From Corner Dairy to Sustainable General Practice A Vision for Primary Care in 2010: Implications for General Practice

MARCH 2007

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towards 2010

1. Executive summary

This report has been commissioned by the Funding Division of Mid Central District Health Board to portray a vision of General Practice within a reconfigured primary care setting.

Sections 2 and 3 describe current trends in four key international markets and the relevance of these trends to the primary care strategy and Mid Central's approach. A key theme of the paper is highlighted:

> "a new way of working" risks losing traction unless capacity and development issues in general practice are addressed.

Section 4 outlines drivers for change and introduces the theme that size matters in general practice configuration, arguing that lack of capacity in primary care has been a key driver for the traditional aggregation of services in and around the hospital. Other trends such as convergence of personal and public health, and future workforce issues are also discussed.

Section 5 takes the reader forward to 2010 and suggests that the 2006 vision has been implemented, describing the drivers and key issues which led to a successful transition. It links the issue of perceived lack of capacity for GPs to perform a different role to the prospect of new and larger facilities providing a pivotal "trigger" in transforming both the clinical and business model of general practice. It emphasises the importance and potential for information technology to both enable and support the change process.

> GPs now perform the role of a community generalist, providing clinical leadership and interventions for minor surgery, chronic disease management and emergency medicine as well as being available to fulfil the traditional role as family doctor.
>
> Shifts in emphasis and redesign could only be achieved by way of well planned and well implemented infrastructure development within community based health service sectors. While infrastructure development includes leadership, workforce development, IT development and more, none of this would have happened without a major re-think of health facilities.

Sections 6 and 7 describe the implications of such a change on funders and providers.

Section 8 brings the reader back to the present and describes in more detail the factors which contribute to successful change. Options for GP amalgamation are outlined; a more detailed approach to facilities development is given, along with a potential blueprint for Mid Central. Examples of integrated services enabled by scale, organisational design and IT are also described. An emphasis on variety, and that "one size does not fit all" is a recurring theme:

> A facility can act as more than a place to work and integrate; it can provide a vehicle to differentiate GPs of similar clinical but varying commercial vocation. Some GPs will want to be owners, others tenants. Some will want to be shareholders, others employees.

Section 9 outlines the roles which the DHB can play to facilitate and/or lead the transformation process.

Sections 10 and 11 complete this report with a summary of critical success factors and conclusions.

2. Global health care trends

Global health care markets are in the grip of intense change. International health care systems, governments and providers are actively considering how engaging in change will benefit their communities.

The following quote comes from the "Declaration of Alma-Ata", made at the International Conference on Primary Health Care held in September 1978 at Alma-Ata in the then USSR.

"Governments have a responsibility for the health of their people which can be fulfilled only by the provision of adequate health and social measures. A main social target of governments, international organisations and the whole world community in the coming decades should be the attainment by all peoples of the world by the year 2000 of a level of health that will permit them to lead a socially and economically productive life. Primary health care is the key to attaining this target as part of development in the spirit of social justice. ...Primary health care addresses the main health problems in the community, providing promotive, preventive, curative and rehabilitative services accordingly;"

Even in 1978, primary health care was considered essential to improving future health status internationally. Current international health industries' trends evidence that primary health care remains central to achieving today's health targets.

Global trends relevant to this report include:

- Health systems are focusing on better management of chronic diseases and workflow processes across the spectrum of care, i.e. community/ primary / secondary / tertiary / community. This means:
    - Rebalancing funding between tertiary / secondary or institutional care and primary and community based care
    - Recognising the logic of early assessment, early intervention and patient self management. This means a greater emphasis on population management, integration between services and evidence based best practice
    - Merging traditional boundaries between personal and public health
    - Distribution and delegation of treatment tasks away from institutions and the medical professionals who work in them, to other health care professionals, community workers, family and individual patient
    - Wider use of electronic systems which aggregate the medical record, enhance workflow productivity and consistency and provide decision support
    - Segmentation of public or private health "insurance" markets which increasingly separate the well from the sick.

Relevant markets

United Kingdom

In the UK almost everyone is registered with a general practice, most of which deliver a full range of general medical services. Other models of general practice have emerged recently, including walk-in centres, NHS Direct and new commuter surgeries. 9,000 independent GP partnerships continue to dominate the market, functioning as independent contractors who sell their services to the National Health Service (NHS) under contracts with regional Primary Care Trusts (PCTs).

Although the dominant model of general practice has not changed, UK general practice has evolved. Recently there has been a shift towards working in group practices and primary care teams, provision of more services by primary care, reduced patient list sizes, increased consultation times and reduced patient waiting time to see a GP or other primary care professional. Consultants traditionally based in secondary or tertiary care are establishing partnerships with primary care colleagues, signing up to work with new providers and contracting to work with primary care providers. Despite these developments and continued international admiration for the efficiency and effectiveness of UK primary care, the UK government is committed to introducing competition to primary care provision.

Several desired outcomes underlie the UK government's proposed reforms and are predominantly directed at increasing patient responsiveness:

- Cultural transition to patient-centred health care whereby patients are perceived as customers, or consumers of health services, actively working in partnership with health professionals, rather than passive recipients of services on offer
- Greater patient choice, including convenient opening hours, practice location, email, phone or personal consultations and service provider (GP, nurse or physiotherapist as first contact)
- Local provision and coordination of a wider range of services by primary care, including management of long term conditions and transfer of some specialist services to primary care (for example clinically safe dermatology, ear nose & throat, general surgery, orthopaedics, urology and gynaecology)
- Promotion of patient self care and management
- Improved coordination between primary and secondary care, and between primary care and social services
- A single, central, computerised patient record that can be safely shared across providers and with patients.

In the above context Professor Paul Corrigan, in a recent paper, argues that size matters in making GP services fit for purpose. Themes that drive this argument include:

- Creating organisational forms that are more appropriate, but allow for variety in style and ownership structures just as in other commerce sectors
- An imperative to move some care, currently provided predominantly in secondary care, into primary care
- Reducing health inequalities, assuming capacity for integration of services across the spectrum of primary care. Current cottage models of general practice are unable to contemplate, let alone provide this.

Ways of moving to fit for purpose organisational forms stimulate debate. In a British Medical Journal article entitled "Competition in General Practice" (Nov 2005, Marshall & Wilson) the following non-exclusive options for alternative, market-based models for primary care are outlined:

1. Commercial takeover - comparatively large independent companies such as current or new independent sector providers, high street retailers, or pharmaceutical companies might buy up whole practices or establish new practices, employing all of the staff.
2. Mergers of existing practices - successful established practices might want to take over other practices and either merge or manage them using a common executive team.
3. Hospital based service - the NHS hospital sector may decide to provide primary care services, either in hospital outpatient departments, or by setting up new primary care clinics linked to hospitals. This model is likely to be particularly attractive to foundation trust hospitals, which have both ability and incentives to expand capacity.
4. Population specific service - general practice services targeted at specific populations (like teenagers, elderly people, or commuters) could be established by any provider. This represents a radical shift from comprehensive family practice.
5. Condition specific service - discrete services targeted at conditions or procedures, like hypertension clinics or investigative facilities, could be delivered to practices or Primary Care Trusts by independent providers under contract.

Of these five models, Marshall and Wilson saw the integrated "takeover" and "merger" as offering most potential for improving primary care provision. A "condition specific service" was seen as offering least potential as the integrity of practice-based provision would be lost. It was postulated that ultimately reform might best be achieved using a judicious balance of market forces alongside educational approaches and performance management.

Corrigan adds a not for profit dimension by including mutual co-operatives as a legitimate form for delivering primary care, regardless of whether the environment is "competitive".

Smith, Ham & Parker (2005) considered the future of primary care under a market model and noted "...new entrants to the primary care market have an opportunity to develop premises that support innovative models of care, particularly for the management of long term conditions. The co-location of primary care and community services together with diagnostic and intermediate care services could potentially deliver a 24-hour model that incorporates the Kaiser Permanente principles of integrating inpatient and outpatient care together with coordinating all aspects of a care plan, both in and out of hours."

In the move towards market-based primary care, a new trend is emerging in practice-based commissioning. Practices may hold budgets and may choose to provide services in-house, or contract with new or alternative providers, rather than referring patients to hospitals. Commissioning comprises planning, purchasing and monitoring and can:

- improve identification of need
- encourage innovation in appropriate care pathways to smoothly cross organisational boundaries
- effectively monitor delivery quality
- improve chronic condition management
- increase clinician engagement
- promote efficient resource use by placing budget holding in closest proximity to those making referral and treatment decisions.

Singapore

Like many countries, Singapore is taking a prospective view, planning to efficiently and cost-effectively meet health needs of a rapidly aging population (8.5% of the 4.3 million population are aged 65+), with a rising average life expectancy (currently 79.7yrs), and increasing prevalence of chronic, non-communicable diseases, including diabetes and cardiovascular disease.

The Singaporean health system is a fragmented, poorly coordinated range of health care services. It comprises various different providers from primary to tertiary and "step down" care:

- Within primary care, primary medical treatment, preventive health care and health education are delivered through a network comprising 17 government-subsidised outpatient polyclinics, catering to around 20% of general primary care needs, and almost 2000 private GPs providing the remaining 80%.

- Tertiary and acute care services are delivered through a network of 13 public and 16 private hospitals. Two not-for-profit companies, SingHealth Group and National Healthcare Group, operate public hospitals. Across private hospitals two providers, Raffles Medical Group and Parkway Group Healthcare, predominate. Both offer a similar standard of facilities and range of specialist services as public hospitals. Within publicly provided and private hospitals there are general hospitals delivering multi-disciplinary healthcare services and specialised hospitals, for example obstetrics, gynaecology and ophthalmology.

- "Step down" care targets intermediate and long term health needs of older people. Typically operated by welfare organisations, some receiving government financial assistance, this group comprises 6 acute geriatric hospitals, 4 community hospitals, 5 hospitals for the chronically ill, 56 nursing homes (including private nursing homes), 33 day rehabilitation and dementia day centres, 10 voluntary welfare home medical providers and 17 voluntary welfare home nursing providers.

Singapore is transitioning to a health care system that:

- emphasises prevention, health promotion and well-being over treatment of advanced-stage disease

- provides integrated, patient-centred delivery in place of fragmented, provider-centric systems

- encourages and facilitates patient self management to a greater degree

- utilises a common information network, controlled by appropriate data standards, to enable information exchange throughout health care and biomedical science research sectors, maximising integration and promoting research to improve clinical care and outcomes.

Singaporeans are taking particular interest in opportunities afforded by information technology, including for example:

- use of decision support systems for more consistent, evidence-based care, while avoiding duplicate testing and medical error. In future, such systems could deliver personalised medicine based on analysis of specific genetic factors indicating likely susceptibility and disease progression, and anticipated treatment response.

- ability for patients to access health information electronically and receive health alerts and reminders at home. For example advise when routine health screening tests are required, inform a patient's GP of test results, assist in locating appropriate specialists, make it more convenient for patients to make or change appointments, explain drugs and treatments and alert to potential adverse drug interactions.

In order to transform the existing, fragmented, Singaporean health system into one capable of delivering seamlessly integrated care, barriers between public and private GPs and specialists, hospitals and step-down care homes will need to be summarily dismantled.

Australia

Australia's funding model is different. It is fragmented as primary care is funded by the Commonwealth Government and secondary / tertiary care by the State.

While Australia needs to integrate care across the spectrum for better disease management, their capacity to change quickly is compromised as there is no population health funding model, nor patient enrolment. Furthermore, there are disincentives for integration between primary and secondary care arising from the split funding mechanism.

In this context corporate models of general practice have emerged, some of which are hugely successful from a market point of view. However, the way in which this has occurred is not necessarily conducive to the objectives of New Zealand's primary care strategy. Australia's model for consolidation is, at least up to now, one of service integration in a fee for service environment, which encourages throughput and cost shifting from primary into secondary.

Kaiser Permanente

Kaiser Permanente is America's largest non-profit health care system. It is arguably the closest example of what a DHB could look like in a competitive insurance market. Kaiser serves over 8 million members who pay a "premium", mostly subsidised by employers, but also by government for the poor and the elderly. "Churn" in the US market context, consumers shifting health insurers, or being forced to shift because of employer decisions, can be as high as 60% of members, but Kaiser's system generally succeeds in retaining higher numbers of members than other, for-profit, less well integrated plans.

Kaiser employs 12,000 doctors. They describe their system as "a prepaid integrated delivery system with aligned incentives". They see themselves as an organisation with a social purpose, quality driven with shared accountability for overall success. They believe in integrated care along multiple dimensions, but with a predominant focus on prevention and care management.

Kaiser comprises three parts:

6. Kaiser Foundation Health Plan provides and markets insurance plans

7. Kaiser Foundation Hospitals own and operate facilities

8. Kaiser Permanente is an umbrella organisation comprising several medical groups owned and managed by the doctors who work within Kaiser. Doctor groups effectively control Kaiser and work cooperatively with the funding arm to ensure both quality of care and economic viability.

The Kaiser model of prepaid integrated care, emphasising chronic care management and prevention, has long been threatened by aggressive insurance companies who select better risk patients, potentially leaving sicker patients to plans like Kaiser, who operate a more socially responsible model.

Kaiser has survived for several reasons:

- unique partnership between insurance plan and doctors
- emphasis on care management and prevention
- absolute focus on evidence based medicine and "making it easier for physicians to do the right thing".

The Kaiser system is admired globally. The UK's NHS promotes systematic exchange programmes between both organisations.

Kaiser has been under renewed threat recently because of the trend in US health insurance to promote "consumer driven health care". Individuals are encouraged to take greater personal responsibility for health costs through attractively priced plans, with high deductibles or "excesses". In other words, plans designed to pool the healthy and exclude the sick.

Kaiser has reacted not only by offering similar plans, but also by turning the system on its head, promoting patients as primary care givers. This is based on the simple notion that individual patients spend 99% of the time living with illness and only 1% of the time with a doctor. This reframe appeals similarly to healthy and sick and is effectively an integrated response to being "consumer driven". Concurrently, they are investing in electronic medical record systems, including personal health records for patients available via the internet.

Visitors to Kaiser are impressed by high quality of doctor leadership. All doctors undergo extensive management training. The overall "culture" of patient focus and shared accountability is also remarkable.

3. Relevance to New Zealand primary care strategy

The New Zealand Primary Health Care Strategy, published in February 2001, states "a strong primary health care system is central to improving the health of New Zealanders". Furthermore, "over five to ten years a new vision will be achieved. This vision involves a new direction for primary health care with a greater emphasis on population health and the role of the community, health promotion and preventive care, the need to involve a range of professionals, and the advantages of funding based on population needs rather than fees for service."

Specific aims of the Primary Care Health Strategy:

- Better health for all
- Reduced health inequalities
- More emphasis on population health
- Better access to primary care services
- Co-ordination, continuity, collaboration
- Community participation
- Primary health care fully involved in the health system.

Progress to date:

- 81 PHOs with > 3.9 million New Zealanders enrolled
- Capitation funding in place
- Improved access for most New Zealanders
- New and innovative services
- Growing community involvement
- PHO performance management system started.

Funding and planning is increasingly devolved. A new work programme is underway under the banner "a new way of working". This is designed to take the strategy to the next stage of implementation and has four work streams:

Funding and accountability

Service development

Infrastructure and sector development

Change management

A review of this programme and MidCentral's specific response indicates most activity identified focuses on PHO level, except infrastructure and sector development, which focuses on individual professional categories and IT generically.

The underlying theme of this paper is to suggest:

> "a new way of working" risks losing traction unless capacity and development issues in general practice are addressed.

In essence, DHB strategies supporting maturation of PHOs, while important and necessary, will not succeed unless comparable strategies support maturation of general practice into models that have both capacity and desire to deliver the "new way."

The following quotation from "Fit for practice and for purpose" advice to the Minister of Health (HWAC & MRG, May 2006) provides excellent background to issues of capacity and change at general practice level:

"Primary health care is a critical area for medical workforce development and has seen substantial change in the past 10 years. The major primary health care reforms were initiated in 2002 with the formation of PHOs and substantial increases in funding for the provision of primary health care services from Vote: Health. For most GPs these changes have come on top of a decade of change that has included the formation of independent practitioner associations, computerisation, and increased bureaucratic requirements for funding, quality assurance and re-accreditation. This has been stressful for GPs, but has resulted in many improvements and innovations in the delivery of primary health care.

New concepts and standards for the provision of primary health care have led to the need for GPs to incorporate themselves into a team environment, both within their own practices and with others who provide primary health care services. The need for administrative support in the form of practice managers has now become mandatory. As a consequence of all this activity, practices have become larger and more complex."

GPs have found themselves out of line with public policy in the face of such broad changes. Traditional models in which general practitioners offered fifteen minute consultations, paid by fee for service, are incompatible with health policy imperatives of spending more time treating major chronic diseases in lower cost settings on a pre-paid or capitated basis. GPs' inability to transform their business models translates into an overall sense of "being too busy to do any more". Population-based management programmes languish through perceived lack of capacity. Worse, GPs' failure to change is seen at best as unwillingness and at worst as obstinate resistance.

Viewed more constructively, GPs could see themselves as leaders of comprehensive multi-professional teams empowered to deal with complex conditions in integrated environments.

General practice is primarily a private business. Changes in and around general practice must take into account change management issues impacting and influenced by a proprietary business model.

The pertinence of UK and Singaporean changes is largely encapsulated in discussions about form and substance of general practice, along with Singapore's vision of an integrated electronic medical record.

The importance of Kaiser's experience is in their emphasis on patients being central to the system supported by doctors as leaders incentivised to do the right thing at the right time, using an evidence based approach.

4. Drivers/Incentives for change

Business model drivers

The need to develop "fit for purpose" organisational models

In his discussion paper "Size matters – making GP services fit for practice" (Nov 2005), Professor Paul Corrigan postulates the traditional small business model of general practice, although well-liked by patients, has been a barrier to primary care expansion and cannot continue to be the sole organisational model in future. While Corrigan's paper focuses on UK health services, his comments are relevant to New Zealand.

Corrigan identifies a need for scale. For example, transferring health services from secondary to primary care is intended by many governments. In order for this to happen, primary care needs to invest in equipment and technology currently well beyond the reach and risk tolerance of a 3-4 GP practice. Such investment requires scale that has to date been the preserve of secondary care organisations.

It is possible to successfully introduce well-resourced, larger primary care organisations, while simultaneously maintaining continuity of care and high quality, personal, local characteristics of existing services. Corrigan reviews four models within the UK health sector:

- Large GP-led provider organisations
- Publicly funded primary care provided by large private companies
- Publicly funded primary care provided by mutual co-operatives
- Multi-practice partnerships.

Services these models are capable of supporting include:

- services currently provided in secondary care, including advanced diagnostics and specialist outpatients being provided by GPs, nurses and allied professionals with a special interest. All reducing the cost of secondary services from the acute sector
- in-patient services, where a community hospital exists locally or in a nursing home
- all traditional primary care services, including district nursing, home visiting, midwifery, physiotherapy and chiropody
- appropriate community mental health services, such as community psychiatric nursing, counseling and cognitive behavioural therapy
- walk-in and out-of-hours services
- some social services such as home care assistance

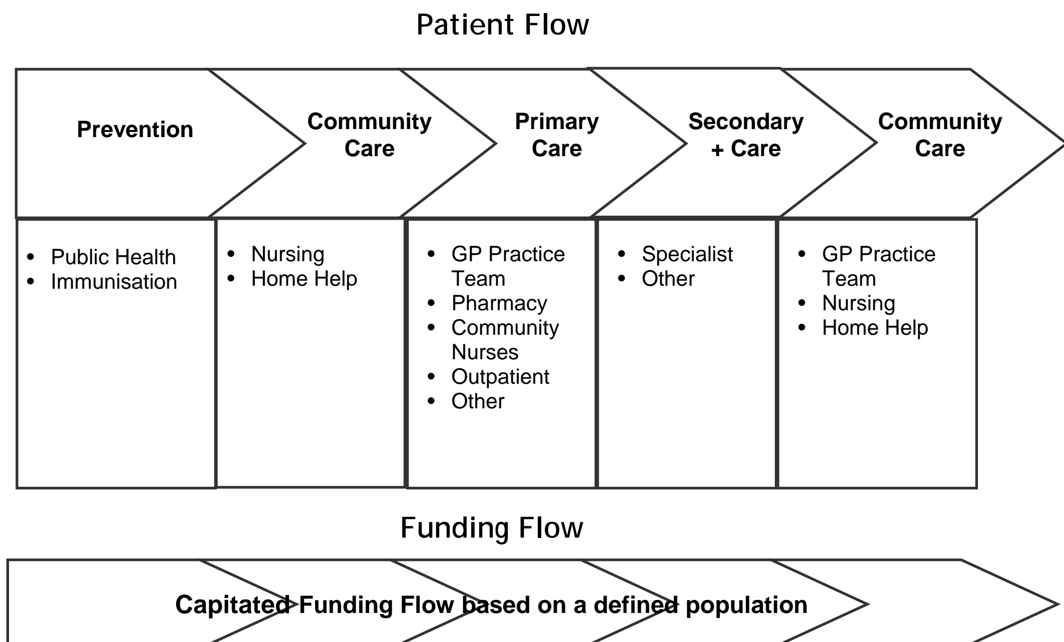
- pharmacy, dentistry and optometry
- local health information or initiatives and health trainers
- other services such as complementary medicine
- plus other services housed within the provider organisation extending its remit and effectiveness, for example voluntary services and Citizens Advice Bureau.

Strengthening the relationship between primary and secondary care

Despite clearly stated policy intentions of governments, shifting literally millions of patient interactions from secondary to primary care has yet to occur. Public health systems have much to gain from such a shift, as do patients who can expect to benefit from an improved experience as a result.

Recent trends towards practice-based commissioning in the UK introduce a mechanism for diverting secondary care funding to primary care. Together with scale, access to secondary level funding is key to enabling primary care investment in diagnostics (for example pathology tests and scans) and facilities (for example purpose designed primary care centres) to support expanded services and allow it to reach full potential. An appropriately controlled transfer of funding from hospital to community could actively guide the conversion of general practice from being the first stop en route to secondary care into a provider of total care pathways within a primary care setting.

Desired care provision and funding



Reducing health inequalities

Health inequalities, predominantly within multi-cultural communities, compound from one generation to the next. In addition, relative to need, disadvantaged tend to utilise health services less than those more advantaged.

Achieving effective intersectoral relationships is another longstanding governmental policy intention. Not only between primary and secondary health, but also encompassing social service support, whereby social service packages become part of primary or secondary care, above all for patients with chronic conditions.

Closer intersectoral relationships can reduce inequalities while also improving patient experience and ensuring resources are efficiently and cost-effectively deployed. Unfortunately there are no clear answers yet to how this might be best achieved. Nevertheless, Corrigan mentions an important difference between health and social services. Health is often free at the point of need while social services frequently involve means testing. These two approaches will need to work in concert for successful intersectoral service integration.

Convergence of public and personal health

Public health and primary care general practice have traditionally operated as distinct and largely unconnected services within communities. For a population management strategy to be effective the two need to come together.

Recently the New Zealand Ministry of Health has aimed to leverage the community's positive perceptions of primary care general practice to maximise effects of public health promotion. There are over 14 million GP consultations each year. This figure does not include numerous other points of contact within primary care general practice. It creates an opportunity to enhance effectiveness of public health promotion investment and efforts. However, limited capacity within general practice has made it relatively difficult to realise such gains.

Opportunities exist to address capacity limitations within general practice and improve the impact of public health promotion. The credibility of GPs to patients, patients' access to their GPs (an average of nearly four consultations per person per annum) and continuous refreshing of the patient age / gender database, captured for enrolment purposes, creates opportunities for consistent, effective health promotion messages to be delivered to New Zealand's population.

Community health as part of primary care

In general terms, community health is health care provided in a non-clinical setting. It includes Plunket, district nurses, disease-specific NGOs (for example Cancer Society) and home care. As the health system re-engineers to recognise "patients as primary providers of acute illness self-care and chronic illness self-management", the importance of community care to them will only increase.

Increasing international demand for health professionals

In New Zealand and internationally, myriad factors including ageing populations, increased incidence of chronic diseases, changing consumer expectations and evolving working conditions, are heightening demand for health professionals.

The international labour market for medical practitioners is increasingly competitive. This impacts numbers of both locally and overseas-trained doctors available to provide services in New Zealand. Furthermore, with the high quality of New Zealand trained doctors recognised worldwide, we are likely to lose our own practitioners to countries offering better remuneration and working conditions.

General practice trends

Relevant trends and issues for general practice include:

Shortage of medical practitioners

- A perceived shortage of medical practitioners in New Zealand particularly in general practice, pathology and psychiatry.
- Within general practice shortages are worse in rural areas. Rural areas find it difficult to recruit and retain doctors due to isolated working conditions, difficulty in attracting locums in order to take leave and onerous rosters and on-call duties.
- General practice shortages burden acute secondary care facilities and budgets.
- Health workforce shortages are not forecast to improve (NZIER 2004). Projected worker shortages across the total health and disability services range from 11% (7284) by 2011, to 42% (28117) in 2021.

Shortage of primary care nurses

- A shortage of nurses both globally and locally. Nursing shortages have been publicly acknowledged as an issue in New Zealand since 1999.
- In 2001 there were 95 active primary care and community nurses per 100,000 populations nationally. At that time, MidCentral's ratio was 106/100,000.
- There is an acknowledged shortage of primary care nurses due to nurses leaving primary care in favour of more lucrative hospital roles ($160-$200 per week higher).
- In 2001 the Primary Care and Community Nursing Workforce Survey indicated primary health care and community nursing workers are ageing, with approximately 20% aged over 55 years.

- New Zealand does not lack trained nurses, but rather lacks nurses practicing in the health system. MOH research (2000) showed non-practicing nurses opted not to practice due to parental responsibilities, unavailability of flexible working hours, unattractive salaries and diverse issues including stress, workloads, poor management, bureaucracy, reduced satisfaction and disillusionment with the health system.

The health workforce is ageing

- An ageing health workforce, lifestyle choices and changing work arrangements (like the rise in popularity of part time work), are contributing to shortage of medical practitioners. This is especially true of GPs.

- 18% (124) of respondents to RNZCGP's 2005 member survey intend to retire by 2010. If they do, NZs GP workforce will face significant crisis, compounded by diminishing numbers of younger doctors choosing general practice.

- Some younger GPs (36-50yrs) are already contemplating retirement from general practice. A majority mentioned "having had enough of the general practice environment in New Zealand." (RNZCGP 2005) Many GPs over 50 are contemplating retirement, some would prefer to work as locums or in part time positions.

- There are many ways in which general practice working environments could be improved, retaining existing GPs and attracting new young recruits.

Recommendations for improving general practice

Part II of RNZCGP's 2005 survey report makes the following recommendations:

- Ensure national workforce planning addresses changes in future working arrangements and demographic profiles to assist GPs in providing quality patient care.

- Examine and adjust infrastructural and contractual issues within current business models that currently inhibit multi-disciplinary teamwork.

- Reverse the trend that is making self employed general practice the least attractive option by developing new business models, recognising and supporting contributions of small business to delivering quality primary health care.

- Commission a stock take analysing current bureaucratic and compliance requirements for relevance and efficacy in the delivery of quality patient care.

The following recommendation is made in "Fit for practice and for purpose" advice to the Minister of Health (HWAC & MRG, May 2006):

"New Zealand should improve its retention of New Zealand-trained doctors, in particular by:

i supporting part time specialist training roles for practitioners

ii for those who require it, a decrease in on-call requirements for practitioners reaching the end of their working years, with the aim of retaining experienced practitioners in the workforce for as long as possible

iii for those who require it, a decrease in clinical / practice requirements for practitioners reaching the end of their working years

iv the development of job-share roles for those who may want to practise on a part time basis

v developing support networks, particularly for doctors in a rural setting

vi mitigating the possible impact of debt

vii the various options of bonding, scholarship, incentive schemes and debt relief to attract health professionals into areas of need"

2003 GPVEP (intensive General Practice Vocational Education Programme) class trainees of both genders identify the following influences on practice choice, listed in descending order (NZMA May 2004):

- lifestyle
- after hours call requirement
- partners' career
- immediate family
- income
- continuing education opportunities / requirements.

5. Scenarios from the future: looking back from 2010

Sections 5 to 7 project forward to 2010. This requires the reader to imagine the vision has been realised and reflect on what has transpired to get primary care/community care to this point. Sections 6 and 7 reflect on the implications for funders and providers in this new environment.

Bridging care demand and primary care capacity

In 2006 many DHBs were worried about the future. New Zealand's population was ageing. By 2020 the number of people aged 65 and over is projected to increase by more than 70% over the 2006 figure to around 800,000. With OECD data indicating per capita health expenditure on the 65+ age group at three to five times that of the 15 – 64 age group, long term planning by many DHBs looked to the gap between projected future demand and available capacity.

Their fear was that if primary care could not expand to provide a greater range of health services in a community setting, hospitals would be placed under even more stress. This stress would manifest itself in two ways:

- need for more beds
- need for larger emergency departments to cater for after hours traffic.

For example, in 2005 Counties Manukau undertook a hospital bed modelling exercise, which forecast that an additional 500 beds would be required by 2025 unless significant changes were made in the model of service delivery. Such an investment in hospital expansion was unaffordable. Instead Counties Manukau set ambitious targets to reduce ambulatory sensitive hospitalisations. Two principles were pivotal to this design:

- decentralisation of specialist services that were not facility dependent
- aggregation of general practice and co-location with DHB community services.

MidCentral DHB embarked on a similar programme.

Workforce was a second concern. Since 1997 GP numbers per head of population had been flattening and, since 2000, declining (NZMA 2004). In 2004 the total ratio of active GPs in New Zealand had been 73/100,000 population, which equated to an average doctor: patient ratio of 1:1369 (MCNZ 2004). At that time, MidCentral's average ratio of active GPs was the fourth lowest of the New Zealand DHBs at 66/100,000 population (or 1:1515).

In an environment with obvious constraints on GP workforce availability, what did increased primary care capacity mean? Examples of expansion within primary care general practice at that time included the following:

- enhanced chronic care, including longer consults spread across primary care teams to include education and management components adjunctive to clinical considerations
- improved coordination of diagnostic services
- transfer of services currently funded and administered by hospitals into a community setting
- decentralisation of non-facility dependent specialist services.

However, major issues were:

- making general practice more attractive to new entrants
- complementing flattening GP supply with nurse practitioners, nurses and health care assistants.

Planning focused less on decreasing patient to GP ratios, but rather on increasing actual capacity by surrounding GPs with resources, allowing them to specialise and provide leadership to a multi-professional team.

While professional organisations argued for a lowering of patient to GP ratios (the Australian Medical Workforce Advisory Committee recommended a ratio of 111 per 100,000), MidCentral looked to integrated care models such as Kaiser Permanente in California, where primary care physician "panels" typically exceeded 2000 patients.

Redefining terminology

Traditional terminology was replaced, reflecting the new paradigm. Instead of referring to health services according to outmoded hierarchies of primary, secondary and tertiary care, MidCentral began to speak of a continuum comprising:

- community-based preventive care (encompassing personal and public health perspectives), where most health care activity took place
- institutional care for interventions that required hospital infrastructure and support, followed by
- community care for those who:
  - had experienced a hospital or institutional event and required rehabilitation or ongoing chronic care and management support
  - required palliative care.

Regarding patients as customers rather than consumers was fundamental to the vision. Patients were envisaged as managers of their own care and partners in improving health and cost outcomes. Kaiser Permanente built a comprehensive case for self care and self management. Their approach was three-fold:

1. Rethink solutions

    - Patients as primary providers of acute illness self care and self management of chronic conditions

    - Behavioural interventions designed by effectively and efficiently addressing psychosocial needs.

2. Restructure systems

    - introduction of group appointments for patients with similar or mixed health conditions and where some individualised clinical assessment and intervention services were also available (in practice this could be scheduled or "drop-in" group visits, cluster visits, and cooperative care clinics directed by a physician or other recognised health care professional)

    - technology utilisation, for instance web-based care tools, email support and virtual consults.

3. Retrain staff

    - enhanced understanding, skills and confidence of staff and health professionals in collaborative communication and care

    - With appropriate support from a health care provider team and with overarching systems to provide access to information and advice, patients effectively became chief providers of their primary care.

Rebalancing the workforce/redefining the workplace

Several factors contributed to rebalancing the primary care workforce, beginning in 2006. These were:

- changing service delivery models

- expanding range of services provided in a primary care setting

- deployment of available health workforce to best effect.

Change began by encouraging general practices to consolidate and aggregate into new primary or community centres. Not every GP wanted to become part of a larger business and not every GP wanted to be in business. However, every GP wanted involvement with the new model of integration.

These centres allowed general practice services to move into scaleable settings. Services could be provided for higher numbers of patients without a corresponding increase in practitioner numbers. A high proportion of routine care moved to being nurse led, with general practitioners dealing with more complex cases and being able to develop their own specialties. GPs became comfortable with "nurse led" clinics as interaction with visiting specialists up skilled nurses, complementing their vocational interests and training.

Support services included relieving health professionals from administrative tasks to maximise their time for high value, patient interactive work.

Over 60% of general practitioners in MidCentral now practice from centres such as these. Services provided vary slightly, but generally include:

- General practice
- Primary care nursing, including practice and district nursing
- General practitioners and nurses with special knowledge and skills (especially in management of long term conditions)
- Dispensing and clinical pharmacy
- Primary midwifery clinics
- Community mental health
- Medical and surgical specialist clinics (not requiring specialised equipment)
- Dental
- Physiotherapy and other allied health therapies
- Radiology
- Laboratory specimen collection and some on-site processing
- Procedure rooms
- Extended hours accident and medical and community helpline
- Observation facilities, with some centres having short-stay beds and others having direct relationships with nearby residential care facilities
- Day stay surgical facility and beds.

Centres also provide a base for outreach workers, including community health workers, clinical and support services delivered in people's homes, public health nursing, community rehabilitation, and needs assessment and service co-ordination (NASC). In high needs localities, other government agencies also locate customer service offices in the centres.

Primary and community health centres rapidly became key delivery 'hubs' for local communities.

As a result MidCentral now comprises mostly large consolidated general practice entities with an average of 15 GPs per centre. Another group of FTE GPs allied themselves to the PHO as employees consistent with Healthcare Aotearoa's model. A further 20 FTE GPs remained in small (1-5 GP) practice units and rely on the PHO and its MSO for business and clinical support. A total of 110 FTE GPs support a population of 180,000.

GPs now perform the role of a community generalist, providing clinical leadership and interventions for minor surgery, chronic disease management and emergency medicine as well as being available to fulfil the traditional role as family doctor.

A number of routine interventions have been delegated to skilled nurses:

- taking medical histories, examining and treating patients, requesting and interpreting laboratory tests and X-rays and making diagnoses
- treating minor injuries, including suturing, splinting and casting
- recording progress notes, instructing and counseling patients and requesting or administering therapy
- supporting on call or after hours services.

Remembering general practice is a business

Recognising general practice had been, and would remain, a business for most GPs was one of the main factors of success in this change strategy.

DHB funding could not cover every individual need. A major strength of the general practice private business model has been its ability to innovate in developing supplementary funding streams.

Taking a workforce perspective, the need for general practice to be able to compete with the rest of the health sector for workforce was acknowledged. This included attracting high quality professionals by providing attractive working conditions, competitive remuneration and rewards.

Also, to attract capital investment required to transform general practice from a cottage industry to an efficient, effective health care delivery vehicle, good commercial returns were essential. In 2006, the UK realised this and began attracting private investment into primary care general practice.

As a result of the DHB encouraging aggregation and consolidation, new models emerged, which increased capacity and provided for the majority of GP concerns as outlined in section 4 above:

- lifestyle
- after hours call requirement
- partners' career
- immediate family
- income
- continuing education opportunities/requirements along with other considerations:

- entry and exit provisions
- provision for retirement

Distinguishing PHO role from consolidated general practice community care

The DHB has been able to define the PHO's role to deliver the MoH and DHB's prescribed purchases of care for a publicly funded health system and provide population management tools and processes. This differentiated the role of the PHO from the community or general practice centre role of performing to service specifications while also generating additional revenues from other funding streams.

At PHO level, public health system priorities are now organised and programmes exist to coordinate care across the PHO population. Leadership is provided from the PHO in liaison with other DHB providers, especially institutional care providers. Clinical leadership is also provided to intersectoral initiatives designed to reduce health inequalities and coordinate health promotion. Individual practices, in particular those opting to remain small, also enjoy clinical leadership and governance.

Information technology as an enabler

Consolidated and amalgamated general practice offers an opportunity to implement various technologies and tools just emerging in 2006.

A distributed electronic medical record (EMR), containing relevant clinical information for each specific encounter, is accessible to health care professionals at the point of care and is fully integrated as patients travels through the system.

Key elements:

- A common practice management system (PMS) operating on an ASP, or thin client architecture. This is used by nurse practitioners, GPs, physiotherapists and others. PMS systems provide workflow tools facilitating each encounter. For example patient demographic and clinical history, appointments, revenue capture and allocation, formulary, screening, recall, prompts and reminders, order entry systems for pharmacy, radiology, referrals etc.
- Population management tools, providing aggregation of practice population and reports at every level
- Decision support services, supporting workflow with evidence based recommendations and patient specific outputs
- Secure messaging pipes to external providers
- Secure portal for patient / doctor / health care professional interaction

- Patient self-management tools for use in the home or in a mobile context

Well designed facilities trigger change

Shifts in emphasis and redesign could only be achieved by way of well planned and well implemented infrastructure development within community based health service sectors. While infrastructure development includes leadership, workforce development, IT development and more, none of this would have happened without a major re-think of health facilities.

Centres facilitated local delivery of a wide range of services across the continuum from prevention, diagnosis and treatment, through to rehabilitation and continuing care for people with long term conditions. Care previously provided through day admission or overnight stay in hospital was now provided as day attendance at a primary and community health centre, or in the person's home through outreach services.

A model for the "ideal" community health facility emerged:

- An ideal community health centre is purpose-built, housing "core services", like GPs, nurses, laboratory, X-ray, pharmacy, physiotherapy and visiting specialists, along with non-core services, such as dental, dietary, podiatry, Plunket, community nursing, counseling. Principal considerations are patient convenience and practical efficiencies presented by co-location.
- A well planned, efficient internal layout providing patient privacy.
- Centralised communications and IT systems ensure patient records are both accessible and secure
- A meeting room for community health team meetings, case conferences and patient and staff education
- Space for antenatal classes and community focused health prevention and promotion activities
- Generic consulting space for visiting specialists
- A large procedure room for minor surgical procedures, like endoscopies, cystoscopies and vasectomies
- An after hours facility
- A call centre provides centralised support for all businesses in the centre as well as a helpline

6. Implications for funders/insurers

In 2007, the Ministry of Health completed devolution of full authority to DHBs for defining and implementing the health plan for their district.

For the first time, MidCentral was able to take a total systems view of health care in the region. Maturation of PHOs and increased capacity in primary care, allowed for effective integration of public health activities and initiatives with related sectors.

In 2010, more complete and consistent data streams from all clinical encounters flow into population database repositories. MidCentral combines epidemiological and actuarial data providing accurate projections of what needs to be done to whom, by which provider and where, for each segment of the population. Cost benefit analyses, based on increased productivity and activity, combined with Qaly analyses produce an effective tool for determining priorities.

At a micro level, effective deployment of decision support systems within the workflow tools available, allows aggregated views of effective versus ineffective treatment. Data are now available to compare effectiveness of historical interventions, to what best evidence suggests should happen, to what actually happens. In other words, outcome measurements have arrived and evidenced based medicine is practised at the moment of care.

This allowed pricing and purchasing functions to take prospective views of health risk, based on what is wrong, taking a disease burden perspective, and what is known to work best, taking a treatment perspective. Basing future decisions on past experience is now outmoded. With confidence arising from knowledge based predictions of risk, more precise specifications of what the health system ought to deliver are included in purchasing contracts. Performance indicators and accountability are now the accepted norms for provider behaviour.

This means a longer term view is now formed and chronic care management programmes typically project out for ten years or more. This was only just emerging in 2006. The health system is more stable because of the power of knowledge and relative accuracy of demand projection.

From a demand perspective, increased capacity and knowledge residing in primary and community environments means demand on hospitals for elective and acute services is more accurately managed. The DHB now accurately defines the type, extent and quantity of services it provides its district.

This helps individuals understand their risk and risk aversion, supporting greater clarity between public and private service provision.

Defining public and private coverage is clearer from insurance perspectives. Some DHBs have aligned themselves with a private insurer to manage cost-shifting risk, now mitigated by better information, and provider aligned incentives. Other DHBs encouraged community funding projects (for example corporate sponsorship) to

evolve into community risk pooling schemes operating on insurance principles. This allowed defined benefits and services to supplement the DHB service.

7. Implications for providers

Achieving this vision of wider ranging, higher quality services required significant change. Change took place in the premises from which primary health services were provided and in the ways community services integrated, both internally and externally with hospitals.

An increased population and shortages in community based health professionals, has necessitated new ways of working to ensure an effective health service. General practitioners now work in multi-professional teams, deputising more work than in 2006. This enables them to provide an adequate health service to the population they serve and improves outcomes through effective patient management. Teamworking has resulted in nurses becoming more generalist and taking on a broader range of tasks. Health assistants comprise a significant workforce component, providing health-related administrative support and a basic health contact service for patients with straightforward needs.

More services are now provided in the community. Moving a clinician to a population is more efficient than all patients travelling to population centres such as Palmerston North. An example is migrating NGO services for palliative care from hospitals to communities. Hospital specialists provide outpatient clinics and first specialist assessment services in outlying community health centres. This has allowed transfer of knowledge and skills to GPs interested in pursuing a specialty. Efficiency has improved due to easy access to these services. Teamwork and communication between community-based and visiting specialist health practitioners has improved, benefiting patients.

Information management is superior. Data is shared across the network and information is swiftly provided to clinicians when needed. Process duplications are reduced and better quality information is centrally held. This means the same patient information is available to both community-based primary care workers and hospital personnel. Patient concerns are more proactively addressed, which is good for patients and funders.

Responding to changing needs like increases in chronic disease, MidCentral DHB and providers in the district have reengineered delivery of patient care episodes. Group consultations are provided for people with common conditions ensuring appropriate care is delivered. This has enabled MidCentral DHB to proactively manage associated risks. The nature of consultations with individual patients has changed. Healthy people requiring relatively infrequent, simple interactions often do so by telephone or internet and email. This maximises clinical time and ensures patients have prompt access to care. It is especially effective in rural populations. Historically, patients in rural areas travelled a long way to access health professionals. If patients need to be seen more urgently, health professionals either encourage them to make an appointment at their local community health centre, or recommend alternative action.

Health professionals are supported by electronic and administrative systems minimising time spent on paperwork. Better teamwork supports general

practitioners, complementing their work with the patient and ensuring awareness of all interventions.

From a business perspective, funding relating to each patient comprises various sources of state funding to subsidise patient care, together with patient co-payments. Potential to over-service patients, or feel discouraged by operating in a team, has been removed by introducing rewards recognising time, productivity and outcomes. To cover care costs there is less fee for service funding and greater levels of capitation oriented funding. Taking into account total costs of providing care, increased emphasis on capitation funding has assisted community health services in ensuring health spend is appropriately and efficiently applied.

The health workforce, including general practitioners and others in the community health centres, receives a combination of base salary and performance-related remuneration. This reflects achievement of efficiencies and outcomes, including measured health outcomes and patient satisfaction.

Developing destination community health centres for delivering the majority of health services in those sub districts, enables a scale of business and facility not previously possible. Combining general practice, after hours services, pharmacy, laboratory, mental health, pathology, public health, community services, home care and some inpatient services within community health centres has been paramount to achieving current levels of coordination and access to health services.

General practitioners overcame their ambivalence to after hours service through effective rostering, sharing the load with more GPs, delegating some services to nurses, or aligning with independent accident and medical clinics.

It is now possible to deliver services in the community in a sustainable way in the key MidCentral centres of Horowhenua (Levin), Manawatu (Feilding), Palmerston North (City) and Tararua (Dannevirke). General practitioners situated outside these centres operate satellite clinics with high levels of information system integration and communication between them.

8. MidCentral – back from the future: how to get there

2006/7 MidCentral is already changing

- A strategic plan is in place
- PHOs are established and an umbrella management services organisation provides administrative support for devolved funding
- Workforce planning has produced a network of diabetes, cardiac and respiratory nurses to complement general practice chronic care
- Planning is underway to migrate some NGO and hospital services to PHOs
- A paper has been commissioned to explore clinical collaboration between hospital clinicians and community providers
- Funding has been approved for community programmes covering podiatry, cardiology, heart failure, cardiac rehab, pulmonary rehab and green prescriptions
- A strategy is being created for a comprehensive regional IT infrastructure
- Workforce initiatives are bringing more Maori health professionals into the regional workforce
- Intersectoral initiatives are underway, for example promoting the HEHA programme into schools and engaging local businesses in raising awareness of healthy lifestyles
- This discussion document has been commissioned to begin exploring ways to develop broader capacity within general practice

Organised general practice: how can size be achieved?

KPMG's paper on the Australian market (2001) indicated that various combinations of design elements were worth exploring under different ownership and practice structures. Such design elements include:

- Scope of services – potential to improve access utilising for example a balance of full and part time practitioners in appropriate ethnic/gender balances, 24/7 on-call cover, extended clinic opening hours and specialist services (like population health, women's health, OSH)
- Scale of practice – potential for economies of scale through shared administrative/nursing overheads, accreditation, computerisation
- Governance arrangements – appropriate representation for a medical centre Board to establish broad policy, monitor performance, establish operational rules acceptable to the profession, the community, government

- Business structures – achieve efficiency gains by enabling employment of a dedicated practice manager, administrative staff, nurse practitioners and technicians
- Asset management – achieve advantageous leasing arrangements such as a purpose-built facility owned by a third party property investor
- Vertical integration – offer specialist clinics, ancillary medical services, pharmacy, diagnostics, day surgery under ethically safe and appropriate contracting structures
- Horizontal integration – co-locate with a broader array of primary care, OSH, alternative and lifestyle services
- E-commerce practices – online access to databases, direct ordering and diagnostic service reporting, direct access to specialist advice, referral appointments, hospital admissions and bookings, and pharmaceutical prescribing
- Legitimate use of market power – commercial but ethical arrangements with specialist and diagnostic services
- Improved differentiation of general practice services – increase consumer choice by offering differentiated products and pricing structures, for example routine vs complex consultations; walk in vs appointment; peak vs off peak; home, centre, online or phone consultations.

Section 2.1.1 referred to Smith, Ham & Parker's future for primary care under a market model and noted "...new entrants to the primary care market have an opportunity to develop premises that support innovative models of care, particularly for the management of long term conditions. The co-location of primary care and community services together with diagnostic and intermediate care services could potentially deliver a 24-hour model that incorporates the Kaiser Permanente principles of integrating inpatient and outpatient care together with coordinating all aspects of a care plan, both in and out of hours."

A number of models could and have arisen in New Zealand:

Co-location without shared services

A limited cost-sharing arrangement involving individual practices on the same location sharing facility costs. Each practice functions as a separate entity.

- Individually owned practices share the same facility
- Each GP practice is individually owned
- Each practice pays a fee covering facility costs (rent, power, water)
- Each practice provides its own resources (administration, reception, IT)
- Each practice retains all income earned
- Each practice maintains a separate enrolled patient population

- All business management occurs at individual practice level

This is a common form of general practice today - in effect an "enlarged cottage"

Co-location with shared services

Expanded cost sharing featuring partial amalgamation. Individually owned practices share the same facility and selected resources.

- Each GP practice is individually owned
- Each practice retains all income earned
- Each practice pays a fee to the service company covering facility and selected shared resource costs (administration services like reception and IT)
- Each individual practice maintains a separate enrolled patient population
- Business management occurs at individual practice level, although the service company may provide "day to day" administration services and cost management

Hastings Medical Centre is an example of a hybrid between 8.2.2 and 8.2.3

Co-location and amalgamation

A single trading company operates from a purpose-designed centre. Cost sharing is maximised by fully amalgamating resources and business management. GPs are encouraged to focus on providing quality care, with minimal, if any, involvement in running the business.

- GPs (not necessarily all) are shareholders in a single trading company
- This single company receives all income and pays all costs
- This company employs or contracts all GPs
- All assets, goodwill and enrolled patient population belong to a jointly owned company
- Profits are shared amongst shareholders on a pre-agreed basis
- Business management occurs at an amalgamated level.

Central Med in Tauranga is an example

Shareholder employee versus employee only

Under a fully amalgamated, co-located model options include:

- Owner/shareholder
- non-shareholding employee or contracted GP
- working on a full or part time basis
- working variable or flexible hours to fit in with other commitments (like family)

Shareholding GPs in a single trading company group practice could participate in governance as directors, or could choose not to. Shareholder agreements need to be carefully constructed to reflect variations on a theme, or specific "owner operator" preferences.

Revenue share models

One revenue share model is a variation on the above models. A third party provides management services for a fixed percentage of gross income, either as an arms length provider or, in the case of option 8.2.3 above, a co-owner of the amalgamated business.

Another variation sets shareholdings and fixed or variable income on the basis of activity and revenue earned.

Benefits

Compared to a co-located shared services model, full amalgamation and co-location offers additional benefits:

Benefits to the community

- Enhanced recruitment and retention of GPs
  - More certainty of future service provision
- Improved access to services
  - Cohesive management for service planning (for example seeking contracts to fund "non traditional" GP services would result in an extended range of services)
  - Doctors and nurses would provide services in a more coordinated way when not focused on individual business interests (for example sub-specialisation would improve both service quality and range)
  - Potential to expand opening hours with a flexible, team approach

- Certainty of service provision if a patient's own doctor is unavailable. Patients would still choose their preferred doctor, but it would be easier to change or see another doctor
- Combined, coordinated practice resources would enhance provision of patient advocacy services when patients are referred to other providers.

Benefits to GPs

- Opportunities for more flexible work arrangements to meet work / life balance needs
- Enhanced team dynamics and collegial support in a non-competitive environment conducive to cohesive, integrated teams
- Increased opportunity for sub-specialisation according to GP interests and increasing the range of services available to patients
- Increased opportunity to interact with devolved hospital services and visiting specialists
- Combined resource for executive management:
  - relieve the day-to-day management burden
  - provide higher level, strategic management for practice sustainability
  - plan and progress services to improve the community's health
  - pursue future, policy-driven expansion opportunities (like contracting to provide expanded services within primary care)
  - develop relationships with other providers to enhance service provision (for example Plunket, local hospital and DHB community-based services)
  - undertake succession planning (for example fostering registrars and visiting students)
- Shared responsibility for providing cover, minimising expensive and difficult to secure locum cover
- Improved cost effectiveness for general practice businesses (including management, accounting, legal, facility and administration costs)
- Ease of employing or contracting GPs and for the income generated to be accrued to a single entity, without shared income-related, cross practice tensions

Benefits to patients

- Increased range of services (via funded contracts to extend services, and doctor and nurse sub-specialisation).
- Potential to expand opening hours with a more flexible GP workforce. For example a part time GP may hold evening sessions to improve patient access and reduce GPs' after hours' commitments without concerns about "losing patients to the evening service".
- More certainty of future availability of general practice services due to improved recruitment and retention of doctors.
- More certainty of optimum services being available if a patient's own doctor is unable to work. In a single practice trading company, there is shared responsibility to ensure all enrolled patients receive services.
- Easier to change doctors if a patient wants to see another doctor (even for one episode) without need for clawbacks or de-registering and re-registering in a new enrolled population.
- Enhanced patient advocacy and support when accessing services elsewhere. This would be beneficial to patients accessing regional, secondary or tertiary hospital services.

Role of the facility

Section 5.7 of this paper focuses on the ideal facility as viewed retrospectively from the future.

Of equal significance today, is the prospect of a new facility and ensuing opportunities to encourage a paradigm shift in the outlook and attitude of individual GPs.

When planning a new facility, GPs can be encouraged to envision the world awaiting them in a larger, more comprehensive service environment. Combining planning with a future vision provides an effective change management approach.

Additional opportunities afforded by combining the new corporate business model with participation in a new development include:

- underwriting the development
- co-ownership of the end result, or
- beneficiary of profits on sale.

Alternatively, the prospect of tenancy may alleviate the pressures of existing facility ownership and offer security in becoming part of a bigger entity, rather than

owning a small business with little goodwill attached and for which there are few buyers.

A facility can act as more than a place to work and integrate; it can provide a vehicle to differentiate GPs of similar clinical but varying commercial vocation. Some GPs will want to be owners, others tenants. Some will want to be shareholders, others employees.

Facility Development

There are a number of approaches to facilities development, but in each case it is critical to ensure both a critical mass of GP tenants and their buy in to the scale opportunity, both financially and philosophically.

It is important that the initial focus be on a shared vision for the activity to be performed in any new facility, and that thought be given to the changes in individual business models implicit in consolidation. Many GPs view relocation as simply moving premises, and no prior thought is given to the benefits of amalgamation, and the change management issues which arise.

Inevitably, a new building means higher rentals than before, and many GPs feel unable to bridge the gap between current and future operational costs, unless they are facilitated into a business model which allows efficiency through scale, through business amalgamation, or at least shared services.

A new facility also means that GPs can either be relieved of, or more involved in, the issue of property ownership.

For example, a third party developer could take on the role of site selection, design and build, tenanting, fit out etc, and either remain as property owner/landlord, or sell to another investor. In this model, the individual GP, or group practice, are passive to the process, although they have to make a commitment to lease, before any developer will initiate the development (land acquisition and construction). As part of the commitment to lease, the GPs and other tenants will generally have some input into design, but no real power to decide. The financial risk to the GP in this model is initially low, apart from any immediate gap in rentals from current to future. The health system risk is that GPs simply transfer current operating models into the new environment without engagement in a process of reengineering. The longer term financial risk is that they lose control of their facility and a key business cost (rental) as the facility changes hands and new investors seek an appropriate (to them) return.

A more active model of GP involvement would see the GPs (and potentially other healthcare providers) form a company to undertake and underwrite the development themselves, using consultants or "developer/partners" to provide expertise and reduce risk. The GP group takes a head lease in the new facility, takes responsibility for arranging sub-tenants, and potentially retains ownership through the development vehicle, or on sells to a third party. In this case the GPs are actively engaged in all aspects. This sense of ownership, whether or not it means an ultimate end ownership, offers a potentially more sustainable solution, in

that the economics of change are grappled with and understood from the outset. Business model change in this environment generally becomes easier because it has been thought through in advance; the GPs own both the problem and the solution. Longer term 'control" over building rentals will also have appeal to at least some of the GPs involved. From an overall cost perspective, an owner/occupier supporting long term leases, and avoiding the costs of a third party developer's margin ought to be an attractive proposition to banks funding the development, which in return should translate into lower interest rates.

Individual GP perspective

The individual GP's perspective, as alluded to in sections 3 and 4.5 will be broadly based around four or five core issues:

- Will being part of a bigger group or entity impact the doctor patient relationship?
- Will my clinical independence and leadership be threatened?
- Will my income suffer?
- If so, will I be compensated by a better work / life balance?
- Am I being forced to change?

This non-exhaustive list of issues is both understandable and legitimate and must be overcome if change is to be introduced successfully.

Fundamental income issues become a reality once economics of renting space in a new building become apparent. Rentals will increase and must be absorbed either by economies of scale in other cost areas, increased revenue, or both.

Section 5.4 emphasises retention of the private business model as one, if not the predominant future form of organisation. To flourish, private general practice needs expanded capacity to earn from the publicly funded health system and from alternative sources of income, such as ACC, out of pocket expenditure, private insurance and business.

Other issues need careful management, predominantly through shared decision making and the reality of a shared journey, as opposed to a mandatory change.

An integrated IT environment

Section 5.6 outlined the capabilities in existing and emerging IT systems to facilitate more effective and efficient care. The application of these systems and tools becomes much easier in larger facilities, and in larger business environments.

While it is true that GPs have jealously guarded the right to "own" patient data, this has more been a function of uncertainty as to the purpose of shared data systems than a claim to proprietary rights.

Shared ownership through business amalgamation breaks one of these barriers down. Greater interaction with hospital based services further breaks down the barrier. If GPs can see the benefit of a shared view of patient progress across the health system, from a multiple perspective of improving quality of care, reducing annoying repetition of tasks, devolving responsibility to primary care, and facilitating collegiality and teamwork, then the systems available will be used.

If the GP fears that data is being stored for non-specific purposes, and shared for non-specific purposes, then the barriers will go up.

Two examples of applications which can more easily operate in an integrated environment are as follows:

- Screening and management of cardiovascular disease and diabetes: Decision support tools provide the clinician with a consistent view of actions to take, based on the NZ evidence, and these actions integrate into the Practice or Patient management workflow systems in both primary and secondary care. Patients are identified for screening within the Primary PMS, nurse led clinics work them up to a consultation with the GP for management (or recall if the risk is marginally below the guideline threshold), and information from each encounter is stored centrally at the PHO level, as well as the individual clinic. The DHB receives an aggregated view of these transactions. When an event occurs, the available records are integrated into the hospital system, and the GP has access to the patient record while the patient is in hospital. Upon discharge, the same decision support system provides a care plan to be implemented in primary care. The PMS system in both environments turns recommended actions into electronic order entry, for example, the electronic ordering of a prescription or blood test. and electronic care planning frameworks

- Elective service referrals: Scoring tools at the GP level assist in determining eligibility for elective services. Any successful score is transformed electronically into a referral, and the hospital automatically accepts the referral without the costly process of first specialist assessment. Frequent interaction between hospital specialists and the GPs at the new facility, support the use of and trust in the electronic tools. When thresholds for referrals are not met, decision support kicks in to provide evidence based guidance for appropriate primary care management.

A possible Blueprint for MidCentral

Palmerston North

In Palmerston North the development of two to three larger GP centres with 10 plus GP's plus a number of smaller satellite clinics with 4-5 GP's could be a viable footprint.

The availability of suitable sites in urban locations will in the end be the main determinant of where a clinic is sited, as opposed to a designed approach based on geographical distribution.

Other factors which influence the ability to aggregate GP practices in urban areas are:

- Land acquisition costs.
- Personal drivers, such as whether availability of locums is an issue, or pressure from after hours demand, or pressure from existing space constraints.
- Compatibility amongst GPs who may have been viewed as competitors, or who may have differing views on how to practice
- Facilitator skills and other incentives

In Palmerston North there will be groups of GPs who have already contemplated aggregating into larger centres. Some may have had preliminary discussions. Most groups never go beyond the exploratory stage, due to time pressures, lack of commitment, know how and fear. One place to start would be to identify these groups.

In the case of the larger centres (10 or more GPs), there is sufficient volume of patients to support co-location of a pharmacy, physiotherapist, radiology service, and so on. It would be at these larger centres where the DHB provider arm services could be co-located, along with nurse led clinics for diabetes, respiratory and cardiac services.

A GP after hours component could also operate from these centres in early evenings and Saturday mornings, with the late night and Sunday services being provided from a single more central location

Feilding

The GP's in Feilding have already seriously contemplated aggregating the 4 GP practices (with 9 GP's) in that town. In February 2004 a feasibility report was commissioned and the conceptual planning was advanced to the point of site selection and initial architectural drawings.

For a number of reasons the project lost momentum, but with the right leadership and direction could be successfully resurrected.

The GP's have shown a preference to own and operate any new centre, and to offer space to DHB and other health providers on a tenancy basis.

There would be an opportunity to co-locate DHB provider arm services at a new centre in Feilding. There may be an opportunity to rationalise pharmacy services and create a single destination after hours service.

Otaki

Otaki has a single medical centre with 4 GP's. Planning is now at an advanced stage to increase the size of the existing medical centre building.

The building extension will enable new community based services to be co-located at the site – at this stage space has been set aside for District Nursing Services and PHO funded community services

The partner GPs in the Otaki practice are intending to fund and end-own the new development. They have offered the DHB, PHO, and other health service providers tenancy options in the facility.

Horowhenua

Foxton currently has 2 GP's who practice out of 2 separate facilities. The town would be better served by a single facility, another full time GP, and space to co-locate PHO funded services, Maori provider services, and DHB services. A co-located Dental Service would also be a logical option

The Foxton Area Community Medical Trust has completed extensive planning for the development of a 'one stop shop' health centre in the town. They have identified potential funding sources to meet the capital cost of building the facility, and would offer tenancy space to provider identified above (including the GPs)

This project in Foxton has, like the Feilding project lost some momentum and now needs some external facilitation to bring it to fruition

In Levin the new community health facility will greatly enhance the delivery of services to the people of Horowhenua. Over time it would be desirable to have the towns GP's co-located at this new facility. Some experienced external facilitation focused on selling the benefits of GP practice integration would help bring this to fruition.

9. DHB role

The DHB can play a variety of roles in facilitating change, beyond the initial step of commissioning this paper. This could include:

- Communicating a vision:

This vision is already articulated in the strategic plan, but could be restated from a Primary Care and General Practice perspective, emphasizing quality outcomes, and a respect for the traditional patient / doctor personal relationship in contrast with the broader population management imperative with which DHBs are charged. Care must be taken to avoid perceptions of an overly top-down approach, which risks alienating GPs rather than engaging them.

- Financially supporting feasibility studies to determine fitness for purpose specific to MidCentral's geography, history and burden of disease.

- Financially supporting groups of GPs to engage consultants for early stage conceptualisation work

- Facilitating delineation of the PHO role from that of organised general practice, or organised community care.

In this context supporting a variety of approaches, from GP owned group practice, to PHO or Healthcare Aotearoa "owned" entities, to traditional small practice models would provide choice for both provider and patient.

- Providing capital and/or ownership of facilities:

This is an option, although sourcing capital for community medical centre development is not seen as problematic. Whether or not the DHB needs to be involved in the development and/ or ownership process will be a function of the appetite of the healthcare professionals involved to participate in the "owner/occupier model outlined above, A DHB owned facility may appeal to those GPs and healthcare providers who prefer to be salaried employees as opposed to small to medium sized businesses. A DHB owned facility may be of economic benefit in contrast to the proliferation of hospital based and/or DHB provider arm funded services which are already occupying rented premises in the vicinity of the new facility. In other words the DHB may transfer some operational expenditure (opex) into capital expenditure (capex) if it can afford to subsidise the rentals for those services.

- Providing security for investors through service contracts and/or long term leases to underwrite the rental risk.

This is an alternative model to providing direct investment. In most cases it will be both desirable and appropriate to have hospital based services and/or DHB provider arm services already based in the community, to relocate in the new facility. This may involve an increase in "opex" as these providers will be subject to the same rental gap which GPs will face. However, it ought to be a less capital intensive way to support the new facility, and help keep down the financing costs of development, through the commitment to long term leases.

The issue here is to find the right balance for assuring devolution of services, between length of underwrite, the need for periodic performance review and potential remedial action in the case of poor performance. In other words a balance must be kept between the implicit commitment to a certain provider by supporting a long term lease, and the threat of discontinuance due to poor performance of contracted services

- Direct subsidy of the rental "gap"

A fixed term loan or grant towards the cost of increased rentals. This may be a "clean" and fixed term approach to supporting the transition to a new facility; alternatively it might make change too easy, and retard the development of new ways forward.

An alternative to this, and a variation on the previous bullet, is for the DHB to lease unutilised space for a period while devolution of services are organised. This could either mean the DHB pays for empty space, or assumes a sub tenanting role and takes the risk of filling the space with short term and potentially non health related tenants.

Cost implications of the DHB leasing space

For either of the above two options an illustration of potential costs is outlined below:

Building costs are similar no matter where in NZ you build.

Currently the average cost per m2 to build a medical centre is in the range $2800 to $3,200 per m2. This is a grossed up figure which includes holding costs and contingency.

If one assumes the building cost (excluding land) is $3000 per m2, and for the purposes of this illustration an assumed 10% return is required on this build cost then this necessitates a rental of $300 per m2.

So even with lower rates of return, and other possible cost savings the rental is not likely to be under $280 per m2 across the facility

So by way of illustration a 5m x 4m consulting space will attract a rental of 20 x $280 per annum i.e. $5,600 per year

In the Foxton and Otaki medical centres, for example, there would be a need for 4-5 additional consulting spaces such as this plus supporting space to accommodate a Diabetes nurse, a generic community nurse, a respiratory and cardiac services nurse and so on.

Some consulting spaces can be shared but nurses all need a work station.

The ideal configuration is to have an open office with workstations for nurses and consulting and meeting rooms that can be booked for patient contact sessions/consultations and meetings.

The types of nurse provided services might be:

- Generic community nurse (facilitates out of hospital care)
- Diabetes nurse
- Podiatry
- Dietician
- Cardiac services nurse
- Respiratory nurse
- Well child nurse
- Aged care services nurse
- Maternity
- Drug and alcohol
- Counselling
- Occupational therapy

If one assumes a configuration of:

- One shared open office with workstations at 5 x 10m = 50m2
- 5 rooms at 4m x 4m = 80m2
- Meeting room for case conferences 6m x 6m = 36m2
- Circulation, staff amenities, storage and admin = 40m2

TOTAL is 206 m2 @ $280 per m2 is a rental cost annually of $57,680 per medical centre, which from the DHB's perspective would represent from 5-20% of total space.

Investment in IT

A review of Mid Central's ISSP (2003) indicates a clear understanding of the opportunity to invest in IT infrastructure, decision support systems, and primary care integration. The DHB could ensure that specific plans are current and directly apply to the prospect of better integration between hospital and primary PMS systems.

Direct support for those GP practices involved in amalgamation may be appropriate, even at the level of IT consultancy. Alternatively, this support could be forthcoming from the PHO Management Services Organisation.

10. Critical success factors

Willingness amongst general practitioners to consider new business structures

A culture of openness and transparency, respectful of clinical leadership and responsibility

Effective deployment of information systems for improved clinical and business management

Implementation of teamwork across primary health care services

Comprehensively deployed population funding for rationally deciding the best location and care provider in each case

Aligned incentives for funders and providers to ensure actions contribute to agreed common goals

Confidence for investors, especially GP investors, that the risk of owning or leasing new facilities is matched by demand for space at appropriate rental levels

Willingness for the DHB to devolve services, and provide support where necessary to the transition from old to new facilities and business models

11. Conclusions

Reconfiguration of primary care requires a scaling of General Practice to be successful – size does matter.

Facility development can be a trigger for change in the model of General Practice as well as providing capacity for devolution of hospital based services and consolidation of community based DHB provider arm services.

Systems integration between primary and secondary care can be more easily achieved in the context of business model change, larger facilities, and greater interaction between hospital and primary care clinicians.

General Practitioners need to be nurtured through a change process and encouraged to lead.

A variety of GP and community care corporate vehicles can be envisaged within a single overarching strategy for primary care.

Reconfiguring general practice with a focus on teamwork and community can provide productivity gains as represented by more patients per GP and improved outcomes over time.

Workforce planning issues can be alleviated through a scaling of general practice, and the fostering of GP leadership of a multi-disciplinary primary care team, and consequent increases in productivity.

The DHB has a leadership role to play, but not at the cost of stifling GP leadership. The DHB potentially has an investment role through provision of capital, or operational expenditure in the form of commitment to lease space in new facilities and contracting for services within these new facilities.

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