service to capitation, partly to encourage task-substitution by nurses, and it provided funds for a variety of nurse-led activities. The 2007 Health Discussion Paper<sup>8</sup> also promoted teamwork and emphasised the use of nurses to provide case management for those with chronic conditions.

What is meant by teamwork? An accepted definition of a team from the management literature is 'a small number of people with complementary skills who are committed to a purpose, performance goals, and an approach for which they hold themselves mutually accountable.'<sup>9</sup> Doctors and nurses working together in accordance with their professional norms would fulfil this description, except that, in hierarchical teams—common in general practice—junior members may be reluctant to hold senior members (e.g. owners or partners) to account.

Teams vary and Korner,<sup>10</sup> studying rehabilitation centres, distinguishes teams which are multidisciplinary ('...professionals work in parallel with clear role definitions, specified tasks and hierarchical lines of authority... only problem cases are discussed at team meetings') and interdisciplinary ('...teams meet regularly ... to discuss and collaboratively set treatment goals ... and jointly carry out treatment plans. [Members] are ideally on the same hierarchical level...'). Staff in interdisciplinary teams reported better team function and higher work satisfaction. Choi and Pak,<sup>11</sup> after a review of the literature, identified a third category, 'transdisciplinary'—'integrating the natural, social and health sciences in an humanities context and transcending their traditional boundaries and encouraging the emergence of new ideas.'

Poulton<sup>12</sup> found that four key team processes accounted for 23% of the variation in the effectiveness of primary care; the processes were: shared objectives; a quality focus; participative decision

## WHAT GAP THIS FILLS

**What we already know:** General practitioners and practice nurses work together, with the nurses taking on an increased proportion of the work. Team relationships are important to efficient function.

**What this study adds:** The type of teamwork is affected by task design and context. General practitioners and practice nurses work as a multidisciplinary team; more intense models of teamwork have advantages, particularly for chronic disease management and when population-based approaches are adopted.

making; and an openness to innovation. A study analysing the international literature suggested that more equitable and less hierarchical team models would generate better patient outcomes.<sup>13</sup>

A review of the literature on teams in health care by Lemieux-Charles and McGuire<sup>14</sup> concluded that the nature of a team is affected by the structure of the work ('task design') and by the context.

The task design in general practice in New Zealand typically involves short interactions with patients/clients who present with a wide variety of problems. GPs may work by themselves, undertaking all clinical tasks. Traditionally, the PN may prepare the patient for the consultation (e.g. recording vital signs, etc.) and follow-up (e.g. wound care or health education). More recently PNs have taken on independent work including the management of chronic conditions and consultations for certain categories of patient.<sup>15</sup>

The context for PHC is practices which are usually small and most commonly owned by the GP (or GPs).<sup>1</sup> We will use this understanding of team type, task design and context to discuss PHC teamwork in New Zealand. Our data and discussion are confined to GPs and PNs and does not address teams with a more disparate membership. The paper presents the data under the following headings: the reported experience of teamwork, nurses' work, and type of teamwork.

## Methods

Qualitative and quantitative data from the evaluation of the PHCS is presented. Qualitative data

were obtained during interviews with GPs, PNs, practice managers and nurse leaders. Practices were selected on a purposive basis to give representation to a wide variety of practice types. A thematic analysis of the responses was undertaken and used to inform the development of quantitative questionnaires which were circulated to all practices in 2006/7.<sup>1</sup> Practices were contacted by phone and asked to respond to the practice questionnaire and to obtain responses from 50% of their GPs and PNs. It should be noted that the response rates were relatively low—27% of practices (N=276), 26% of GPs (N=277) and 38% of PNs (N=384). Practices (interim-funded) serving less deprived populations and practices belonging to small PHOs were over-represented. Questions covered practice structure and procedures, and staff workload, work satisfaction and opinions concerning the PHCS. Descriptive statistics were derived for all closed questions. Details of the methodology, ethics approval, etc. may be found in the report.<sup>1</sup>

## Results

### 1. Reported experience of teamwork

Practice managers, GPs and PNs were asked 'Do the doctors, nurses and other clinicians in the practice operate as a team (defined as each person seen as an equal but contributing according to their knowledge and experience)?' and were given the options: 'yes'; 'partially'; and 'hardly at all'. A large and similar percentage (around 80%) of each group answered 'yes' and most of the remainder (around 19%) answered 'partially' (Table 1). PNs working in non-GP-owned practices were more likely to answer 'yes', as were GPs in practices affiliated with a Maori organisation.

### 2. Nurses' work in PHC

The PN survey asked nurses to estimate the percentage of time that they spent in each of 10 specified activities (Table 2). In viewing the distribution of nurses' time across tasks, it will be noted that independent work (consultations, triage and chronic care management) took up less than a third (31.7%) of their time. Most (63.4%) was spent on administrative or patient-contact work delegated by the practice or by an individual GP.

GPs were asked about the expansion of the nurse's role. The great majority indicated that they had encouraged the nurses in the practice to expand their role (98.8%), the nurses had taken up the opportunity (98.5%), this had improved GP work satisfaction (95.5%) and freed up GP time (94.3%), and led to increased efficiency (95.8%).<sup>15</sup>

The practices surveyed reported their complement of PNs and GPs (as FTEs); on average there were 0.98 PNs for each GP.

### 3. Type of teamwork

The task design in many practices leads GPs and PNs to work separately, with a brief interaction to ensure that an accurate transfer of care occurs when a patient is seen by both.

In the survey, GPs were asked how often they would discuss a case with a PN; the average per-

Table 1. Perception of teamwork

	Practice n (%)	General practitioner n (%)	Practice nurse n (%)
Yes	222 (80.5)	221 (79.7)	299 (77.8)
Partially	50 (18.0)	51 (18.5)	78 (20.4)
Hardly at all	4 (1.5)	4 (1.5)	7 (1.9)

Table 2. Distribution of time reported by nurses

Distribution of nurse time	%
<b>Independent activities</b>	31.7
Assessing and managing patients' problems independently	12.1
Assessing needs of patients who walk or phone in (triage)	11.9
Consultations over chronic conditions (e.g. Care Plus)	7.7
<b>Delegated work</b>	68.4
Undertaking predetermined care (e.g. dressings, immunisation)	19.4
Providing nursing care for patients referred by the doctor	16.6
Phone follow-up, e.g. test results and screening recalls	14.7
Administrative	12.7
Other activities	1.8
Specific care of those with mental health problems	1.7
Education of groups of patients	1.5

centage of cases was 11.5%. The percentage was higher at practices (access-funded) serving disadvantaged populations (17.1%). The majority of practices had clinical meetings for more extended discussion of particular topics; such meetings were reported in 53% of solo practices and in 84% of larger practices. Meetings were attended by both GPs and PNs (one or other group was excluded in about 7% of cases). In 50% of practices the meetings were held monthly; in most of the remainder they were weekly or bi-weekly. It would be impractical to use such meetings to discuss any but the most problematic cases.

The context of teamwork in general practice includes the employer/employee relationship that exists between the majority of GPs and PNs. Of the practices that responded to the survey, 87% were owned by GPs. Further, patients can only register with a GP and some tasks (certification, prescribing) are only open to GPs. This generates an inequality in the relative power between GPs and PNs, and may limit the role PNs can play.

The hierarchical nature of teams created by GP employment in itself reduces collaboration.  
(Nurse Leader)

In small practices, many management decisions are made informally and only 34% of practices reported formal management meetings; of these, 77% were attended by GPs and 37% by PNs. Similarly, while many small Primary Health Organisations (PHOs) have nurses on their boards, there were no nurses on the boards of the large PHOs (in 2006) to which the majority of practices belong.<sup>16</sup>

Thus, the task design within general practice imposes essentially independent work patterns with occasional consultations between GPs and PNs. The context ensures that the voice of nurses is weaker than that of GPs with regard to management of the practice and governance of many PHOs.

## Discussion

In 2007 New Zealand GPs and PNs saw themselves working together as a team. The work of PNs had expanded, encouraged by GPs, but most

of the work they did was delegated by the GP. The task design of work in general practices, with many short clinician/patient interactions, militates against discussion of care between team members and instead encourages independent activity with the occasional brief handover communication. In mainstream practices, the employer/employee relationship implies a significant power differential between the GPs and PNs, reinforced by the lack of nurse representation at PHO governance level.

It would seem clear that the teamwork between GPs and PNs, as revealed in this analysis, involves separate areas of responsibility with hierarchical relationships between GPs and PNs. It should be classified as multidisciplinary rather than interdisciplinary.<sup>10</sup>

**Encouraging a higher level of teamwork could increase the satisfaction of both patients and the general practice workforce, improve outcomes and engender innovative solutions to community health problems.**

A qualitative Wellington-based study<sup>17</sup> found that GPs and PNs believed that teamwork was impaired when work was divided into task-based components, while it was improved by setting aside uninterrupted time for meetings, mutual respect, and GPs (as well as PNs) being on salary. These findings imply advantages to interdisciplinary teamwork, with PNs being accepted as independent professionals.

One barrier to the full use of PNs appears to be the reluctance of GPs based on tradition, and a desire to retain personal responsibility for patient care. A study conducted in Sweden,<sup>18</sup> where PHC teamwork is well established, identified a high level of ambivalence towards it among GPs. Most indicated approval of teamwork but had reservations about the advantages: teamwork could reduce work demands but

required unproductive team meetings; it was a relief to share responsibility (and services could be extended) but this required giving up the position of leadership; the GP could concentrate on medical matters but had to give up the role of generalist who had a complete overview of the patient's situation; and it was desirable to benefit from the expertise of others but it entailed a loss of control.

There is also evidence that some PNs are unwilling to expand their role and that this is often associated with a lack of support and training.<sup>15</sup> Just as doctors are trained to be independent, so nurses have been trained to accept hierarchy and bureaucratic rule-following.<sup>19</sup> In addition, patients may not see PNs as independent professionals. In a recent small qualitative study in Wellington, a patient stated '...the nurse is just a sort of reporter, isn't she, for the doctor.'<sup>20</sup>

Nevertheless, some practices, mainly those serving more deprived communities, appear to have taken teamwork to a higher level. We suggest that there are two mechanisms for this. First, both GPs and PNs are often salaried in these practices<sup>1</sup> so that the power differential is reduced. Second, they may see the main task, not as the care of individual patients, but as the care of the community. With this focus, planning the services and the coordination of each person's work—both of which are necessarily team activities—become key functions. While the nurses may defer to doctors on some clinical issues, there is no reason for them to defer in matters relating to interaction with the community, seeking out groups with unmet needs and devising new strategies to boost community health. Indeed, these activities may be seen as transdisciplinary and not merely interdisciplinary.

Similarly, those who have adopted Wagner's Chronic Care Model<sup>21</sup> typically encourage their interdisciplinary teams to 'huddle' each morning to set goals and distribute tasks for the care of the patients to be seen that day.

Encouraging a higher level of teamwork could increase the satisfaction of both patients and the general practice workforce, improve outcomes

and engender innovative solutions to community health problems.

More collaborative teamwork will accompany or might be assisted by:

- redesigning the nurse's role away from allocated tasks towards full patient care
- mentoring GPs and PNs in the development of safe and effective teams<sup>22</sup>
- providing accessible and affordable training for actual and potential PNs
- supporting wider adoption of a population-based approach to allow a re-conception of the structure and function of the PHC team.

Caution is required—in New Zealand most practices are small (mean three GPs; median one GP)<sup>1</sup> and may more closely resemble families than teams within a large organisation. The style of teamwork may be affected by human relationships and personalities<sup>4</sup> as much as by tradition, task design and context. It may not be desirable to replace a well-functioning multidisciplinary team with a dysfunctional transdisciplinary one.

The data used in this paper have some limitations. Questions were not designed to distinguish team type. The response rates were low—it is possible that more conservative practices would have been less likely to respond and that the development of PN/GP teamwork was less advanced than our figures would suggest. Finally, the data were collected in 2006/7—a more recent study describes a practice with a majority of consultations undertaken independently by nurses.<sup>23</sup>

## Conclusions

Better teamwork improves staff satisfaction and patient outcomes. Teamwork between GPs and PNs in New Zealand is multidisciplinary and hierarchical, rather than inter- or transdisciplinary. This is reinforced by the nature of primary care work and the business structure of general practices. Practices that embrace a population-based approach to health care and adopt the chronic care model may more easily adopt enhanced doctor/nurse teamwork.

## References

1. Raymont A, Cumming J. Evaluation of the implementation and intermediate outcomes of the Primary Health Care Strategy. Third report: Status and activities of general medical practices. Wellington: Health Services Research Centre; 2009.
2. Proudfoot J, Jayasinghe Y, Holton C, Grimm J, Bubner T, Amoroso C, et al. Team climate for innovation: what difference does it make in general practice? *Int J Qual Health Care*. 2007;19(3):164–69.
3. Roblin D, Howard D, et al. An evaluation of the influence of primary care team functioning on the health of Medicare beneficiaries. *Med Car Res Rev*. 2011;68(68):177–201.
4. Grumbach K, Bodenheimer T. Can health care teams improve primary care practice? *JAMA*. 2004;291:1246–51.
5. Solheim K, McElmurry B, Kim M. Multidisciplinary teamwork in US primary health. *Soc Sci Med*. 2007;65(3):622–34.
6. Mitchell G, Tieman J, Selby-James T. Multidisciplinary care planning and teamwork in primary care. *Med J Aust*. 2008;188(8 Suppl):S61–S64.
7. King A. The New Zealand primary health care strategy. Wellington: Ministry of Health; 2001.
8. Ryall H. Better, sooner, more convenient: health discussion paper. Wellington: National Party of New Zealand; 2007.
9. Katzenbach J, Smith D. The wisdom of teams: creating the high-performance organization. New York: Harper Business; 1993.
10. Korner M. Interprofessional teamwork in medical rehabilitation: a comparison of multidisciplinary and interdisciplinary team approach. *Clin Rehabil*. 2010;24:745.
11. Choi B, Pak A. Multidisciplinarity, interdisciplinarity and transdisciplinarity in health research, services, education and policy: 1. Definition, objectives and evidence of effectiveness. *Clin Invest Med*. 2006;29(6).
12. Poulton B, West M. The determinants of effectiveness in primary health care team. *J Interprof Care*. 1999;13:7–18.
13. Richards A, Carley J, Jenkins-Clarke S, Richards D. Skill mix between nurses and doctors working in primary care—delegation or allocation: a review of the literature. *Int J Nurs Stud*. 2000;37(3):185–97.
14. Lemieux-Charles L, McGuire W. What do we know about health care team effectiveness? A review of the literature. *Med Care Res Rev*. 2006;63:263.
15. Finlayson M, Sheridan N, Cumming J. Evaluation of the primary health care strategy: developments in nursing 2001 to 2007. Wellington: Health Services Research Centre, Victoria University of Wellington; 2008.
16. Smith J, Cumming J. Taking the temperature of primary health organisations: a briefing paper. Wellington: Health Services Research Centre; 2009.
17. 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(560):191–7.
18. Hansson A, Arvemo T, Marklund B, Gedda B, Mattsson B. Working together—primary care doctors' and nurses' attitudes to collaboration. *Scand J Public Health*. 2010;38(1):78–85.
19. Davies C. Getting health professionals to work together: there's more to collaboration than simply working side by side. *BMJ*. 2000;320(7241):1021–22.
20. Pullon S, McKinlay E, Stubbe M, Todd L, Basdenhorst C. Patients' and health professionals' perceptions of teamwork in primary care. *J Primary Health Care*. 2011;3(2):128–135.
21. Wagner E, Austin B, Davis C, Hindmarsh M, Schaefer J. Improving chronic illness care: translating evidence into action. *Health Aff (Millwood)*. 2001;20(6):64–78.
22. McCallin A, McCallin M. Factors influencing team working and strategies to facilitate successful collaborative teamwork. *NZ J Physiotherapy*. 2009;37(2):61–66.
23. Hefford M, Cumming J, Finlayson M, Raymont A, Love T, van Essen E. Practice nurse cost benefit analysis: report to the Ministry of Health. Wellington: Ministry of Health; 2009.

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## COMPETING INTERESTS

None declared.