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# Chronic care management within a rural primary health organisation

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## ABSTRACT

Chronic conditions pose particular challenges for the health system. People with chronic conditions utilise the health system frequently and over an extended period of time; they often develop co-morbidities. There is a growing body of evidence around potential ways to respond to the problem. The expanded chronic care model takes into account chronic disease prevention as well as options for looking after people with established disease. This article provides an overview of how the West Coast Primary Health Organisation has taken a practical approach to tackling the challenge of addressing chronic conditions across the disease continuum over the last year.

## Key words

Chronic care management, disease continuum, primary care.

\*

## Introduction

The West Coast Primary Health Organisation (WCPHO) provides management support for nine general practices, with just over half owned

by the West Coast District Health Board (WCDHB), and several rural health clinics. The practices and clinics stretch from Karamea in the north to Haast in the south, the same distance as Auckland to Wellington. The region has one of the lowest general practitioner to patient ratios<sup>1</sup> in the country and, until recently, suffered from a high turnover of general practitioners.<sup>2</sup> The West Coast has the most socioeconomically deprived population in the country.<sup>3</sup> The population over 65 years of age has higher mortality rates than their New Zealand counterparts, particularly from cardiovascular disease, diabetes and respiratory illness.<sup>3</sup> Hospitalisation rates are significantly higher compared to the New Zealand average.<sup>3</sup>

In 2005 the WCDHB, the WCPHO and Community and Public Health Canterbury/West Coast division (C&tPH) were all co-signatories to a chronic care strategy for the West Coast.<sup>4</sup> The strategy was underpinned by two models: Wagner's chronic care management model<sup>5</sup> and a disease continuum framework encompassing the well population, at risk population, those with established disease,

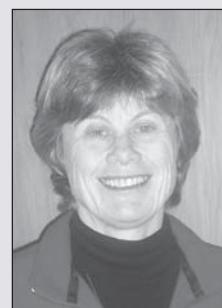
those with controlled chronic disease and those at the end of life. A seventh pillar was added to Wagner's model, that of equity of health; this referred to equity in relation to access to, movement through and outcomes gained from interaction with the health service (see Figure 1).

Recently Barr and colleagues<sup>6</sup> made some revisions to Wagner's chronic care model. The expanded chronic care model provides health organisations with one model to underpin both disease prevention and management and as such fits well with the disease continuum framework embodied in the West Coast chronic care strategy.<sup>4</sup> The expanded chronic care model has guided the key principles underpinning the WCPHO's approach to chronic care management, which are:

- Health promotion
- Risk factor management and decision support, specifically around diabetes and cardiovascular disease
- Self-management and self-management support
- Clinical disease management
- Monitoring and feedback.



**Fiona Doolan-Noble** grew up in South Wales, UK. She completed her nursing training at the Radcliffe in Oxford and gained her Post Grad. DipPH in 2005 from Auckland University. Fiona has worked in a variety of positions since arriving in New Zealand and moved to the Coast just over two years ago. She works four days a week as the Clinical Programmes Coordinator for the West Coast PHO and works as the Course Assistant for the Chronic Illness Management in Primary Care paper delivered by the University of Otago.

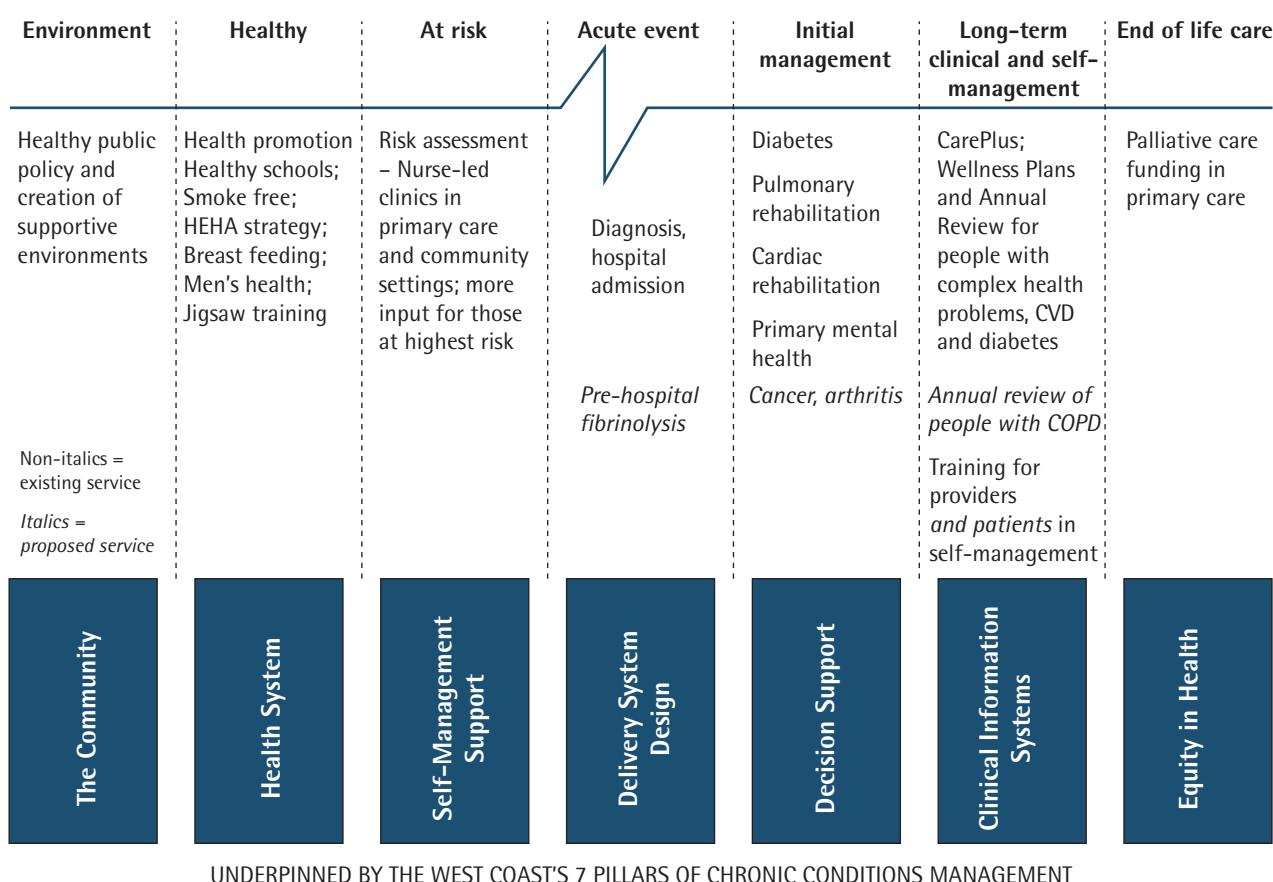


**Jocelyn Tracey** is a GP who has also worked widely in GP education, research and evaluation and development of chronic care management programmes. She is the Clinical Director of PHOcus on Health and supports clinical developments in the West Coast PHO.

# Chronic Disease Management

Figure 1. Chronic conditions management – the WCDHB framework, Year 2

## The Patient's Journey



All the key principles are guided by a desire to reduce health inequalities for Maori living on the West Coast.

## The journey so far

### Health promotion

Many of our costly and disabling conditions – cardiovascular disease, diabetes, cancers and chronic respiratory conditions – are linked by common risk factors: tobacco use, physical inactivity and unhealthy nutrition.<sup>7</sup> Given that 80% of premature heart disease, diabetes and stroke can be prevented,<sup>8</sup> health promotion has an important role to play in primary care. The WCPHO formed a triad with the WCDHB and C&tPH to explore where the gaps lay in health promotion on the Coast. Four population groups appeared to be underserved by health promotion initia-

tives in the region; Maori, those on low incomes, men and youth.<sup>9</sup> Taking these groups into consideration and the diseases which are currently a focus for the WCPHO (cardiovascular and diabetes) a health promotion business case was developed and endorsed by the clinical governance committee and board. The business case included eight initiatives all of which have been commenced over the last nine months. Table 1 provides a summary of the initiatives.

### ***Self-management and self-management support***

There is a growing body of evidence pointing to the significance of self-management and self-management support in the management of chronic conditions.<sup>10,11,12</sup> In 2006 the WCPHO funded a Flinder's Self Management training workshop; 24 people attended

of whom four were general practitioners. All practices on the Coast now have a member of staff who is Flinder's trained. The WCPHO provides funding for each practice to undertake Flinder's assessments and provide support to achieve goals set with the top 5% of their Care Plus patients, i.e. those who, even though they are on Care Plus, are not coping with the complexity of their conditions.

Patients are also being encouraged to take a more active role in the management of their condition through the use of a 'Shared Health Record'. The Shared Health Record is a collaborative care plan adapted from the Counties Manukau Wellness Plan. It is designed to encourage partnership working between the health professional and the patient and improve communication within and across sectors. The Health Informa-

Table 1. Health promotion initiatives within West Coast PHO

Initiative	Target Group	Work to date
Jigsaw (health promotion) training	Primary care team members	Initial enthusiasm which declined when time commitment realised; discussions held with C&PH course delivery revised instead of 2 x 2 ½ day blocks to be delivered over six weeks in two hour sessions
Consultation around health promotion messages and campaigns	Maori	Two hui held
Advocacy training	Maori	Workshop planned for September in association with the Health and Disability Office
Hikoi 2 Hauroa Increasing activity for Maori with CVD, Diabetes	Maori	Currently at phase 2 of the project – trialling the use of pedometers with staff of the Maori health provider on the Coast. Phase 3 will involve using pedometers with Maori who have heart disease and/or diabetes
Collaborative physical activity and smoke free projects with C&PH	Total population	Three practices, one pharmacy and the PHO took part in a six week physical activity and nutrition challenge; this is an established Coast-wide initiative – Spring into Action. All practices and pharmacies took part in smoke free month
Men's health forums	Men 35 years and over	Intensive liaison with community organisations and employers; high level of support from the two communities where forums are planned for 29th & 30th November
Youth health – access to sexual health services	Youth aged under 22	Work plan established
Healthy lifestyle ambassador awards	Total population	Three people nominated one from each territorial area. Nomination made by the Mayor's office in liaison with the regional sport trusts

tion Strategic Action Committee includes as a feature of its vision for chronic care management '*care plans that support care co-ordination by multiple providers*'.<sup>13</sup> Von Korff et al.<sup>14</sup> identify '*collaboration between service providers and patients and a personalized care plan*' as two of the elements required for effective chronic illness management. The development of the shared health record included an extensive consultation process and, to date, 900 are in circulation on the Coast being used across the gamut of chronic condition initiatives.

Recently the WCPHO has employed a Diabetes Self Management Educator and two facilitators to provide a minimum of 10 group self-management courses a year across the region with a particular focus on Maori. The provision of diabetes self-

management courses has been part of the Local Diabetes Team's vision for integrated diabetes care on the Coast for over a year. The self-management course that will be delivered is based on the Counties Manukau programme. Currently the self-management team are undergoing training and it is envisaged that at least two courses will be delivered prior to the end of the year.

#### **Risk factor management and decision support**

More than any other area of medicine, primary care is characterised by the need to deal with a huge variety of frequently unrelated problems. Computerised decision support systems potentially can reduce the variation in clinical management of individuals at various stages of the disease continuum.<sup>15</sup> To support more

proactive identification of individuals at risk, as well as more consistent management of those at high risk, the WCPHO implemented EDGE<sup>16</sup> at all its MedTech practices (70% of all practices). EDGE was chosen over other electronic decision support tools due to its ability to do the following:

- Easily identify, recall and tag charts of people requiring screening, negating the need to run a query build
- Support opportunistic and systematic screening of individuals
- Support nurse-led clinics
- Quick risk assessment; many domains pre-populate
- Embed guidelines into everyday practice
- Facilitate individual care planning and self-management support
- Ease of putting on follow-up alerts and recalls

- Ability for practices and WCPHO to monitor performance for QI purposes
- Electronic invoicing.

Implementation of EDGE within the majority of practices of the WCPHO has increased the capacity of the clinical team by supporting the establishment of nurse-led clinics. Practice nurses can undertake systematic risk assessments as well as working with their clinician colleagues to manage those individuals at high risk. The role of nurses in chronic care management and the importance of teamwork are discussed in other articles in this issue.

The WCPHO has had a strong focus on providing education to the practice teams around cardiovascular risk assessment, choosing to incentivise attendance of all team members at an initial professional development evening focusing on the topic. A practice nurse specific study day was facilitated by Dr Diana North, one of the design team who created EDGE on cardiovascular risk assessment, using EDGE and motivational interviewing.

Visiting practices and welcoming feedback on programme processes

from team members, whether positive or negative, has been key to getting cardiovascular risk assessment up and running. For example, when staff expressed confu-

sion about which patients qualified for extra subsidised reviews because of their high needs status, a flowchart of the process and funding rules was developed and circulated.

For those practices not using MedTech, a paper-based form has been developed which covers all the WCPHO cardiovascular programmes until EDGE becomes available via the Internet. This is envisaged towards the end of 2007.

Since January 2007, Coasters wishing to stop smoking have been

able to access smoking cessation support at their practice or pharmacy. The PEGS programme (Preparation, Education, Giving up and Staying stopped) was developed by Pegasus Health in Christchurch and, to date, 34 staff from seven of the PHO practices and 12 staff from four of the pharmacies have been trained to deliver the programme. Due to demand from staff a further training programme is planned for later this year.

### ***Clinical disease management***

As well as Diabetes Annual Reviews and Care Plus, Cardiovascular Annual Reviews are also funded by the PHO, using Services to Improve Access funding. The rationale behind the CVD programme is similar to Diabetes Annual Reviews in that there is a focus on ensuring optimal clinical management, providing support for behaviour change and the development of individualised care plans.

The WCPHO has provided practices with folders of recommended resources, such as, '*Are you at risk of a heart attack or stroke*' and '*Have a heart – a guide to recovery after a heart problem*'<sup>17</sup> and asthma and COPD self-management plans

from the Asthma and Respiratory Foundation of New Zealand<sup>18</sup> to make it easier for the health professional to provide the patient with suitable information. Each folder

also contains a list of classes and support groups specific to each practice region to which patients can be referred.

All primary care teams work from a condensed READ code list. The list of 25 READ codes has been laminated and is stuck to the side of all computers. The READ code is the code from the very top of the 'string'; if the health provider wants to record the condition more specifically they type in some narrative within the clinical notes. It is hoped that the

condensed list will facilitate two outcomes:

- Improved consistency of READ coding
- The development of a clearer picture of the health care needs of West Coasters.

In order to assist practices to understand and use the current variety of chronic care programmes the PHO has provided practices with folders for each GP, nurse and practice manager that contain all the information they need to implement each programme; having all the information in one place assists providers in finding the information when needed.

### ***Monitoring and feedback***

Currently practices on the Coast receive feedback around Diabetes Annual Reviews on a three to six monthly basis analysed according to the standard clinical data items, e.g. HbA1c>8. The data from Care Plus Annual Review forms completed by practices is analysed so that they receive feedback on the percentage of patients with Shared Health Record, on flu recall, referred to Green Prescription, and on smoking cessation and also the percentage that have made changes in the previous year, such as increased activity levels and better medication adherence.

The data is provided with practice comparisons and used in peer review and quality improvement meetings to stimulate practices to learn from each other and make changes to their systems.

When more data is available on the EDGE database the same level of feedback will be provided for the two cardiovascular programmes.

### ***Tackling inequalities***

We all know that there is the potential for the delivery of different programmes and services within the health sectors to either decrease or increase a range of health inequalities such as access to a programme or service and optimal management of an illness or condition. When comparing census data with Maori

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enrolments in the WCPHO, a major deficit was noted in the Buller region.

In addition, an analysis of data from our clinical programmes showed that Maori were not accessing programmes at the rates to be expected, e.g. only 51% of the Maori places on Care Plus have been filled and only 31% of Maori diabetics compared to 61% of non-Maori diabetics had their annual review in 2006. There are also concerns around the clinical management of diabetics, Maori being less likely to be on either a statin or ACE.<sup>19</sup>

To address the identified problem in the Buller it was decided to appoint a Kaiawhina in an attempt to:

- Increase the number of Maori within an identified region enrolled in the PHO
- Assist the three practices within the identified region to improve uptake of programmes and services to Maori
- To support Maori in their interactions with non-Maori providers.

Since taking up the position in February this year, the Kaiawhina has increased Maori enrolment within the Buller region by 70. She has assisted practices with their ethnicity coding and has re-enrolled 13 people correctly as Maori. She also assists practices to access Maori who have been unable to keep appointments such as for their Diabetes Annual Review. To date 29 clients/whanau have accessed her services to assist or accompany them to the local medical centre.

As well as being able to access free programmes such as Diabetes Annual Reviews, Cardiovascular Annual Reviews and subsidised Care Plus appointments, the smoking ces-

sation programme PEGS is free to Maori and other 'high needs' patients, as is an immediate follow-up and annual follow-up appointments if they are found to be at high risk of a cardiovascular event.

Those practices without access to the Kaiawhina are currently being funded to systematically search their patient management systems to identify Maori and then to search their records to see if they are on the appropriate programmes and if they are up-to-date with their screening and immunisations. Those who could benefit will be followed up and offered extra services.

### Lessons learnt?

Our key advice for others implementing clinical programmes would be:

- Consultation with providers using all means at disposal (face to face/email/telephone/hardcopy) and at all stages of programme development – from first thought to final package
- Allow time – develop programme timelines and extend them by 100%
- Repeat messages often – no one gets everything first time around
- Tailor evidence to local needs and resources.

### Where to from here?

The WCPHO has invested a lot of time, energy and money in improving chronic care management and it is time to take stock and review and revise where necessary. At present the collaborative approach to health promotion between Community and Public Health and the WCPHO is being evaluated by an independent eval-

uator to confirm its usefulness as an approach for both organisations to continue to develop. A review is also underway of the plethora of chronic care programmes currently available within the WCPHO and whether there is a preferable way of delivering these which would also reduce the bureaucracy attached to each programme. It is hoped we can develop a more seamless approach for both patients and providers and, in the near future, to be able to address the needs of people with other disease states such as COPD.

### Conclusion

Over the last 18 months PHOcus on Health has assisted the WCPHO work towards improving chronic care management by initially ensuring they had a good understanding of the local context, e.g. population, availability of services etc., the prevalence of particular conditions and the high level national and international strategies that currently guide service delivery. The WCPHO has now developed a number of programmes that provide a local flavour to chronic care management within the region, dependent on the needs of the population, the capabilities of the practices, integration with other providers and the funding streams available.

In summary, the practicalities of implementation of such programmes has not kept pace with the optimism of the timelines in the business cases, however the journey has well and truly begun.

### Competing interests

None declared.

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## A conversation with Dr Selwyn Carson

**Selwyn Carson** was a well-known GP in Christchurch. In November 1995, in the year that he retired at the age of 72, Selwyn talked with **Niall Holland** about his experiences of being a general practitioner. These excerpts are direct transcripts of the conversation.

*Selwyn: Well I always thought that GPs were the real doctors; I don't think there is any argument about that at all and I think that is...there have been tremendous developments of course. Day surgery and all the pharmaceuticals that started to pour out in the 50s and still coming out and working with nurses has been a great experience. Tremendous changes in that way, but I'm staggered at what specialists can do; they make me blink they're so expert. I saw a guy this morning went in on Tuesday at Southern Cross and had an angiogram that evening, and back at work next morning. And you know this type of thing makes you blink, and I've had personal experience of what they can do. But I think that a GP is fish who swims in the sea of patients and he's the real doctor. We live for the patients or we should and I think that specialists and surgeons are, they are our assistants, they are our helpers who look after the patients. Sometimes they are our teachers but always they're our assistants. And I don't think we should ever forget that and of course specialists have got no idea of this, and they do their best to resist any of those thoughts. I think the surgeons are so marvellous they should be like generals, they should be put into a cupboard until there is a war on then you take them out and use them. You shouldn't let them loose otherwise...*

*When I was first in practice, oh after about, I don't know, must have been about 17 or 18 years, I remember driving around the foot of a hill one day and I suddenly had the feeling – this is not what I did medicine for. It was drug-oriented and stereotype thinking and so what I did was, I with Marjorie's collusion, went off to UK for six months – quite suddenly, I was gone in a fortnight – sold my car to finance it, and sort of survive – quite feckless! But over there, I decided I had heard about the Balint and I decided I'd attend the Balint group, as green as grass...in 1966...I got to London and I rung up the Balints – 'I've come to join your group'. And they said come along and visit us in Regent Square. I went along there on Sunday afternoon, spent the afternoon with them. At the end of the afternoon they said 'yes we'll have you' and I was in two groups, at Charing Cross and University College Hospital for the whole time there – two groups a week and I also by some fluke gained entry to the registrars course at the Tavistock Clinic.*

*I came back and I had a different feeling about the whole thing, about general practice. I could see quite clearly that there were two kinds of medicine. There's the kind where complaints can be identified, tests can be used and it's a recognised pathology which has a recognised treatment. And this is the kind of thing that hospitals are very good at. But it is only a small part of medicine. There's the other kind where there is no recognisable pathology, tests are useless if not down right harmful and there is no recognised pharmaceutical treatment. And that makes up the whole bulk, most of general practice.*