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Preventing and managing chronic disease through primary health organizations: the example of 'Heartbeat Tararua'

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Backround: Primary health care service delivery in New Zealand is in an exploratory phase as primary health organizations determine new models of service delivery to reduce the incidence and impact of chronic disease. As organizations have restructured from predominantly primary care providers, the incorporation of a population approach to practice is welcomed but has provided some challenges for providers and funders alike as they reorient and extend practice parameters and determine the most effective methods of service delivery. **Aim:** To describe and critically examine the underpinning assumptions of a new service delivered through a primary health organization to reduce the impact and burden of chronic disease with a focus on lifestyle risk factors, acting on obesity, nutrition, physical activity and smoking. **Approach:** 'Heartbeat Tararua' is a community-based lifestyle change programme focusing on the issues of obesity, nutrition, exercise and smoking and provides both clinical care for high-risk clients as well as operating a community-based prevention programme. The simplistic health education–behaviour change model was identified as problematic in the population approach and the high-risk service alone was unable to address all clients who expressed an interest. A revised population approach was sought that encompassed the existing community capacity and encouraged sustainable change in the community. Drawing from the public health evidence base a revised framework was recommended with a set of strategies based on social–psychological and ecological models with participatory and empowerment approaches. The work demonstrates a skilled practice team well able to reflect on practice, willing to seek advice and work towards establishing new models of primary health care service delivery.

Key words: chronic disease management and prevention; health promotion; primary care; primary health organizations; population

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Introduction

Implementation of the New Zealand Primary Health Care Strategy has moved from a focus on broad structural change to concentrate on sector responsibilities and capabilities required to improve health outcomes. This phase focuses on reducing inequalities, engaging communities and the management of chronic conditions. Primary health organizations (PHOs) as the major co-ordinators and providers of primary health care are in an exploratory phase as they ascertain effective service delivery that includes population approaches and health promotion.

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'Heartbeat Tararua' is the Tararua PHO's initial foray into primary care and health promotion delivery. This service was implemented to reduce the impact and burden of chronic disease with a focus on lifestyle risk factors, acting on obesity, nutrition, physical activity and smoking. Its point of difference from historical service provision is the additional population approach from the outset and the provider arm. Health promotion is used as the underpinning concept of service delivery.

The article format first provides the rationale for the focus on chronic disease, and then provides information on the establishment of PHOs and the ensuing climate of exploration for primary health care service delivery. A description of the 'Tararua Heartbeat' service follows describing the initial programme concept and delivery, the community response and key findings during the programme's early implementation. The interpretation of the service framework, review of public health evidence and the development of this revised framework was the work of the author while working in an observational and advisory role with the Tararua PHO during his postgraduate study.

Background information

Chronic disease in New Zealand

New Zealand is similar to other economically developed countries where chronic diseases contribute significantly to the nation's mortality and morbidity. Cardiovascular disease is the leading cause of death and accounted for 41% of all deaths in 1999 (Ministry of Health, 2003a). Coronary artery disease is the major cause of these deaths, followed by stroke, which is also the greatest cause of disability in older people. Cancer ranks second as a cause of death, accounting for more than a quarter of all deaths in the late 1990s (Ministry of Health, 2002a). For the period 1991–2001, deaths from ischaemic heart disease and cancer exhibited a slow decline. Conversely, cancer registrations in the same period increased (Ministry of Health, 2005), partially influenced by the aging population. An epidemic of type 2 diabetes is occurring. By 2011, it is predicted that more than 2000 people a year may die from diabetes, double the figure for the early part of this century. Approximately 145 000 will suffer the human cost of living with the potentially disabling condition (Ministry of Health, 2002b). New Zealand faces further challenges with health inequalities present for Maori, Pacific Islanders and those from socio-economically disadvantaged circumstances (Ministry of Health, 2006a). For the MidCentral district, which includes Tararua, circulatory system diseases are the major cause of illness and the most important cause of mortality. Ischaemic heart disease is the most common cause of hospitalization in this category, representing 41% of all admissions (MidCentral District Health Board, 2005). Stroke and diabetes hospitalization is increasing yearly (MidCentral District Health Board, 2005). Digestive and respiratory cancers are the two most common cancer groupings causing cancer deaths. Maori have a higher than expected number of deaths from these causes (MidCentral District Health Board, 2005). Hospitalization in the Tararua district increased 17.8% from 1999 to 2001 and for the MidCentral district overall mortality was 10% higher than the national average for the same period (MidCentral District Health Board, 2005).

Service prioritization at a national level has emphasized the following health objectives: reduce smoking, improve nutrition, reduce obesity, increase the level of physical activity, reduce the incidence and impact of cancer, reduce the incidence and impact of cardiovascular disease, and reduce the incidence and impact of diabetes (Ministry of Health, 2000). Sedentary lifestyles, poor nutrition and obesity are recognized as significant risk factors contributing to the increase in non-communicable disease. They are major and increasing causes of preventable disease, disability and death nationally (Ministry of Health, 1999). Regionally the MidCentral district demonstrates a population that still has a large proportion of sedentary and inactive residents with 30% participating in less than 150 min of exercise in a seven-day period (MidCentral District Health Board, 2005). Fifty per cent of the same population consume less than the recommended five servings of fruit and vegetables daily with 56% of people considered obese or overweight (MidCentral District Health Board, 2005). Of the communities that make up the MidCentral District Health Board's geographic area, Tararua has the second-highest proportion of current smokers at 24%, with Maori significantly

over-represented (MidCentral District Health Board, 2005).

Primary health organizations and primary health care services

A strong primary care system is recognized as a necessity for improving the health status of the population generally and for reducing health inequalities (WHO, 1998). The government released the Primary Health Care Strategy in 2001 to provide direction for this sector. Subsequent development included changes in the way that services were organized as well as the method and level of subsidy of these services (Ashton, 2005). PHOs have been established and are the local structures for co-ordinating and delivering primary health care services in the community. They bring together a range of health professionals such as doctors, nurses, midwives, allied health professionals and Maori health providers, who are reflective of the local communities. This structure is expected to encourage integration of health care between providers, allow for multi-disciplinary teams and bring greater diversity than earlier primary care and public health structures have achieved. The PHOs are non-profit organizations and contract to district health boards to provide a comprehensive set of preventative and treatment services. Since their inception in 2002, PHO numbers have grown with 81 now operating throughout the country (Ministry of Health, 2007).

There is an expectation that PHO practice will implement both individual and population approaches (Ministry of Health, 2003b). To date, the population health role of PHOs is open to interpretation, how this relates to service delivery and other providers (Public Health Advisory Committee, 2006). Additionally, with the diversity in PHO size, demography, kaupapa, style of governance and public health capacity there is no typical PHO unit. Currently, there is significant variance in the interpretation of service delivery and how primary care and health promotion services are accommodated within the primary health care model.

Tararua PHO has an enrolled population of 15 241 (Ministry of Health, 2007) and as such is one of a number of smaller PHOs. The ethnic makeup of the Tararua community is predominantly European at 80% and Maori 18%. Both figures are proportionately larger than the national average, with the community exhibiting less ethnic diversity than nationally (Ministry of Social Development, 2006). The nature of the community with the population spread over many towns and settlements presents resource challenges. The community has some clear strengths. The people of Tararua actively contribute to community activities and respond to community needs with pragmatism and resourcefulness (Ministry of Social Development, 2006).

The purpose of establishing new structures for service delivery is to bring closer integration of primary care and public health. Public health has much to offer primary care, able to provide direction in promoting health, preventing disease and prolonging life. There is a substantial history of activity in the sector, working towards enabling people to increase control over and to improve their health. Amongst primary care providers, there is strong support for the integration of population perspectives and health-promoting practice but a degree of uncertainty about how this translates into service provision. With funding for health care from the Ministry of Health now devolved to district health boards (Ashton, 2005) there is significant potential for localized understanding of health and planned co-activity.

There is an expectation that PHOs will engage with their communities. In part, this has been achieved with community members involved in governance and opportunities for public participation in forums. The degree to which community expressed needs are prioritized depends on the facilitators' health assessment, whether this matches the community view and the value placed on partnership. This variance in participation expressed as 'community organization for participation' is well described by Tones and Tilford (2001). To date, service provision remains predominantly top-down but does emphasize the importance of enlisting community support and community networks. The inclusion of community development and empowerment approaches in programme planning is being encouraged from the public health sector. The approach has the ability to raise awareness of chronic disease and its determinants and engage the community to take action and ownership.

With service delivery expected to combine primary care, public health and community

involvement into one integrated primary health care structure, there is a need to share information on practice, establish a knowledge base and emerge over a time with an evidence base of best practice for the sector.

Description of the Heartbeat Tararua service

Funding support for Heartbeat Tararua was made available through MidCentral District Health Board in recognition of the need for action on preventing and managing chronic disease in the Tararua District and to support the development of integrated primary health care services. It demonstrates the monies available through the devolution of funding that can now be supplied to providers at a local level.

Implemented in late 2004, Heartbeat Tararua is a lifestyle change programme designed to provide the opportunity for all people within the Tararua communities to make positive and informed choices towards a healthier lifestyle. It is a community-based programme focusing on the issues of obesity, nutrition, physical activity and smoking. It demonstrates an integrated format combining both primary care (clinical treatment for those at risk) and public health (population-based prevention services). The programme is additionally supported by a diabetes and cardiovascular screening service designed to improve access to primary care for those whose clinical condition, history and lifestyle factors indicate need (Ministry of Social Development, 2006).

The individual approach places an emphasis on high-risk groups; specified as those already suffering from ischaemic heart disease, obesity, type 2 diabetes and those at high risk of developing these conditions. Clients identified as 'high risk' are enrolled in the Heartbeat Primary Care Service, which provides specialist dietary, physical activity and smoking cessation advisors that plan and support a tailored lifestyle change process. Although no theoretical basis has been stated, the focus on the enhancement of personal skills through education and social support to promote individual behaviour change fits attitude, social influence and self-efficacy models. Enrolment in the service is most commonly by referral from a health professional, typically a general practitioner but other practitioner referral and self-referral is possible.

There is recognition that those at risk may not be accessing services. The population approach seeks to reach greater numbers of the community. It was implemented by accessing local community events through both small group meetings and gatherings as well as larger more formalized events. Prior planning in consultation with target groups resulted in tailored 'awareness raising' ventures which promoted the importance of healthy lifestyle choices. The approach was predominantly one of education, where a change in knowledge is expected to lead to changes in behaviour. Early implementation had a further objective of raising community awareness of PHOs and their extended service capabilities, including the individual Heartbeat Tararua service. The community responded promptly with high interest with both community groups seeking access for event planning and individuals wishing to enrol in the supported lifestyle change service. As is not uncommon with a primary care orientation, this programme has been initiated by health providers. In this instance it was well received and regarded as relevant to the community. The existing strong community networks and links with the programme manager were a significant factor in the rapid community acceptance and uptake.

The burgeoning popularity of the programme and interest in the individual service highlighted an approach that was high in demand on time and staff numbers and could only address a small number of the overall community. There was recognition of the need to ensure a service that sort to include those not currently enrolled with a service provider or accessing health care and catered for those who by limitation of numbers could not access the individually assisted service. Staff expressed the need to capture the community's enthusiasm and respond with a more structured population strategy that was inclusive allowing all interested to participate beyond the event level. The situation represented a good platform to establish primary health care in the community with trust already established and the community demonstrating a willingness to be involved.

Bringing evidence into practice

Support for integrated primary health care

The high-risk approach has significant potential for motivated individuals (Rose, 2001). Research

indicates that lifestyle education given to clients diagnosed with non-communicable disease is effective in creating positive lifestyle change. Study results have produced either a moderate effect (Gaede *et al*., 2001) or a more substantial effect (Steptoe *et al*., 1999; Clark and Hampson, 2001; Clark *et al*., 2004). Those most effective in establishing and maintaining behavioural changes have intervened using counselling directed at behavioural and attitudinal change tailored specifically to the individual's readiness to change (Steptoe *et al*., 1999; Clark and Hampson, 2001). In addition, French and Rosenberg (2005) demonstrated a relationship between cigarette smoking and other health behaviours. Smokers are also more likely to demonstrate poorer nutrition and sedentary lifestyles. This indicates that individually tailored programmes aimed to create behavioural change across the spectrum of nutrition, physical activity, obesity and smoking would be most beneficial to those at high risk rather than programmes targeted at single issues. It is well accepted that intervention efforts cannot be expected to change behaviour directly but need to address the mediators of behaviour change, as these need to be influenced to create changes in behaviour.

There is substantial recommendation for the inclusion of a population-based approach. Both Rose (1992) and Mittlemark (1999) have demonstrated that there is often no obvious and clinically meaningful risk factor threshold that differentiates those at risk from those not at risk and focusing on those at the extreme end of clinical indicators is less efficient than improving the risk profile of the entire population. Furthermore, a population approach is beneficial as it encourages determination and action on a common cause (Rose, 2001).

Both high-risk and community-based approaches are considered desirable for the challenges of preventing chronic disease (Harris and Zinman, 2000; Huot *et al*., 2003). There is encouragement for a more health-promoting-type practice. There is increasing support for community development (Rance and Manahi, 2006) with government working to establish and disseminate an evidence base to practitioners (Ministry of Health, 2006b). The Healthy Eating – Healthy Action Strategy (Ministry of Health, 2004) calls for an integrated and comprehensive approach to addressing nutrition, physical activity and obesity, highlighting the importance of both individual behaviour and the environment. The shift in emphasis from individually focused explanations of health has been driven by the recognition of the influences that social, environmental and political factors have on health. The Ottawa Charter, although still encouraging the development of personal skills, created a major thrust for creating environmental, social change and political activity (Tones and Tilford, 2001).

Public health for creating improved population health

The primary care sector is expected to incorporate public health activity with the emphasis on being responsible for a community population. Public health has an extensive history in the prevention of chronic disease particularly in the prevention of cardiovascular disease. Early programmes such as the North Karelia and the Stanford Three-Community Project used comprehensive community interventions drawing on social learning theory (Bandura, 1986) and the theory of planned behaviour (Ajzen and Fishbein, 1980). Using the tools of education linked with enhanced social environments, behaviour change was sought at an individual level, with the expectation of creating change across a community. Second-generation programmes, the Stanford Five City Project, the Minnesota Heart Health Program and the Pawtucket Heart Health Program sought to increase behaviour change across the community using the previous foundation plus new theories of community organization (MacLean, 1994). Finally, third-generation programmes expanded existing foundations further; additionally, they targeted hard to reach populations, adapted intervention strategies to local realities and included empowerment approaches (Shea *et al*., 1992; Paradis *et al*., 1995; Macauley *et al*., 1997). To date, results exhibit modest success with programmes still lacking the desired depth of community change sought (Goodman and Yoo, 2005).

No single factor is likely to be the sole determinant of success or failure. Reasons for poor performance include limitations to the interventions and theories used as well as poor connection between programme design and implemented

activities. To gain insight into design these components have been examined separately to elicit the particular combination of participatory involvement and intervention strategies that will provide the recommended framework for the population approach for Tararua Heartbeat.

Participatory approaches

Health promotion in New Zealand has made significant progress; however, to achieve greater gain there is a need to implement sustainable programmes (Wise and Signal, 2000). Globally, participatory approaches are increasingly finding favour. Evidence suggests that communities can be mobilized to identify, plan, channel resources and undertake effective action for health promotion and health-enhancing social change (McLeroy, 1996). The underlying principal is one of community development through capacity building where the participatory process focuses on building community health promotion capacity through the process of organizational development (Simmons *et al*., 2004; Sotomayer *et al*., 2007). Where personal, collective and relational skill development is used to assist in capacity building, the approach becomes one of empowerment (Braun *et al*., 2003; 2006). The empowerment approach is underpinned by social capacity theory, where a multi-level ecological framework considers both individual psychological and behavioural conceptions (sense of community, collective efficacy – or empowerment, neighbouring and citizen participation) and institutional and community network-level conceptions (Perkins *et al*., 2002). Endorsed by Perkins *et al*. (2002) the creation and establishment of common goals and empowerment approaches within localities where networks are limited or non-existent allows for the development of an organizational structure.

Where the programme meets an identified need in the community a favourable outcome is more likely regardless of facilitator (Balcazar *et al*., 2001; Braun *et al*., 2006; Jenum *et al*., 2006). The degree of participatory activity is varied and can be graded low to high (Brager and Specht, 1973). Programmes that plan jointly between host agency and community (Balcazar *et al*., 2001; Simmons *et al*., 2004; Gracey *et al*., 2006; Sotomayer *et al*., 2007), or alternatively delegate some (Ronda *et al*., 2004a; 2004b) or all control to the community (Wagner *et al*., 2000; Braun *et al*., 2003; 2006) are well received. The participatory process encouraged an increased focus on health both with the individual and in the community. Wallerstein (2002) notes the connection between the process of participation, empowerment and the level of community capacity, where increasing mastery of the social action process can aid in increasing the levels of civic engagement. Sustainability of initiatives is thus enhanced as community members feel better equipped and able to manage projects. Rifkin (1990) also reports on the sustainability of this approach. Having identified with the project and being involved in the process of managing it creates a sense of ownership. On a precautionary note high participatory activity does not necessarily lead to more successful outcomes as much rests with the remaining intervention design (Wagner *et al*., 2000; Simmons *et al*., 2004; Blumenthal *et al*., 2005).

In the Tararua example, the shared agenda means that the potential to work collectively is high and that success for the programme is more likely if care is taken in reconsidering the design. Tararua also has effective community networks, which are likely to aid the speed of the work. However, where networks are slim or non-existent if care is taken in the empowerment and organizational process this should not limit success in other programmes. Additional time will be required in the implementation. Where interests differ there is a need to nurture a value for health amongst the community and recognize and treat as valid issues expressed by the residents. This indicates the need for flexibility in planning. This represents a fundamental shift in programme type moving from a health system-driven approach, to one that recognizes the value of community development.

Intervention strategies for the prevention of chronic disease

A systemic review on community-based intervention strategies for the primary prevention of diabetes found a predominance of behavioural type approaches (Goodman and Yoo, 2005). It is acknowledged that a change in knowledge will not necessarily bring about changes in behaviour. For many individuals a change in behaviour may offer little or no benefit and thus there is little or no motivation for change. Hence, intervention efforts have been directed towards addressing the

mediators of behaviour change (Bartholomew *et al*., 2000; Bauman *et al*., 2002). Comprehensive programmes have sought the support of socio-ecological models of health with limited to modest success dependent on how each programme has operationalized the context. According to these models, health behaviours are influenced by the proximal intrapersonal and psychological factors plus the more distal social and physical environmental factors. Programmes have planned around these models in a variety of ways and can be seen to exhibit areas of action embodied by the Ottawa Charter: creating supportive environments, strengthening community activity or both. A common strategy to promote physical activity has been the formation of walking groups lead by lay health leaders or health services using existing resources (Bjaras *et al*., 2001; Huot *et al*., 2003; Kelley *et al*., 2005). However, there is no indication of the sustainability of this approach either through something as simple as maintaining interest in inclement weather (Bjaras *et al*., 2001; Kelley *et al*., 2005) or local action maintaining community interest (Huot *et al*., 2003). Interactive nutrition and/or physical activity sessions, educational and practical in nature have been commonly provided through existing health services and other providers (Huot *et al*., 2003; Ronda *et al*., 2004a; 2004b; Kelley *et al*., 2005; Staten et al., 2005; Gracey *et al*., 2006; McCarthy *et al*., 2006; Schuit *et al*., 2006). By using group activities (that may or may not have included participatory process in intervention design) these reach larger numbers of the community. However, these still bear strong similarity to the individual approach in that they view health as predominantly an individual responsibility and have failed to achieve significant success. Raphael (2003) is critical of these types of programmes as they have a propensity to focus on personal barriers to change. A comprehensive programme that identifies barriers across social, cultural, community and environmental factors has been recommended (Goodman *et al*., 2006).

A particular challenge for the population approach is the need to provide an intervention that is suitable for diverse groups. Historically, public health has had its greatest successes when seeking change through environments and this should not be forgotten in the prevention of chronic disease. One intervention that targeted a low-income, multi-ethnic district initiated a chronic disease awareness campaign with a participatory problem-solving approach addressing low levels of physical activity in the community (Jenum *et al*., 2006). Similar to previous programmes, physical activity was encouraged by establishing walking groups. However, this programme also sought sustainable change in the physical environment making improvements to the availability and safety of the tracks. There were significant improved health effects on risk factors for type 2 diabetes and cardiovascular disease from participants (Jenum *et al*., 2006). However, the programme failed to capture young women and demonstrates the complexity and difficulty in reaching all members within a community. There is recognition of the physical environment as a resource for health in this intervention. Sloane *et al*. (2006) have taken this further and argue that every community or neighbourhood is located within a 'resource environment' for recreation, food and other health-promoting or health-compromising goods and services and that defining, describing and measuring these resource environments will define and prioritize suitable interventions. This study developed tools for assessing nutritional and physical activity resources that were practical, user friendly and provided relevant information leading to community interventions that produced sustainable change in the environment. Conceptualization of features of neighbourhoods, influenced by factors such as income distribution and segregation, have to date mostly being ignored and should be considered more carefully in future planning.

The revised framework

Interventions need to be comprehensive in action, include community involvement beyond the level of the individual and be based on sound theoretical foundations. Building on the enthusiasm exhibited by the community the new framework continues with education but develops this further to include empowerment and problem-solving skills to enhance community capacity. Education continues to raise awareness about chronic disease and its determinants but assists the community to understand the issue beyond the level of the individual. Empowerment moves from the individual level of personal skill development to support individual behaviour change, to mobilizing individuals to act collectively using

organizational development to create change in the environment and in policy. Continuing their work with community groups staff continue to plan educational events developing a shared understanding of the facilitators and barriers to change particular to that group and/or in the wider community. As a whole, the group is facilitated to encourage a problem-solving approach, planning strategies for action seeking change in policy and environment. The Ottawa Charter has been instrumental in reshaping practice, placing greater emphasis on policy and environmental change (Tones and Tilford, 2001) and the use of the framework in this manner creates a more comprehensive population approach. The revised framework uses the existing structure and networks to implement an orchestrated set of strategies based on social-psychological and ecological models with participatory and empowerment approaches. Support is given to the mobilizing process encouraging group self-determination and action. At the top end of the participation ladder the community takes ownership of the issue and seeks change (Brager and Specht, 1973) and aids sustainability. The intention to facilitate community members towards creating change in their communities is similar to the strategies used by Jenum *et al*. (2006) and Sloane *et al*. (2006), which have demonstrated greater success than an education strategy alone. The programme while still within the service specification fosters a stronger community development approach.

The PHO's staff role becomes one of education, enabling those concerned to understand the issues, develop an understanding of the determinants of these issues and place it in the context of their environment. Additionally, it is one of facilitation aiming to mobilize individuals into collective activity such that they are able to manage their own transformations. Education is reshaped towards a shared dialogue between health workers and community groups to establish a collective knowledge of the issues and from this a deeper understanding emerges of the influences that direct it. From this deeper understanding comes the opportunity of collective problem solving and the development of collective initiatives to address the problem. Outcomes are of a dual nature, where participation and shared decision making aid in the process of empowerment, as well as change in health outcome. Older, less mobile people in discussing ways to increase physical activity and improve nutrition found gardening had been an enjoyable pastime but decreasing mobility meant difficulty with this and it had in many instances been abandoned or become much reduced. Raised container vegetable gardening was seen as one solution and the group was to become active in seeking ways to achieve this.

Programmes with an emphasis on high community participation take longer to become established and this should be expected. It takes time to establish a collective identity, structure and formulate a programme, prior to further movement along the planning cycle. With the time factor involved it becomes difficult if not impossible to plan, implement and evaluate distal health outcomes on a short planning cycle. An approach that captures the 'stage development' and analyses and evaluates throughout the cycle is required in addition to ongoing measures of health outcomes. Although interest has grown in designing multilevel approaches to improve community health in areas such as nutrition and physical activity, there is as yet no adequate tested framework for measuring such initiatives beyond the individual or group level (Anderson *et al*., 2003). Evaluations such as those of Balcazar *et al*. (2001), Braun *et al*. (2003; 2006), Ronda *et al*. (2004b) and Sotomayer *et al*. (2007) have measured or described a variety of activities and processes including assessment of relationships, community capacity and organizational structure as a means of assessing effectiveness of the intervention. An effective process evaluation will determine whether a programme has been well implemented or where improvements can be made. Process evaluation in this manner with the appropriate selection of participatory, empowerment and organizational indicators will be necessary for the Tararua programme. Although evaluation at this level has neither been specified nor funded where well-documented data on the programme have been kept, it is often possible to achieve some form of evaluation of this type (Kelley *et al*., 2005).

Conclusions

The format of this recommended framework demonstrates one interpretation of a population

approach to service delivery. The underlying concept is one of health promotion using the prevention paradigm that adopts both high-risk and population approaches. While the provision of individual care to clients is expected to remain central to the services offered by PHOs, this approach reaches greater numbers of the population and places health and chronic disease as an important issue within the community. There is a forward thinking mindset to service delivery with wholehearted adoption of the vision and objectives of the primary health care strategy.

The revised comprehensive framework seeks population health gain by including change in social and physical environments and includes community participation and collaboration in a move to establish greater effectiveness and equity in primary health care. The definition of a population approach equates closely with public health and has drawn on the evidence base from this sector to improve service delivery. Care has been taken to consider the interpretation and alteration to staff roles as well as how this impacts on the monitoring and evaluation of the programme.

On a broader scale, it represents emerging practice where district health boards and primary health care providers are working together more closely to establish a collaborative working arrangement beginning to align strategic planning and distribution of service delivery. The process maximizes the potential to strategically place services in localities where specific health needs are identified and to raise awareness of these within the community. The Tararua Heartbeat health promotion service effectively brings together both treatment and prevention services for chronic disease into a community which by its rural nature and geographic distribution had difficulty accessing services previously.

The programme is required to undergo a formal evaluation and this in combination with dissemination of other service innovations will add to the evidence base determining best practice for primary health care in the community setting.

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