Long-term conditions and Care Plus: Local implementation

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ABSTRACT

This paper describes the implementation process and discusses outcomes at the PHO (Primary Health Organisation) and patient level for the 'Care Plus' model implemented across five PHOs by Wellington Independent Practice Association Management Services. Three thousand and sixteen people were enrolled in Care Plus from 1/7/04 until 5/4/06, with an ethnicity uptake similar to that in the total enrolled population. Results from routinely collected primary care data are presented that cover uptake, utilisation, outcomes and satisfaction. There is a mean of 4.9 goals per patient of which 12.8% are revised, with others mostly or partially achieved. Perceived health status is reported by patients and clinicians as 'better', 'worse' or 'the same'. The results reported by patients are similar to those reported by provider, with 8% being worse (to be expected as this includes severe illness and terminal illness.)

The mean consultation rate has increased from 12.7 to 15.9 over the first year of Care Plus.

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Introduction

Care Plus is a programme that is funded by the New Zealand Government as a mechanism to improve access to primary health care for those who are anticipated to need intensive clinical management (more than two hours of primary care time over the next six months), and who meet a number of qualifying criteria.[1] The most common qualifying condition is that of having two or more chronic conditions.[2] Care Plus was introduced by five Primary Healthcare Organisations (PHOs) in Wellington and the Lower North Island managed by Wellington Independent Practice Association Management Services (WIPA), from July 2004, to provide the best possible fit between the government Care Plus funding and accepted chronic disease management programmes.[3,4,5] Self-management is critical to good chronic care management[3] and empowering patients to achieve their goals is part of this. A holistic approach rather than a disease-centred approach has been taken with a strong emphasis on developing patient-centred goals.

The vision developed by the PHOs for the programme is: *'Healthier patients through effective personal health care (wellness) planning and chronic disease management.'*

Planning included using evidence-based information where possible, and recognition of the high health needs of Maori and Pacific populations.

Method

This is a descriptive study reporting progress to date of the Care Plus programme in some of the PHOs in the Wellington region. The study describes the characteristics of patients participating, and reports process outcomes over the 21-month period. All practices were able to implement Care Plus and received support from WIPA Management Services.

The PHOs involved in the programme and their demographics are listed in Table 1.

The time period of this study was from the introduction of Care Plus on 1/7/04 until 5/4/06. Data sets have been limited to completed episodes, where appropriate, to ensure robustness of results.

Data was recorded by practitioners (GP or practice nurse) on an electronic form, which included the ability to produce a Wellness Plan and generate a claim. The claim and data were sent to WIPA. Linking claims and clinical data increased completeness and allowed effective feedback to practices. Ethnicity is captured from the practice management system and is based on self report.

Patients and practitioners were asked to rate the patient's health as compared with the previous Care Plus

visit. This paper uses claims received rather than HealthPac figures used by DHBs and based on register submission. There is a minor variation due to timing of claims and updating from the practices; HealthPac figures are slightly less (2–3%) than those in this study.

The software has been developed by the WIPA Information Management team and integrates with practice management systems, including Medtech 32 and Houston VIP. It links with the reporting and payment system at WIPA. Some of the initial claims were made on paper prior to the deployment and implementation of the electronic system. However the requirements were the same. The information submitted included:

- demographics
- which visit is claimed for
- which practitioner
- whether the patient has had influenza vaccination
- for follow-up visits, whether patients perceive their health to be better, the same, or worse
- for follow-up visits, whether the clinician considers their health to be better, the same, or worse
- which goals are developed with the patients
- whether the goals were achieved, partially achieved or revised. Revised goals were those that the patient had made no progress towards achieving.

Anecdotal feedback was gathered by staff at practice visits, other contacts, PHO meetings and Care Plus professional development sessions.

At the time of implementation (1/7/04) practices were provided with set-up funding, education and ongoing support. A targeted fee-for-service payment was utilised which included an appropriately funded extended first visit to allow effective Wellness (Care) Planning to take place, including a review of health conditions and goal setting. There were four subsidised visits per year, with two having a higher level of subsidy and thus free of patient co-payment (first and third). Standard reports were provided to PHOs, which included uptake and population utilisation.

Table 1. Demographics of PHOs

PHO	Enrolled population	% of Maori/ Pacific patients	% of elderly (65+) patients
Capital PHO	136645	9%	9%
Kapiti PHO	33436	9%	26%
Tumai Mo Te Iwi	45007	27%	10%
Otaki PHO	6156	33%	23%
Wairarapa PHO	37483	14%	16%
Overall	**258727**	**13%**	**13%**

Table 2. Total number of individuals on Care Plus compared to the total predicted Care Plus population from July 2004 to 5/4/06

PHO	Predicted Care Plus population	Individuals on Care Plus 5/4/06	% of predicted
Capital	4700	1207	26%
Tumai	1954	298	15%
Kapiti	1613	697	43%
Otaki	479	58	12%
Wairarapa	1812	1091	60%

Predictions of the population eligible for Care Plus are based on the Ministry of Health formula (5% of the population less those on High User Health Cards). This was compared with actual uptake at both practice and PHO level.

Components of the implementation and ongoing management of this programme include:

- education for practitioners about chronic disease management, motivational interviewing, Te Whare Tapa Wha model of health, Pacific People identity and culture, other cultural considerations, and goal setting with patients; this is ongoing
- supply of appropriate guidelines (clinical and administrative)
- provision of information about available community resources
- a multidisciplinary focus; in most practices it is a nurse-led programme
- ongoing clinical mentoring is available
- a workforce relief scheme is in place in some areas
- feedback to practitioners and practices (reports and visits available)
- an opportunity for audit.

There is also a process for using Care Plus for those with terminal illness.

The Wellness Plan is generated electronically and a printed copy is given to the patient. It is integrated with the practice management system and is able to capture relevant disease coding, medication and related information. Patient education is an ongoing component. Practices generate recalls and reminders for patient visits as part of pro-active management.

Results

1. Progress to date

Table 2 shows the number and percentage of Care Plus patients entered into the programme compared with the predicted number.

Ethnicity of people on Care Plus as at 1/4/06

Table 3 outlines the total number of individuals on the Care Plus programme by ethnicity compared to

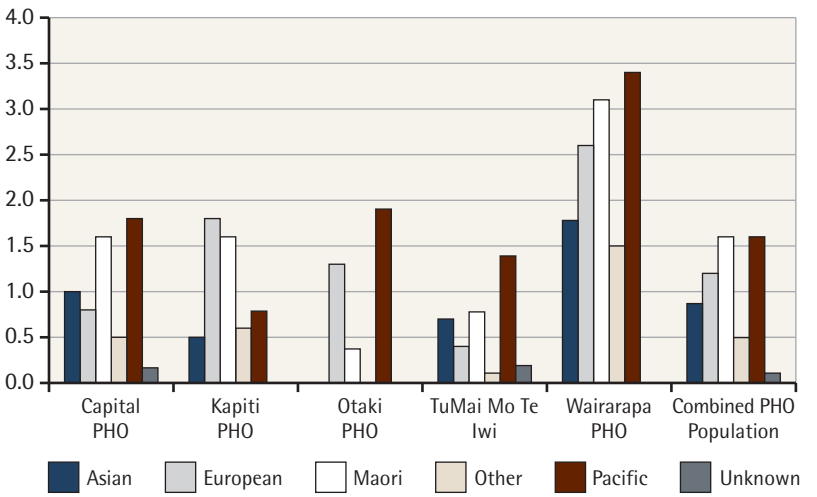
Table 3. Number of Care Plus patients and Care Plus patients as a percentage of those on PHO registers

PHO	Asian	European	Maori	Other	Pacific	Unknown	Total
Capital PHO	124 (1.0%)	762 (0.8%)	122 (1.6%)	29 (0.5%)	86 (1.8%)	9 (0.2%)	**1132 (0.8%)**
Kapiti PHO	2 (0.5%)	517 (1.8%)	41 (1.6%)	5 (0.6%)	3 (0.8%)	0 (0.0%)	**568 (1.7%)**
Otaki PHO	0 (0.0%)	51 (1.3%)	8 (0.4%)	0 (0.0%)	2 (1.9%)	0 (0.0%)	**61 (1.0%)**
Tumai Mo Te Iwi	14 (0.7%)	120 (0.4%)	52 (0.8%)	1 (0.1%)	76 (1.4%)	1 (0.2%)	**264 (0.6%)**
Wairarapa PHO	6 (1.8%)	811 (2.6%)	145 (3.1%)	11 (1.5%)	18 (3.4%)	0 (0.0%)	**991 (2.6%)**
Overall	**146 (0.9%)**	**2261 (1.2%)**	**368 (1.6%)**	**46 (0.5%)**	**185 (1.6%)**	**10 (0.1%)**	**3016 (1.2%)**

the total number of individuals on the PHO registers by ethnicity. This gives the percentage of the PHO registers on Care Plus by ethnicity allowing for more direct comparison of uptake.

Figure 1 demonstrates the different uptake across different PHOs.

Figure 1. Percentage of patients on PHO registers on Care Plus as at 1 April 2006 by ethnicity



Consultation rates

An analysis was undertaken of 959 patients who have been on Care Plus for over one year. The 959 patients have had 3102 more total practice consultations in their first year on the programme than they had for the preceding year. There was an increase in the mean number of consults per patient per year from 12.7 to 15.9.

2. Outcomes

Effective personal health care planning

Table 4 outlines the reported goals developed with patients and the outcomes of this. There is a mean number of 4.8 goals per patient of which 13.2% need to be revised, the others are 'mostly' (65%) or 'partially' achieved (21.9%). Partially achieved goals are those where progress has been made towards achieving the goal, revised goals are those that the patient has not been able to make progress on.

Exercise related goals

Table 5: Exercise related goals were analysed separately. There were 1373 goals set that related to exercise (approximately 13% of all goals). Of these 1226 had a status recorded. The 147 without a status were assumed 'not achieved' and have been included with the revised group.

Table 4. Care Plus goals with a status recorded against them as at 7/3/06

				Goal outcomes			
PHO	Individuals	Goals with status recorded	Avg goals per individual	Completely or mostly achieved	Minimally achieved	Revised	% Completely or mostly achieved
Capital PHO	891	4349	4.9	2645	1146	558	60.8%
Kapiti PHO	343	2054	6	1517	202	335	73.9%
Otaki PHO	47	249	5.3	123	87	39	49.4%
Tumai mo te iwi	177	1261	7.1	988	200	73	78.4%
Wairarapa PHO	496	1478	3	831	417	230	56.2%
Overall	**1954**	**9391**	**4.8**	**6104**	**2052**	**1235**	**65.0%**

Healthier patients

Tables 6 and 7 indicate that, from both patient and provider perspectives, the majority of patients have the same or better health compared with their previous visit. This subjective reporting of health status is used as a proxy marker for health status and in a previous study[6] reflected formal quality of life measures. This analysis includes only those visits where outcome was recorded.

Satisfaction

Anecdotal feedback from practitioners and patients report a high level of satisfaction with the programme, in particular the extra time available for the patients and the health improvements achieved. Teamwork is also reported to have improved and nurses report improvement in their patient management skills.

Discussion

This descriptive study found that it was possible to implement Care Plus across a range of practices and PHOs, however uptake varied. Uptake by Maori and Pacific people was generally in proportion to their population. Practitioners were able to set achievable goals with patients.

Managing chronic illness is an increasing part of care provided in primary health care due to changing patient demographics, changing disease prevalence, and changing medical care. This care must be structured, proactive, integrated with self-management programmes and have adequate allocated time.[3]

The strengths of this Care Plus project are that it is building a process for managing long-term conditions, into a usual primary care setting, with staff training and systems support. It shows that it is possible to implement a systematic change, but that considerable time is involved with slow practice uptake and ongoing support required from PHO staff.

Limitations of the study are that it is based on routinely reported data. If the patient does not attend a claim will not be made and hence no data will be submitted (further analysis on this is underway). Reliance is on practices to input accurate data and, while no evidence has been found to date that this is a problem, ongoing processes are in place to ensure accurate data collection, including feedback of information to practices for their own use so inaccuracies can be detected. This has led to improvement in systems.

There is a large behaviour change component involved in implementing new services for chronic illness care and this programme has been used to assist in orientating primary care towards chronic care (long-term condition) management. The change management is supported by ongoing education, mentoring, feedback, information sharing, workforce support, and targeted fee-for-service payments. Improvements have been made to the supporting information management and business rules, and shared learning has resulted in improved practice-based systems. There is also a need for practices to have good teamwork and an understanding that chronic care management is different to episodic care, requiring a more structured approach.

Primary care teamwork is a predictor of quality of care.[7] Teamwork is reported to have improved in many practices and nurses are taking up the challenge of chronic disease management care. Better communication within practices is also a component of this.

Uptake has been variable. PHO rates have been influenced by early adoption by certain practices, workforce variations, and other clinical service activity in the PHO. Barriers to uptake of Care Plus have been reported at practice visits and include practice workload (for example the

Table 5. Outcomes for exercise related goals

Goals achieved or partially (minimally) achieved	993	72%
Goals revised or information not completed	380	28%
Total	**1373**	**100%**

Table 6. Outcomes for visits where supplied - provider 7/3/06

PHO	% Better	% Same	% Worse	Total
Capital PHO	47%	46%	7%	**2048**
Kapiti PHO	68%	26%	7%	**674**
Otaki PHO	45%	47%	8%	**66**
Tumai mo te iwi	75%	20%	5%	**343**
Wairarapa PHO	46%	42%	12%	**1173**
Overall	**52%**	**40%**	**8%**	**4304**

Table 7: Outcomes for visits where supplied - patient 7/3/06

PHO	% Better	% Same	% Worse	Total
Capital PHO	46%	47%	8%	**2048**
Kapiti PHO	68%	24%	8%	**674**
Otaki PHO	52%	42%	6%	**66**
Tumai mo te iwi	72%	22%	6%	**343**
Wairarapa PHO	45%	48%	8%	**1173**
Overall	**51%**	**41%**	**8%**	**4304**

MeNZB programme), available time, available space and lack of systems to recruit patients. These issues have been overcome by practices employing additional staff, structuring the programme such as with 'Care Plus Clinics' and the larger practices have a designated nurse leader. The mentoring, ongoing education, feedback and other resources available via PHOs and Management Services are essential to encourage expansion of the programme. Taking into account the significant reorganisation and reorientation required, the uptake of Care Plus is good, and improving.

The results show an overall encouraging uptake by Maori and Pacific peoples, which would indicate appropriate targeting by the practices. In most areas the proportion of the Maori and Pacific population engaged in Care Plus is higher than other groups. For example in Capital PHO, 1.6% of the Maori population is on Care Plus compared with 0.8% of NZ European.

The increase in consultations by 3.2 per patient per year was unexpected and indicates that, for this group of people, additional Care Plus consultations have not had an impact on reducing other consultations. This effect may change with time or with strengthening the self-management and self-monitoring component.[4] It may indicate that patient selection for this model of Care Plus needs revision. This group of patients are consulting in excess of initial Ministry expectations (eight per year)[2] and in excess of usual consultation rates. This, coupled with the requirement for two or more chronic conditions, indicates a population with a high need for primary care service. It may indicate a response to previously unmet needs and is similar to the national recent report on Care Plus implementation.[2] We hope to look at hospitalisation for this group to understand any change in secondary care utilisation.

It was an objective to monitor components of the programme that are indicators for good chronic care management and we looked to the South Australia HealthPlus model which included a goals and care plan approach.[8] Because of the complexity and diversity of patients' comorbidities it was decided that monitoring of patient-centred goals would be useful.

Care Plus ...has proved to be an important first step in reorienting primary care towards long-term conditions

The proportion of goals being achieved either completely (65%) or minimally (21.9%) is consistent over time. 'Minimally' equates with our commonly used terminology of 'partially achieved' and recognises some movement towards achieving the goal. These results are similar to that achieved in the South Australia HealthPlus model which used a rating scale to measure goal achievement, which demonstrated that between 40% and 60% of patients made some progress towards their goals during the 12-month trial.[8] The analysis of exercise-related goals shows substantial improvement in the level of exercise being undertaken. Increased exercise is linked to improved health.[9] A review of all the goals also shows that they are mostly patient-centred, hence reflecting a self-management orientation.

A part of the vision is 'healthier patients'. Overall, 92% of people are either maintaining their health ('same') or have improved health ('better'). This outcome for those with long-term conditions, coupled with the achievement of personal goals by patients, indicates that usual primary care teams can support people with long-term conditions toward improved health.

While Care Plus does not yet reflect a comprehensive systems approach to managing long-term conditions, it has proved to be an important first step in reorienting primary care towards long-term conditions, and demonstrating the ability of primary care teams to adapt and work in new ways.

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Competing interests

The authors declare that they are employees and contractors for WIPA Management Services, providing PHO management including Care Plus.

References

1. Ministry of Health; 2004. Care Plus criteria: http://www.moh.govt.nz/moh.nsf/wpg_Index/-Primary+Health+Care+Care+Plus
2. CBG Health Research Limited. Review of the implementation of Care Plus 22 August 2006.
3. Singh D. Transforming chronic care. Evidence about improving care for people with long-term conditions. University of Birmingham Health Services Management Centre, NHS Institute for Innovation and Improvement; 2005.
4. Bodenheimer T, Lorig K, Holma H, Grumbach K. Patient self-management of chronic disease in primary care. JAMA 2002 Nov 20; 288(19):2469-75.
5. Lewis R, Dixon J. Rethinking management of chronic diseases. BMJ 2004; 328:220-222.
6. Rodenburg H, Bos V, O'Malley C, McGeorge P, Love T, Dowell AC. General practice care of enduring mental health problems: An evaluation of the Wellington Mental Health Liaison Service. NZMJ 117:1202 ISSN 1175 8716
7. Bower P, Campbell S, Bojke C, Sibbald B. Team structure, team climate and the quality of care in primary care: an observational study. Qual Saf Health Care 2003; 12(4):273-279.
8. Battersby MW. Health reform through coordinated care: SA HealthPlus. BMJ 2005; 300:662–665.
9. Kerse N, Elley CR, Robinson E, Arroll B. Is physical activity counselling effective for older people? A cluster randomised, controlled trial in primary care. J Am Geriatr Soc 2005 Nov; 53(11):1951–6.