Incentives Matter:
Successfully executing transformative change within General Practice Teams

April 2011

DISCUSSION DOCUMENT
Foreward

This paper has been commissioned as an update to the earlier discussion documents titled Towards 2010 which formed the strategy work done within MidCentral DHB from 2005 onwards. Its core premise is that recent primary care strategies, including the current Government strategy of better sooner more convenient (BSMC) can be further realised with the use of clinician incentives, alongside a better alignment of funding and accountability for service provision. This needs to be undertaken in a framework of trust in our clinicians to do the right thing given the right tools and motivation. The lack of progress over the past decade, despite the creation of favourable funding streams in the form of capitation, can be counteracted through appropriate incentives, performance measurement, feedback and trust.

It is important to note that MidCentral is being used as a case study rather than as a reflection of performance relative to any other region of New Zealand. The authors have not conducted broad research across a number of DHBs which would no doubt provide further relevant experience; nonetheless it is evident anecdotally that some if not all the lessons learned from this study will have relevance across the sector.

MidCentral DHB is currently establishing five Integrated Family Health Care Centres (IFHCs) in line with the primary care strategy. MidCentral DHB is not unique in this regard. The planned establishment of IFHCs throughout New Zealand supports the goal of transforming primary health services, with the nine current EOI primary health care groupings\(^1\) covering 60% of New Zealand’s population.

Full service integration is intended as an outcome of the establishment of the MidCentral IFHCs. The research undertaken for this paper would suggest that incentivised alignment of funding and service provision along with many of the integration strategies already envisaged or in play, will complete the formula for transformative change necessary to achieve service integration. A further underlying theme is to see the recommendations as an investment in transformational change which ought to substitute for the transactional costs of today’s funding workarounds.

Finally, thank you to Roger Bowe, Susan Benge and Tony Haycock for this paper. The paper has been commissioned to stimulate discussion within the health sector generally, not just MidCentral. Work is now progressing on identifying and defining the outcomes at practice and population levels and the funding models to achieve those outcomes.

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\(^1\) The Government invited organisations and networks to submit Expressions of Interest (EOIS) to provide Better Sooner More Convenient Health Services. Nine EOIs were selected to progress to Business Case Development.
**Introduction**

In 2006, the MidCentral DHB commissioned a series of papers including; *From Corner Dairy to Sustainable General Practice A Vision for Primary Care in 2010: Implications for General Practice*. The vision articulated within the paper describes the provision of an integrated and innovative continuum of care within general practice.

In 2010 a series of interviews and discussions were held within MidCentral DHB to understand the actual provision of General Practice services. This process was further informed by a review of current research and literature, both international and local, including relevant MidCentral documentation.

The 2010 reality regarding the provision of General Practice within MidCentral DHB is summed up succinctly within *Transforming Primary Health Care Services MidCentral Business Case – March 2010* where it states “The practice model is stuck” (2010, 37) The powerful vision that engaged the “hearts and minds” of those who developed it in 2006 has not been fully transformed into a 2010 reality.

This paper explores the barriers to change experienced within MidCentral and undertakes an examination and exploration of the provision of primary care both nationally and internationally. It provides recommendations regarding how to foster and support such change at the level of general practice across the sector.

International case study analysis of high performing health care delivery systems provides transferable principles. In particular, the overarching themes of values-driven leadership, interdisciplinary teamwork, integration, aligned incentives, mutual accountability and transparency can inform the New Zealand context. Clinical leadership and decision making at the clinical microsystem alongside, critically, an expanded clinical professional identity are proposed as being fundamental to the successful transformation of general practice in order to achieve the 2010 vision that was first articulated in 2006. This is in fact in line with Government strategy to engage more with and put more trust in clinicians. Service integration through the establishment of IFHCs would also be an outcome of such transformation.

The professional identity of General Practice Teams be they comprised of primary care physicians, nurses, general practitioners, allied health professionals or specialists is formed as an outcome of professional selection, training and cultural inculcation. Practitioners are welcomed into a guild of sorts that has its defining characteristics. Management currently sits outside the guild while the two separate primary and secondary sectors can operate quite independently of each other. The proposed transformation of service requires an expanded professional identity that includes rather than precludes management while promoting cross sector collaboration.

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2 The overarching themes were identified by the Commonwealth Fund following case study analysis of fifteen high performing organisations. Further discussion regarding the research and findings is contained within section three.

3 Within *Improving NHS productivity; More with the same not more of the same*, Appleby et al borrow the term clinical microsystem from (Mohr and Batalden (2002)) and use it to describe the teams that deliver front line care. They provide examples such as GP practices, nursing teams, departments and directorates that staff identify with in their daily work. (2010,20) The clinical microsystem is of utmost importance in that it is: “the point at which patients experience care, and because it is within these microsystems that decisions are taken on the use of resources”(2010,20)
It is proposed that an alignment of Government strategy, DHB policy and the provision of sustainable General Practice across the sector can be achieved through a parallel alignment of funding strategy and service provision informed by clinical governance. The proposed adoption of an integrated and incentivised funding model that is paid directly to participating and qualifying practices will provide the means to effect sustainable change within general practice. This is not a new idea. This paper is not the first to argue that incentives matter. What is different is the idea that incentives should be selectively and/or optionally applied, partially in advance, based on capacity, performance and self-selection.

The MidCentral experience demonstrates that aggregation and consolidation of general practice provides an excellent platform on which to build integrated service provision. Between 2006 and 2010 there is much of value that has been achieved particularly in the areas of practice infrastructure and the introduction of the successful Chronic Care Model (CCM). However, the barriers experienced within MidCentral are indicative of a systemic (New Zealand) fault where the current funding and incentive structures hinder rather than promote change at the level of the clinical microsystem.

Despite the persistence of such barriers, the MidCentral experience also provides compelling case study examples where comprehensive system change has been facilitated. The characteristics of success identified as a result of the successful Integrated Palliative Care Service have provided a clear framework for the subsequent Chronic Care Model and Kidney Health in Horowhenua (KHH) primary care initiatives. The CCM project in particular has produced demonstrable system change and provides insight into how the “stuckness” of general practice can be interrupted and transformative change facilitated.

In MidCentral, the DHB has invested heavily in primary care consistent with the 2004 MidCentral Primary Care Strategy. The DHB has reached out and embraced General Practice. While the practice model has shifted in places the embrace has not been fully reciprocated. The reasons for this are complex and multifaceted. There is an inherent tension between ‘managing business as usual’ within an acute model of care while simultaneously making transformative change. The day-to-day acute business of General Practice is pressing. The ‘corner dairy’ model is not well equipped for transformative change whereas the consolidated and amalgamated practices have a greater capacity in this regard.

Lessons learned from the CCM and KHH projects with their attendant specified funding streams and planned change management processes that were clearly aligned with specified deliverables and incentives provide the foundation for the proposed way forward. The KHH project, in particular, clearly demonstrates the cost benefit of doing things differently where the investment required to bring about change is able to be recouped and the ongoing cost of best-practice care has proven to be less expensive than the model previously used within general practice.
Current IFHC initiatives across the sector are proposing to use Alliance Contracting to support transformative and systemic change. Capitation funding is precluded from the alliance contracting model with the accountability extending only as far as SIA and CarePlus funding. This paper recommends including capitation within the framework with payment being made directly to the participating and qualifying practices.

International research and the lessons learned in New Zealand through both the MidCentral primary care experience and the budget holding of the 90s clearly demonstrates what can be achieved when clinical governance, informed by access to timely clinical and financial information, is used to inform resource allocation. The proposed integrated incentive system is predicated on practice based decision making for resource allocation alongside a practice based incentive system.

Enhancing capitation and consolidating SIA and CarePlus funding into an integrated income stream that is pre-paid directly to providers will incentivise outcomes at a practice level, provided that participating practices have the demonstrated capacity to deliver targeted health outcomes. It is therefore proposed that, subject to the demonstration of capacity and capability, practices be able to access the integrated income stream “up front” in order to undertake the transformative change necessary. In addition, it is proposed that the achievement of agreed outcomes is further rewarded through a system of shared savings where the practices retain an agreed proportion of savings produced through transformative change.

Implementation could be staged across the sector in line with the establishment of IFHCs. Alternatively, the proposed concept could be proven in one or more DHBs in order to test and refine the model prior to more widespread implementation.

Adoption of the proposed practice based incentive system will ensure an alignment of the government BSMC vision and the provision of sustainable general practice. Pre-paying more of the incentive pool will underline the government pronounced strategy to place more trust in clinicians.

In summary:

- Organised general practices within the various proposed IFHC concepts will provide scale and capacity for transformational change
- Integration of services across previously distinct boundaries of primary and secondary care will further facilitate sustainable change
- Measurement and feedback mechanisms first experienced with 90s budget holding and implicit in the approach to alliance contracting will foster professional pride and trust
- Larger and more complex practices teams will by definition require a bridge and ultimately a merger between clinical and management science and practice
- The complexity of today’s funding and contracting environment can be substituted with an investment in trust and contractual simplicity

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The concept of Alliance Contracting that has been used successfully within the construction industry is currently being developed within the New Zealand Health sector and is defined as; “... a collaborative, incentive driven method of contracting where all the participants work co-operatively to the same end, sharing the risk and rewards of bringing in the project within time and under cost, whilst respecting principles of good faith and trust.” Presentation by Tony Abrahams KPMG Legal as cited by Andrew Stephenson (2000), Alliance Contracting, Partnering, Co-operative Contracting, Risk Avoidance or Risk Creation. The Waitemata DHB note that “The concept of alliance contracting is being developed and this along with changes resulting from the legislation will lead to changes in planning services but there is little further information available. (Waitemata DHB Board Minutes 28/07/10)
• Promoting the expansion of professional identities within general practice teams will help to ensure productivity gains are achieved, through clinical decision-making, reduction in variation in clinical practice, improved clinical outcomes and achievement of agreed targets.

• Practices (clinical Microsystems) which demonstrate the above characteristics and a willingness to be accountable for outcomes should be eligible for a package of incentives (enhanced capitation) both pre and post contract fulfilment.
Section One

Environment Scan: Primary care is cheaper; transformation requires alignment of strategy, structure and process; don’t forget the incentives

While there are over two decades of robust evidence to support the adoption of primary health care strategies the evidence regarding how best to implement them is not as clear. The work of Barbara Starfield provides the starting point for this paper in examining the provision of primary care in the New Zealand context.

Starfield’s research provides evidence of increased health outcomes and greater equity at a lower cost through primary care. The evidence indicates that the primary health care structure and system characteristics can foster and drive change at the point of care. Notable success stories are then presented where a primary care strategy has produced quantified evidence of positive health, equity and financial outcomes. Particular emphasis is paid to the Ontario Family Health Team model.

Discussion then turns to the New Zealand context where after two decades of health care reform improved health outcomes at a lower cost have not been realised. During this time there are some notable success stories which are examined followed by a brief discussion of Judith Smith’s critical analysis of the implementation of the New Zealand Primary Health Care Strategy.

Smith, identifies the key issues facing the sector as: “the lack of an overall implementation plan, the existence of fraught relationships, unclear organisational roles and inadequate incentives.” In New Zealand, therefore the system characteristics may have tended to frustrate rather than foster change within clinical processes and therefore outcomes.

The MidCentral experience discussed in section two provides insight into such frustration while simultaneously providing case study examples where comprehensive system change has been brought about.

Section Two

The MidCentral Experience: Looking back, moving forward. Considerable progress, significant success, but the DHB embrace of General Practice has not been reciprocated as envisaged.

The provision of primary care services within the MidCentral District has developed under the auspices of the MidCentral Primary Health Care Strategy (2004). In 2006 a series of papers focused on building capacity, sustainability, collaboration and innovation was commissioned in order to support the implementation of the strategy. As effective primary care is dependent upon sustainability of General Practice a key theme of the 2007 paper was that “size mattered” in practice configuration. The paper served as a discussion document to help facilitate the transition of “the corner dairy” approach to General Practice to a sustainable and fit for purpose business model. An integral part of the paper was a compelling vision for General Practice in 2010.

In 2010 a series of interviews and discussions was held in order to ascertain the degree to which the vision had become a reality. Since 2006 and 2010 practice amalgamation and the development of a shared infrastructure has had a positive impact on practices such as Otaki and Tararua Health Group. However, the overwhelming response to the translation of the 2010 vision into reality was one of frustration where the current capitation funding and contracting arrangements and what was described as the “nature” of GPs has resulted in day to day general practice remaining largely unchanged despite a clear commitment to change.

Comprehensive system change has however been effected through the Integrated Palliative Care Service and the CMM implementation in General Practice pilots. A similar change process has begun as a result of the KHH project. The ongoing and considerable effort and investment that the DHB has made in this regard has ensured the primary care strategy has kept traction within a stuck system. The learnings from these key MidCentral primary care initiatives clearly inform the proposed way forward.
Section Three

High Performing Health Systems: Common international and local themes. Structure (systems and processes) follows strategy; culture is important, as is a consistent set of characteristics, robust management systems and aligned incentives. Advance incentives can work.

International research into high performing health care delivery systems provides both insight into how practice transformation can be achieved to produce increased health outcomes in a sustainable manner and supports the case study learnings gained through the MidCentral Experience.

Commonwealth Fund case study analysis of high performing health care delivery systems identifies overarching themes to inform the development of high performance and system transformation. The overarching themes endorse and resonate with the MidCentral characteristics of success providing further support for the proposed solution.

The Group Health Co-operative pilot demonstration of the patient-centred medical home (PCMH) model of primary care clearly demonstrates that the initial “up front” investment necessary in order to deliver primary care differently is able to be recouped due to the resulting shifts in care utilisation. The cost benefit of change evidenced in the MidCentral KHH provides a current New Zealand example of such change where the investment required to bring about change is able to be recouped and the ongoing cost of best-practice care has proven to be less expensive than the model previously used within general practice. Research from the Kings Fund clearly identifies the clinical microsystem as the priority area to focus on in the quest to produce more value from scarce resources.

Section Four

Transferable Principles and Transformative Change: To get both you need a merger of medicine and management science

The transferable principles of values-driven leadership, interdisciplinary teamwork, integration, aligned incentives, accountability and transparency identified in the previous section are explored in regard to effecting transformative change at the clinical microsystem as identified by the researchers at the King Fund. This exploration is facilitated by an examination of Dr Richard Bohmer’s research that identifies the intersection of medical and management science as the space where the potential for transformation of health care delivery resides.

As health systems are also social systems an appreciation of social change is necessary to inform transformative change. Medical professionalism is discussed in this regard. The work of Mountford and Webb is examined with specific regard to clinical leadership and a resultant expansion of the professional identity of clinicians. Mountford and Webb demonstrate the value and benefit of clinical leadership through case study analysis.

Clinical leadership and informed decision making at the clinical microsystem are key transferable principles to underpin transformative change. An expanded professional identity that includes rather than precludes clinical leadership and management is an additional prerequisite for successful transformation to occur.
Section Five
Aligning Strategy, Policy and Practice: Incentivising Change: Enhance the current strategy by expanding and simplifying the incentive toolkit; create criteria for incentive eligibility; substitute contract complexity for trust

MidCentral DHB is currently establishing five integrated family health care centres (IFHCs) in line with the national primary care strategy. Full service integration is intended as an outcome of the establishment of the MidCentral IFHCs. The research undertaken for this paper would suggest that the proposed and incentivised alignment of funding and service provision will enhance the transformative change necessary to achieve service integration.

Further discussion of the Ontario Model of blended capitation and fee for service will be used to advocate the use of practice incentives alongside a better alignment of funding and accountability for service provision. As is the case in Ontario the introduction of incentives is closely aligned to the achievement of outcomes.

In order to deliver improved health outcomes within the current fiscal envelope, it is essential that any initial “up front” investment necessary in order to deliver primary care differently is recouped due to the resultant shifts in care utilisation. Health outcomes and primary and secondary care utilisation patterns must be defined and tracked at both practice and population levels as part of an ongoing evaluation. This will require a level of acceptance for and establishment of management processes which seamlessly merge with clinical processes.

The research undertaken for this paper would suggest that without the proposed and incentivised alignment of funding and service provision; integration will be compromised, resulting in further frustration.

Section Six
Preliminary Conclusions and Recommendations

The MidCentral experience is a case study example of the paradoxical situation in New Zealand where the health system characteristics simultaneously frustrate and foster change with the implementation of the Primary Care Strategy. The ongoing traction of the MidCentral primary care strategy and the comprehensive system change effected provides insight into the way forward. The insight and learning gained through the MidCentral experience is reinforced and strengthened with international primary care success stories.

International research into high performing health delivery systems identifies overarching themes to inform system transformation within the New Zealand context. Clinical leadership and informed decision making at the clinical microsystem are key transferable principles to underpin transformative change. An expanded professional identity that includes rather than precludes clinical leadership and management is an additional prerequisite for successful transformation to occur.

The successful combination of multidisciplinary teams and financial incentives for providing comprehensive care has led to improvements in health, increased efficiency and reduced costs with the introduction of the Family Health Teams in Ontario. It is therefore strongly recommended that proof of concept demonstrations be undertaken within two or more locations to refine the proposed model prior to more widespread implementation.
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Key drivers of increasing cost and decreasing resource frame the international health context as we emerge from a worldwide recession. In addition, there is a notable “burning platform” within the health sector comprising workforce issues (and the attendant shortages of health care professionals), the needs of the ageing population, an increasing demand for acute services and the rise in the prevalence of long term conditions. In New Zealand, chronic illness results in approximately three quarters of all deaths, and three quarters of all health expenditure. The “burning platform” has developed within a health sector environment of continuous change, increased funding, increasing technology and specialisation, but falling productivity.

The 2005 Treasury report, cited within Better Sooner More Convenient, concludes that; “hospital productivity has dipped despite massive funding boosts from the Government.” The report found that between July 2001 and July 2004 hospital productivity had experienced a 7.7% drop. In addition, an analysis across the Auckland DHBs concluded that, “it is taking almost $3 of extra spending to get $1 worth of extra benefit.”

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6 Dr Warwick Davenport, MidCentral DHB, Marginal Gains, p. 8

7 Examples from a 2005 Treasury report are provided to support the conclusion that; “hospital productivity has dipped despite massive funding within the Health Discussion Paper: Better Sooner More Convenient


9 Page 33, IBID
Primary Care is specifically excluded from the Treasury analysis with the authors noting: “Ideally an analysis of value-for-money would relate changes in patients’ health as a result of health services to expenditure, but this is extremely difficult and no country does it.”\(^{10}\) They go on to describe the thrust of the Government’s Primary Health Care Strategy being: “to avoid inappropriate or preventable hospital admission.”\(^{11}\)

International comparisons of population and clinical studies provide very robust evidence that increasing specialisation decreases measures of health outcomes\(^{12}\). Indeed, "areas with high use of resources and greater supply of specialists have neither better quality of care nor better results from care"\(^{12}\). Barbara Starfield describes the adoption of a primary care oriented health system as a highly relevant political strategy because its effect is clear and quick to realise.\(^{14}\) Primary care produces better health outcomes at a lower cost and facilitates greater equity in health\(^{15}\).

*Primary care deals with most health problems for most people most of the time. Its priorities are to be accessible as health needs arise; to focus on individuals over the long term; to offer comprehensive care for all common problems; and to coordinate services when care from elsewhere is needed.*

*Barbara Starfield, The Primary Solution, Boston Review, 2005*

The payment mechanisms utilised, within Starfield’s argument, should be based on the achievement of evidence-based primary care outcomes over a period of time. Starfield states: “Any payment system that rewards specific services will distort the main purpose of medical care: to deal with health problems effectively, efficiently and equitably.”\(^{16}\)

Within the above framework, the adoption of a primary care strategy ought to have a clear and rapid effect in both producing improvement in health outcomes and facilitating greater equity at a lower cost. Health system structures and system characteristics and the impact these structures and systems have on the processes of care\(^{17}\) are the key drivers for such improvements.

Starfield’s evidence indicates that primary health care structure and system characteristics support foster and drive change at the level of the provision of care i.e.; the clinical microsystem. System structures and characteristics can also however hinder and frustrate change. It is therefore of obvious and paramount importance when implementing a primary health care strategy to ensure the structure and accompanying systems are fully aligned and are indeed producing the desired and intended outcomes.

\(^{10}\) Page 2, New Zealand Treasury Report: Value for money in health – the DHB sector, February 2005

\(^{11}\) Page 2, IBID

\(^{12}\) Barbara Starfield’s work has been highly influential in this regard. *Starfield,* Professor of Health Policy and Management at the Johns Hopkins Bloomberg School of Public Health, is author of *Primary Care: Balancing Health Needs, Services, and Technology*, Oxford University Press, 1998. Refer to pp 3-17 for further discussion.

\(^{13}\) Barbara Starfield, The Primary Solution: The Case for Primary (Health) Care, presented at RNZCGP Annual Quality Symposium, Wellington NZ February 2009. PowerPoint Presentation

\(^{14}\) IBID

\(^{15}\) IBID

\(^{16}\) Barbara Starfield, PowerPoint presentation: The Primary Solution: The Case for Primary (Health) Care, presented at RNZCGP, Annual Quality Symposium, Wellington NZ, February 2009 available at [www.rnzcgp.org.nz](http://www.rnzcgp.org.nz)

\(^{17}\) IBID
Internationally there has been widespread adoption of primary health care strategies as a response to the robust evidence base and shared “burning platform” issues.

While there are over two decades of robust evidence to support the adoption of primary health care strategies, the evidence regarding how best to implement the strategy is not as clear. Dr Ruth Wilson describes an “evidentiary vacuum” within which primary care policy and changes are made. The importance of ensuring alignment of strategy, systems and desired outcomes necessitates a secure evidence base upon which to base reforms.

There are some notable success stories where the development of primary care strategy and attendant primary care services has produced quantified and positive health, equity and financial outcomes.

In response to the decline in family practice in British Columbia during the 1990s, the British Columbia Ministry of Health and the British Columbia Medical Association collaborated to support family physicians in the province. The General Practice Services Committee (GPSC) was established with the mandate “of finding solutions to support and sustain full family practice in British Columbia.” An analysis of the GPSC’s work was undertaken in answer to the question; “whether or not full-service family practice constitutes a wise investment of funds in British Columbia”, thus adding specificity to the general research and literature on the benefits of primary care.

The overall finding of the study was that; “there is a clear inverse relationship between the level of attachment to a primary care practice and costs, for higher-care-needs patients. Thus the more patients go to the same practice, the lower the overall annual costs to the healthcare system.” The reduction in overall cost related to hospital use. The analysis found, in regard to both diabetes and CHF for higher-care-needs patients that, “a 1% increase in attachment to practice is associated with an average decrease in the total cost of care of $80 - $323.” This evidence supports the move in New Zealand to capitation and practice enrolment.

The Illinois state Medicaid programme incorporated primary care and chronic disease management strategies with the aim of reducing costs and improving the quality of care. Over the fiscal years 2008 and 2009, the Medicaid programme was able to save a total of $500 million while improving the quality of care. Margaret Kirkegaard a family physician and medical director describes the cost savings as; “largely a result of better disease management, fewer hospitalisations and decreased emergency room use.”

18 “There has been over two decades of evidence around the effectiveness, efficiency and equity of primary care.” Phillips and Starfield as cited by Hollander et al Increasing Value for Money in the Canadian Healthcare System: New Findings on the Contribution of Primary Care Services. Healthcare Quarterly, Vol 12 No 4 2009

19 Family Physician, Educator and President of the College of Family Physicians of Canada

20 Page 33, Hollander et al 2009

21 Page 33, IBID

22 Page 33 IBID

23 Page 43 IBID

24 James Arvantes, Primary Care Initiatives Help Save State Medicaid Program Millions; Illinois Combines Two Programs to Improve Quality, Save Costs, American Association of Family Physicians, Online Publications, 21 July 2010

25 As cited by Arvantes page 1 IBID
In addition, 97% of patients surveyed in 2009 and 2010 reported being extremely satisfied or satisfied with their primary care practice while in 2009, 84% of health care professionals reported being satisfied with the administration and more than 90% said the IHC (Illinois Health Connect) was beneficial to their patients.\(^\text{26}\) This evidence supports the current New Zealand strategy of greater primary care capacity leading to better service integration between primary and secondary care.

Analysis of success stories regarding the implementation of primary care strategies can go some way to addressing the evidentiary vacuum. A 2010 analysis and discussion of Patient Centred Medical Homes in Ontario\(^\text{27}\) suggests that a combination of; “**multidisciplinary teams and financial incentives for providing comprehensive care will lead to improvements in health, increase efficiency, and reduce costs while making practice more attractive for primary care physicians.**”\(^\text{28}\)

While a full evaluation of the model’s effectiveness will not be completed for 3 to 5 years, initial results appear encouraging with the authors concluding;

\begin{quote}
The use of multidisciplinary teams expands the range of services provided and reduces overload for individual physicians.

Since income is not based primarily on physicians’ visits, practices can explore broader roles for team members.

The total number of visits per patient has not declined, but more visits appear to be occurring with team members other than the primary care physician.

One study has shown that control of hypertension is better among patients in FHTs [Family Health Teams] than among those in fee-for-service practices.

The use of integrative electronic records appears to improve efficiency and communication, and we believe that quality incentives have made participating physicians more proactive in providing preventative services and providing care management for chronically ill patients.

The percentage of Ontario medical school graduates entering family medicine has increased from 25% in 2004 to 39% in 2009 (as compared with an increase in 24% to 29% in other Canadian provinces).

**One effect that is already obvious is an increase of approximately 40% in physicians’ incomes**\(^\text{29}\)
\end{quote}

(The authors note that physician income within the fee-for-service sector has not risen substantially)

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\(^{26}\) Page 3 IBID  
\(^{27}\) The article cited below from the New England Journal of Medicine uses the term Patient-Centered Medical Homes (PCMH) to describe Ontario’s experience with Family Health Teams (FHT). The PCMH is a model of care that “embraces the aspirations” of the Wagner Care Model. Discussion of the history and core features of PCMH can be found in the Robert Graham Center’s November 2007 paper; “The Patient Centred Medical Home: History, Seven Core Features, Evidence and Transformational Change”.  
\(^{29}\) IBID page e7(2)
The key preconditions for such outcomes have long existed in New Zealand yet system wide changes have not eventuated. The current strategies of consolidation of services and/or practices, along with service integrations across primary and secondary care, will take advantage of such preconditions (e.g. the ubiquity of an electronic record). The use of practice based incentives to successfully transform practice in Ontario has the potential to produce similar results here.

Capacity within the Family Health Team model (FHT)\(^\text{30}\) is expanded through both the development of interdisciplinary teams and an improvement in the breadth and quality of care and results are achieved through the use of incentives delivered through a blended payment model. The FHT model is flexible with no two being the same. The FHT is the focal point for the delivery and coordination of care.

The above primary care reform in Canada took; “more than a decade from conceptualization to implementation”\(^\text{31}\).

In New Zealand, the provision of primary care has been a component of two decades of health sector reform. Organised primary care within New Zealand prior to the 1990s is described as minimal.\(^\text{32}\) The “Green and White Paper” produced by the then Minister of Health placed “an emphasis on the role of primary care in a rational health system.”\(^\text{33}\) The resultant Government reforms gave rise to organised primary care including large independent practitioner associations (IPAs) with well-established clinical governance practices.\(^\text{34}\) In this respect, the IPAs functioned as part of the system characteristics through which the primary care strategy would give rise to changes within processes of care.

IPAs, by the late 1990s, had introduced an “array of clinical and organisational innovations, and information technology was widely deployed.”\(^\text{35}\) One such deployment centred on the management of GPs’ pharmaceutical prescribing and diagnostic laboratory testing budgets. Throughout the country, groups of clinicians developed, utilised and refined evidence-based guidelines to inform decision making and resource allocation. The clinicians had the necessary information, collegial support and accountability to make informed decisions that resulted in considerable savings. The savings in turn were utilised to develop and deliver services to the populations served by the clinicians involved.\(^\text{36}\)

During the period 1995 – 2002 ProCare “has delivered in excess $30,000,000 of savings against the pharmaceutical budgets of the funding authority in its various transmogrifications.”\(^\text{37}\)

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\(^\text{30}\) A Family Health Team is an approach to primary health care that brings together different health care providers to co-ordinate the highest possible quality of care. Designed to give doctors support from other complementary professionals, most Family Health Teams will consist of doctors, nurses, nurse practitioners and other health care professionals who work collaboratively.

\(^\text{31}\) IBID page e7(2)

\(^\text{32}\) As described by Robin Gauld and Nicholas Mays, Reforming Primary Care; Are New Zealand’s new primary health organisations fit for purpose?, BMJ, Volume 333, 9 December 2006, page 1216

\(^\text{33}\) Tom Marshall, The Silent Revolution, University of Auckland Business Review, Volume 5 No 1, 2003

\(^\text{34}\) Malcolm Mays as cited by Gauld and Mays (2006), page 1216


\(^\text{36}\) Tom Marshall, 2003, page 6
The accumulated funds were used to deliver additional services such as Prompt Cardiovascular Risk Assessment (CVRA), Minor Surgery, Primary Options for Acute Care (POAC), Smoking Cessation and Engage – Mental Health, within the ProCare practice teams.

Within MidCentral, MIPA\textsuperscript{38} achieved savings of $2,000,000 through the 1990s budget holding process. The successful and innovative Palliative Care Partnership PCP, discussed in section two of this paper was subsequently established as a result of Arohanui Hospice and MIPA: “establishing a multidisciplinary working party to address the issue of provision of community-based palliative care.”\textsuperscript{39} The PCP was able to attract further significant DHB funding as: “this partnership model was consistent with the MidCentral District Health Board’s vision for primary secondary multidisciplinary service integration.”\textsuperscript{40}

In July of 2010, when examining NHS productivity and the development of strategies for improvement researchers from the Kings Fund demonstrate the importance of the clinical microsystem and the impact decisions made there have on sector productivity. The authors cite evidence that supports clinical leadership and involvement in decision making regarding resource allocation.\textsuperscript{41} The New Zealand 1990s budget holding experience also demonstrates that involvement of GPs and primary care teams can make very positive impacts on both quality and productivity.

The budget holding experience was frustrated, in the view of the participants, by an inability to extend the budget scope beyond primary care. Policy at the time was constrained by political change and the negative perception of a monopsonistic purchasing framework which tended to antagonise rather than promote collaboration across the care continuum.

The budget holding exercise did, however, extend the professional identity of physicians to include decision making regarding resource allocation. The resultant decisions were largely framed within the existing patient-focused ethical and professional framework. Clinical leadership and decision making can be further enhanced by the introduction of formalised and recognised professional development and support in this regard.

Over the past two decades, the New Zealand Health sector has undergone many system and structural changes to translate different iterations of primary care strategy into reality. Over this time, the sector has undergone continuous reform and as a result is “the most restructured health system in the world.”\textsuperscript{42} There has been change in strategy, policy, structure and systems with an attendant growth in Government expenditure at an average rate, in real terms, of 4% per annum over the past 50 years.\textsuperscript{43} A clear and rapid effect in improved health outcomes at a lower cost has however not been realised.

\begin{itemize}
  \item \textsuperscript{38} MIPA Manawatu Independent Practitioners Association
  \item \textsuperscript{40} IBID p 2
  \item \textsuperscript{41} Page 20 Appleby, John, Ham, Chris, Imison, Candace, Jennings, Mark, (2010), Improving NHS productivity; More with the same not more of the same, The Kings Fund 2010
  \item \textsuperscript{42} Robin Gauld (2003), Continuity Amid Chaos, University of Otago Press, As cited within MidCentral District Health Board, Primary Health Care Strategy 20 April 2004
\end{itemize}
A critical analysis of the implementation of the New Zealand Primary Health Care Strategy (PHCS) was undertaken by Judith Smith, Visiting Academic Fellow in the Sector Capability and Innovation Directorate of the Ministry of Health during 2008-2009. Smith’s analysis focused on the PHCS implementation to date, a framing of the key issues facing the sector and the identification of options for the future development of primary care provision  

Smith, while noting a strong base of primary care provision on which to build, found a “real appetite” within primary health care stakeholders to keep moving forward to successfully meet the challenges facing the sector. Smith identified the key issues facing the sector as; “the lack of an overall implementation plan, the existence of fraught relationships, unclear organisational roles, and inadequate incentives.” Smith locates the central flaw as “a failure to address the need for clear incentives and levers in respect of the allocation of new funding.”

In New Zealand, therefore the system characteristics have tended to frustrate rather than foster change within clinical processes and therefore outcomes. Despite much progress, and some shining lights, the MidCentral experience nonetheless demonstrates that a level of frustration, both at, and within General Practice still remains.

44 Judith Smith, 2009, Critical analysis of the implementation of the Primary Health Care Strategy implementation and framing of issues for the next phase. Page 43
45 IBID page 47
46 IBID page 48
47 IBID page 46
Section Two
The MidCentral Experience: Looking back, moving forward. Considerable progress, significant success, but the DHB embrace of General Practice has not been reciprocated as envisaged

The provision of primary care services within the MidCentral District has developed under the auspices of the MidCentral Primary Health Care Strategy (2004). In 2006 a series of papers focused on building capacity, sustainability, collaboration and innovation was commissioned in order to support the implementation of the strategy. As effective primary care is dependent upon sustainability of General Practice a key theme of the 2007 paper was that “size mattered” in practice configuration. The paper served as a discussion document to help facilitate the transition of “the corner dairy” approach to general practice to a sustainable and fit for purpose business model. An integral part of the paper was a compelling vision for General Practice in 2010.

In 2010 a series of interviews and discussions was held in order to ascertain the degree to which the vision had become a reality. Since 2006 and 2010 practice amalgamation and the development of a shared infrastructure has had a positive impact on practices such as Otaki and Tararua Health Group. However, the overwhelming response to the translation of the 2010 vision into reality was one of frustration where the current capitation funding and contracting arrangements and what was described as the “nature” of GPs has resulted in day to day general practice remaining largely unchanged despite a clear commitment to change.

Comprehensive system change has however been effected through the Integrated Palliative Care Service and the CMM implementation in General Practice pilots. A similar change process has begun as a result of the KHH project. The ongoing and considerable effort and investment that the DHB has made in this regard has ensured the primary care strategy has kept traction within a stuck system. The learnings from these key MidCentral primary care initiatives clearly inform the proposed way forward.

Strategic Positioning

The provision of primary care services within the MidCentral Region has developed under the auspices of the MidCentral Primary Health Care Strategy (2004).48

In April 2004, the MidCentral District Health Board released the Primary Health Care Strategy as the first of four strategies developed to address the health needs and community concerns of the MidCentral district.49 The strategy provided direction towards strengthening and investing in primary health care services through the development of primary health care teams, establishing Primary Health Organisations (PHOs) throughout the District and addressing the population health objectives outlined in the New Zealand Health Strategy. MidCentral is unique in this regard being the sole New Zealand DHB to first develop a primary care strategy and subsequently establish PHOs.

As a result of the DHB strategy,50 four Primary Health Organisations (PHOs) were established in accordance with territorial local authority boundaries. Each PHO population was therefore comprised of an established geographic community in order to enable effective mapping of health need and census data. The PHOs did not operate in a competitive arrangement and were supported by Compass; a dedicated management service organisation.

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48 An expanded version of this section is contained within Appendix One of this paper.
50 MidCentral is unique in this respect as the only DHB to develop a formal Primary Health Care Strategy prior to the establishment of PHOs.
A compelling vision for primary health care was developed and considerable additional investment in primary health care was anticipated in order to achieve the following six goals:

<table>
<thead>
<tr>
<th>Access:</th>
<th>People will have ease of access to health care services throughout the district</th>
</tr>
</thead>
<tbody>
<tr>
<td>Community Participation:</td>
<td>The community will actively contribute to shaping primary health care services</td>
</tr>
<tr>
<td>Co-ordination of Services:</td>
<td>There will be seamless follow-through for all people</td>
</tr>
<tr>
<td>Infrastructure Development:</td>
<td>Primary health care services are supported by planned development</td>
</tr>
<tr>
<td>Integration between Primary and Secondary Care:</td>
<td>People receive care that is not interrupted between primary and secondary care events</td>
</tr>
<tr>
<td>Quality:</td>
<td>People can expect the best possible quality when receiving primary health care services</td>
</tr>
</tbody>
</table>

The 2001 Health Need assessment undertaken by MidCentral outlined the fundamental health patterns of the district and identified key disparities in health outcomes across the different PHO communities. Resourcing decisions were made to target change in the outcome profiles for Tararua, Otaki and Horowhenua.

Disease management groups (DMGs) were formed in order to develop specific service plans for the following areas; Respiratory, CVD, Cancer, Diabetes, Oral, Health of Older People and Skin. The DMGs were informal groups, the responsibility for subsequent intervention and implementation was managed by the PHOs and the Health Development Team.

A chronic care model (CCM) was developed by the Health Development team, the implementation of which was piloted within General Practice. The bulk of the considerable resource anticipated within the MidCentral Primary Health Strategy was dedicated to the management of chronic care and the implementation of the CCM represents a key point within the resource allocation process. The CCM pilot is discussed further in section five alongside a recommendation that an evaluation of the CCM be undertaken that tracks the resultant changes in health outcomes and secondary care utilisation.

The health needs assessment of 2005 identified that the MidCentral health status was worse than the overall New Zealand status and that there was a major issue with service access. In addition, deaths through cardiovascular disease and cancer were higher than expected in regard to the population demographics.

In 2006, a series of strategy papers was commissioned in order to inform the ongoing development of primary care within MidCentral. The papers focused on building capacity, sustainability, collaboration and innovation in order to further realise the vision.

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51 pp 19-23, Primary Health Care Strategy 20 April 2004, MidCentral District Health Board

52 In 2007, the DHB stated that “approximately $13m has been invested, with the bulk of funding used for the creation of approximately seventy new clinical positions across a range of nursing, medical and allied health professional groups.” MidCentral DHB as cited within the Completion Report of the Primary Health Care Strategy – Innovations Fund 2009 for the MDHB Health Care Development Chronic Care Model Implementation in General Practice.
The *Towards 2010* suite of papers was released in March of 2007. The paper *From Corner Dairy to Sustainable General Practice A Vision for Primary Care in 2010: Implications for General Practice* is the focus for this paper. A brief description of the additional papers follows below.

**Building Capacity of Primary Health Organisations to Meet Population Health Objectives.** As suggested within the title, the paper focuses on PHOs and how to enhance the role of the PHO as; “the main agent for achieving the goals of the Strategy at community and service delivery level.” The authors identify the multiplicity of funders of primary health as carrying with it a number of problems and risks; “funding and contracting relationships are working against the goal of primary health care strategy, which is towards greater collaboration and better managed care.”

The authors also note that the chronic conditions highlighted through the 2005 Health Needs Assessment are best controlled in the primary health care sector. They also noted a lack of data in regard to the tracking of changes in health outcomes and the resultant impact on secondary care utilisation.

The authors note a degree of confusion where non PHO funded primary health care providers are funded by the DHB or Ministry of Health. As a result, PHOs are accountable for meeting local health needs while they do not have responsibility for the services needed to meet these needs. The solution put forward within the paper is to increase the capacity of PHOs.

The problematic organisational and contractual structures and the resultant issues and confusion noted within MidCentral in 2006 is reflected in the New Zealand 2009 reality as described by Smith and Cumming where PHOs; “have achieved some of the aims of the PHCS (e.g. improving access to primary care for disadvantaged groups, reducing the cost of first contact care) but seem constrained in their ability to bring about significant change to the model of service delivery in primary care.” This constraint is both a source of frustration and a cause for concern within the primary care sector and is reflected in the 2010 assertion that the *practice model is stuck*.

**Discussion Paper: Enhanced Quality of Care through More Effective Collaboration,** Dr Fergus Aitcheson FRACP, Consultant Physician. Within this paper, Dr Aitcheson argues that changes within the nature of working relationships between primary and secondary sector medical practitioners have the potential to significantly increase capacity, improve quality of services and enhance job satisfaction.

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53 MidCentral District Health Board, March 2007, Building Capacity of Primary Health Organisations to Meet Population Health Objectives.
54 IBID page 2
55 IBID page 11
56 IBID page 10
57 IBID page 25
58 Page 17, Smith, Judith and Cumming, Jacqueline, (2009), Where next for primary health organisations in New Zealand? Victoria University of Wellington, School of Government Health Services Research Centre
59 Aitcheson, Dr Fergus, (2007), Discussion Paper: Enhanced Quality of Care through More Effective Collaboration, MidCentral District Health Board
Aitcheson describes a MidCentral DHB environment that seeks to maximise the health gains achieved for each dollar spent, and demonstrates that with: “several small and easily implemented changes in the structure of practice relationships, significant gains in system efficiency and capacity may occur.”

Aitcheson provides the reader with an appreciation of doctors and their “paradoxical attitude toward change” where conservatism and innovation abide side by side. He then describes system vulnerabilities that result in the breakdown of the continuum of care. Aitcheson provides compelling case study examples including that of deficient primary/secondary information transfer resulting in death, dislocated and fragmented care and inefficient multi-step care. Aitcheson also makes reference to the frustrations experienced by both general practitioners and hospital doctors in regard to the transfer of information across the primary/secondary interface.

Aitcheson makes specific reference to frustration faced by GPs in obtaining or providing services to patients within a constrained scope of practice. De-skilling of GPs resulting from the loss of chronic care patients to the secondary sector does not facilitate GPs taking on an increased role in the management of chronic conditions.

Aitcheson’s focus shifts to the predicted shortfall in GP numbers, the lack of appeal of marginally viable rural practices to newly qualified GPs and the inadequacy of many GP surgeries to accommodate a broader range of services. He then examines the hospital environment where specialists work in an environment of frequent interpersonal conflict and defensive practice that has resulted from the adverse medico-legal environment of the late 90s. A paradigm shift, produced by clinical leadership and supported with a common set of information, is deemed necessary to bring about change in the existing model.

The MidCentral Palliative Care Partnership is presented as an example of a successful model of primary and secondary integration. Aitcheson proposes a case study story of collaborative and integrated care that comprises hospital specialists conducting outreach clinics in co-located clinic where support for GPs is enhanced, skill and knowledge transfer takes place and group learning is undertaken. He then transposes the collaborative model on to the earlier example of dislocated and fragmented care reducing the number of patient visits to multidisciplinary team members from over forty to eleven co-located and coordinated visits thus demonstrating the power of collaborative relationships.

The MidCentral Palliative Care Partnership is a working example of cross sector collaboration that challenges the primary/secondary separation by focusing on the patient journey as opposed to the professional qualifications and location of the provider. Aitcheson’s proposed collaborative model enhances the professional scope of both primary care physicians/general practitioners and secondary care physicians/hospital specialists and blurs the boundary between primary and secondary care.

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60 IBID page 3
Innovation in Health: A Concept Document describes the MidCentral DHB as being at the forefront of strategic development in the sector. The authors advocate the establishment of a “health incubator” to further support the MidCentral strategic framework through innovation and development.

From Corner Dairy to Sustainable General Practice A Vision for Primary care in 2010: Implications for General Practice has an inherent focus of; ensuring sustainability of general practice within a reconfigured primary care setting. The authors assert that; “a new way of working” risks losing traction unless capacity and development issues in general practice are addressed.

A key theme of the paper is that “size matters” in general practice configuration. The authors note: “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.”

The authors use the work of Professor Paul Corrigan to support the development of organisational models for general practice that are “fit for purpose”. The paper served as a discussion document to help facilitate the transition of the “the corner dairy” approach to general practice to a sustainable and fit for purpose business model. A variety of models was outlined including; co-location without shared services, co-location with shared services, co-location and amalgamation, shareholder employee versus employee only and revenue share models.

The authors present the additional benefits of full amalgamation and colocation when compared to a co-located shared services model. The benefits to communities, GPs and patients are clearly listed.

Several illustrative examples are listed below:

- Improved cost-effectiveness for general practice businesses (including management, accounting, legal, and facility and administration costs).
- Increased opportunity to sub-specialisation according to GP interests and increasing the range of services available to patients.
- Shared responsibility for providing cover, minimising expensive and difficult to secure locum cover.
- 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).
- Enhanced team dynamics and collegial support in a non-competitive environment conducive to cohesive, integrated teams.
- Increased opportunity to interact with devolved hospital services and visiting specialists.
- Cohesive management for service planning (for example seeking contracts to fund “non-traditional” GP services would result in an extended range of services).
- Increased opportunity to interact with devolved hospital services and visiting specialists.

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63 Page 2, MidCentral District Health Board, 2007, Innovation in Health: A Concept Document
64 Page 2, MidCentral DHB, From Corner Dairy to Sustainable General Practice: A Vision for Primary care in 2010: Implications for General Practice, 2007
65 Page 12, IBID
66 IBID page 14
Increased range of services (via funded contracts to extend services, and doctor and nurse sub-specialisation).

More certainty of future availability of general practice services due to improved recruitment and retention of doctors.

The focus of the paper then shifts to the ideal environment to support such practice. The authors assert that the initial focus be on the establishment of a shared vision of the activity to be performed in the environment and that thought be given to the changes in individual business models implicit in consolidation. By requiring the reader to imagine “the vision has been realised”, the writers describe the 2010 vision as envisioned in 2006:

Change began by encouraging general practice services to consolidate and aggregate into new primary or community centres.

These centres allowed general practice services to move into scaleable settings. Services could be provided for a higher number 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 specialities. 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.

GPs now perform the role of a community generalist67, providing clinical leadership and interventions for minor surgery, chronic disease management and emergency medicine as well as being able to fulfil the traditional role as family doctor.

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

- taking medical histories, examining and treating patients, requesting and interpreting laboratory test and x-rays and making diagnoses
- treating minor injuries, including suturing, splinting and casting
- recording progress notes, instructing and counselling patients and requesting or administering therapy
- supporting on call or after hours services68

The 2010 reality

In 2010 a series of interviews and discussions were held within MidCentral DHB to ascertain an understanding of the actual provision of General Practice services. The 2010 reality regarding the provision of general practice within MidCentral DHB is summed up succinctly within Transforming Primary Health Care Services MidCentral Business Case – March 2010 where it states “The practice model is stuck”(2010,37). The powerful vision that engaged the “hearts and minds” of those who developed it in 2006 has not been fully transformed into a 2010 reality.

67 The term community generalist was used in 2007, however in 2010, Primary Care Consultant is preferred.
68 IBID pp. 20-23
In 2009, Smith and Cumming demonstrate that the implementation of the PHCS has struggled to bring about desired changes in terms of extending primary care service provision at the practice level. Despite the development of a compelling vision and a considerable resourcing commitment the day to day provision of general practice within MidCentral remains largely unchanged in 2010.

In MidCentral, the DHB has invested heavily in primary care consistent with the 2004 MidCentral Primary Care Strategy. The DHB has reached out and embraced general practice. While the practice model has shifted in places the embrace has not been fully reciprocated. The reasons for this are complex and multifaceted. There is an inherent tension between ‘managing business as usual’ within an acute model of care while simultaneously making transformative change. The day-to-day acute business of general practice is pressing. The ‘corner dairy’ model is not well equipped for transformative change whereas the consolidated and amalgamated practices have a greater capacity in this regard.

System change has however been effected through the Integrated Palliative Care Service and the CCM implementation in General Practice Pilots. A similar change process has begun as a result of the KHH project. The ongoing and considerable effort and investment that the DHB has made in this regard has ensured that the primary care strategy has kept traction within a stuck system and changes in health outcomes have been achieved. For example, diabetes detection has improved 100% with the MidCentral statistics moving from 20% below the national average to being 20% above.

Several key themes emerged from the interviews and discussions held within MidCentral in 2010 which are summed up as follows:

**Practice amalgamation and the development of a shared infrastructure has positive benefits**

In the instances where colocation and amalgamation of practices has occurred, shared administrative and IT functions have had a positive impact on practices such as Otaki and Tararua Health Group (THG).

The practices that amalgamated to form THG have made the transition from having four separate payrolls, job descriptions, IT systems and supply and ordering systems to one shared and integrated system. The transition occurred over a six month period and was supported by focused change management processes. As a result admin and business processes have changed. THG has experienced an increased recruitment capacity and an increased GP focus on health outcomes rather than on admin outcomes. Professional development is facilitated via web conferencing to international specialists and universities.

At THG, a single management structure is seen as advantageous. However, while the admin functions have integrated, the provision of general practice remains largely unchanged.

Otaki Medical Centre has successfully made the transition to a 6 GP practice working alongside PHO staff. Four years ago, the only access to a dietician would have been through secondary services. Otaki now has a practice based dietician. Diabetes, respiratory and CVD nurses who are employed by the PHO work within the Otaki Medical Centre. The shared practice management system at Otaki has enabled practitioners to “move in a similar direction by using a familiar tool”.

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69 Smith and Cumming (2009)
In addition the use of clinical management software that is linked to national guidelines and algorithmically based indicators has enabled peer reviews and best practice risk assessment.

The GPs in Feilding are looking at establishing a financially sustainable consolidated practice and transitioning from the corner dairy approach and have undertaken a feasibility study accordingly. A process is currently underway to develop a non-binding heads of agreement and there has been verbal agreement from all the doctors involved. Arrangements regarding structure, long-term commitment, return and risk all need to be finalised prior to consolidation.

The collocated services at Horowhenua are looking forward to shared management and admin systems, shared IT systems and the establishment of an overall clinical governance structure. The vision for Horowhenua is for a single health centre with a shared vision

“**The practice model is stuck**”

Notwithstanding the above, the overwhelming response to the translation of the 2010 vision into reality was one of frustration where the provision of general practice remains largely unchanged. The 2010 vision where a high proportion of routine care had moved to being nurse led, with general practitioners dealing with more complex cases and being able to develop their own specialities had not eventuated. The 15 minute consultation remains firmly in place. The health policy imperatives of spending more time treating major chronic diseases in lower cost settings have not been translated into practice.

There has however been a significant investment in the development of primary care that has produced a shift in practice. The MidCentral Chronic Care Management Demonstration Project (CCM) was a quality improvement initiative designed to assist general practice teams enhance the way that chronic care management is provided to their practice population. The CCM framework; “guided the service redesign with clinical facilitation driving and supporting change management” 70 As a result of the CCM “improvements in chronic care management had been made in the three chronic conditions or groups of people with chronic conditions that practices had self-selected to focus on.” 71

The CCM demonstration pilot received targeted funding through Ministry of Health Innovations Funding. There was a clear financial incentive for practice participation accompanied by outlined and detailed criteria for each component of the criteria. The CCM pilot was completed in early 2010 and it is intended, as part of the BSMC business case, that the CCM be rolled out into general practice as a means of achieving transformational change.

“**You get what you pay for**”

The provision of general practice is partially determined by the attendant funding and contracting systems that define and outline service provision. The following comments are illustrative of a capitation funding and contracting system that has not yet served to bring about change. The perceived impact or non-impact of capitation funding as a means to stimulate a focus on population health is demonstrative of a disconnect between the policy intent and the practice outcome. The disconnect at a national level is clearly illustrated by the following comments.

“**Availability of practice income determines services offered.**”

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70 Page 16, MidCentral District Health Board Chronic Care Model (CCM) Implementation into General Practice Demonstration Project Final Report, June 2010.

71 Page 14 IBID
“Capitation has resulted in a reduction of fees paid directly by patients and not a shift to population health.”

“The introduction of capitation was intended to bring about change at service delivery level with clinical outcomes as the target but there was no financial incentive or disincentive to do so.”

“Capitation was never linked to outcomes.”

“You get what you pay for – the reward system rewards GP consults.”

“The IPAC version 18 contract contains 152 pages with half a page on clinical practice. Why change?”

**Transformational change is both achievable and desirable**

The commitment to change evident in the 2006 vision of 2010 remains apparent:

“We are capable of world class delivery with the business structure and health outcomes.”

“Need to have GPs moving forward together. The Leadership Programme will have a role to play.”

“The Palliative Care Partnership achieved major transformational change.”

“Relationship concepts framed the success of the Palliative Care Partnership.”

“Without funding it (the palliative care partnership) would never have happened.”

“All we need is the space and resource to develop the model and create the new space for primary care.”

“A long term commitment is needed to offset the risk.”

“Incentives must be in place to achieve transformational change.”

“We won’t just morph into a new model a step change is necessary.”

The success of the Integrated Palliative Care Service was referred to within many of the MidCentral conversations and was presented as a model of successful primary and secondary integration by Fergus Aitcheson⁷². The ten characteristics of the Integrated Palliative Care Service informed the subsequent development of the CCM and KHH projects within MidCentral. The outcomes and learnings produced through these MidCentral primary care initiatives provide insight into the way forward.

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⁷² Aitcheson, Dr Fergus (2007), *Discussion Paper; Enhanced Quality of Care through more effective Collaboration*, MidCentral District Health Board
The IFHC concept is great and there is a degree of urgency to get it right

There is firm commitment to the achievement of transformational change within the provision of general practice. The vision as articulated in 2006 remains valid in 2010 with several people describing it as both relevant and aspirational. There is also an understanding and appreciation of the urgency facing the sector regarding the need for transformative change.

The MidCentral business case Transforming Primary Health Care Services had recently been completed when the interviews and discussions were held. Several people expressed the view that the IFHC model may provide the means with which to achieve the vision of an integrated continuum of care. Indeed, the frustration expressed regarding the “stuckness” of the practice model was felt to be potentially ameliorated through establishment of the IFHCs.

“It is time to find ways to work together and to integrate care.”

“The IFHC represents an excellent opportunity to do the clinical stuff.”

“IFHCs will break down the silos for funding streams.”

“It is time to better utilise scarce resources – the current system is full of inefficiencies and duplications.”

The nature of GPs as GPs

The “nature” and “culture” of GPs was almost consistently described as a barrier to change;

“GPs are too busy, too tired, too disinterested.”

“GPs are isolationist in approach and are all intelligent and respond to reason.”

“GPs are individualistic by nature which is not conducive to change.”

“Corner Dairy GPs are disparate groups who kick against each other.”

In addition, the nature of and pressures experienced within the current acute model of general practice have served as a barrier to change. The time pressure of general practice where ‘business as usual’ necessarily occupies the primary focus at times precludes a focus on change. The ‘nature’ and ‘culture’ of GPs are in this regard heavily influenced by the ‘business as usual’ experience and pressures. The following comments are illustrative;

“Where is the time to think?”

“Where is the time to vision?”

The pressure that is experienced with the provision of ‘business as usual’ was at the time of the interviews exacerbated by the time commitment required by the BSMC Business Case and the preparation for MidCentral IFHCs.
The provision of general practice within the MidCentral region has not undergone the degree of transformational change envisioned in 2006. The authors of the 2006 Capacity paper describe the involvement of a multiplicity of agencies organised through a system of contract and funding relationships that vary for each funder. They go on to identify a significant risk that the “activities of the various funders will not be coordinated or that they will not be able to get the best return for the limited resources available.”\textsuperscript{73} Starfield’s assertion, cited earlier, that payment systems that reward specific services serve to distort the main purpose of medical care is borne out by the authors’ assertion that the funding and contracting systems are “working against” the goal of the primary health care strategy.\textsuperscript{74}

**Success Stories: Integrated Palliative Care Service (IPCS)**

In contrast, the CCM and KHH initiatives which were both resourced and incentivised did achieve change in the provision of practice. Smith locates the central flaw of the implementation of the primary care strategy as “a failure to address the need for clear incentives and levers in respect of the allocation of new funding.”\textsuperscript{75} The MidCentral experience provides insight into how this might be changed.

The MidCentral Integrated Palliative Care Service (IPCS) referred to by Aitcheson in the collaboration paper was the precursor for both the CMM and the KHH initiatives. Ten characteristics of the IPCS were identified as having contributed to the project’s success. These are summarised as follows:

- Shared governance and leadership
- Equal input from generalist and specialist health providers – role of specialist nurse as well as expert clinician is critical to building strong effective relationships
- Specific funding stream
- Care pathway to facilitate collaboration
- Planned change management process
- Early entry into the service
- Culturally appropriate care
- Involvement with community organisations
- Provision to support nursing staff within residential aged care settings
- In-built quality assurance programmes

An independent evaluation of the service was undertaken and reported in the New Zealand Medical Journal in 2007. The authors concluded that; “The Palliative Care Partnership is an effective model of funded palliative care in primary care. It utilises the enhanced skills of primary and specialist clinicians to provide cost effective palliative care and is a model worthy of replication nationally and internationally.”\textsuperscript{76}

\textsuperscript{73} IBID page 11
\textsuperscript{74} IBID page 11
\textsuperscript{75} IBID page 46
The results noted as part of the evaluation are summarised as follows:

All stakeholders report favourably on the model of care. Data analysis shows the majority of MidCentral general practitioners and many practice nurses have completed training and cared for at least one patient using the funding streams of up to $400 per patient. Clinicians report increased clinical confidence and satisfaction. Patients/family describe best practice palliative care delivery. Funder and management organisation report robust quality and funding procedures.\textsuperscript{77}

Further support for the partnership is provided within the 2006 New Zealand Medical Journal where Stewart et al report:

\textit{Referrals to the specialist palliative care outpatient clinics have decreased, however their complexity increased. This suggests a greater number of less complex problems are being resolved in the community.}\textsuperscript{78}

The GP frustration experienced within a confined scope of practice, as described by Aitcheson within section one of this paper was apparent within general practice teams (GPTs) prior to the PCP. Stewart et al note: “General practice perceived that the Hospice Service had ‘captured’ palliative care, often to the exclusion of general practice.”\textsuperscript{79} The perception was reinforced and clearly demonstrated by the subsequent survey commissioned by Arohanui Hospice in conjunction with MIPA that signalled: “GPTs feeling marginalised in palliative care provision”.\textsuperscript{80}

The effective working relationship between GPTs and Arohanui Hospice is described as the cornerstone of the successful partnership with the following comment cited by Stewart et al.

\textit{I think there is more of a partnership feel in the care, less of patients being taken over.} \textsuperscript{81}

The de-skilling of GP’s, identified by Aitcheson, as arising through such loss of patients was countered with a focused education programme framed on the Gold Standard Framework (GSF). The GSF supports and facilitates the; “primary care practice teams to ‘raise their game’ towards the highest quality care and goes beyond physical symptom control and management issues which could have easily become the focus of a standard GPT education programme.”\textsuperscript{82}

Through the development of the PCP, GPTs have in effect “reclaimed” the patient that was “lost”. This “reclamation” of the patient accompanied by a focused education programme has resulted in an increased the capacity within an expanded GPT scope of practice.

The ten characteristics of success summarised earlier are described fully below:

\textsuperscript{77} IBID page 1
\textsuperscript{78} Page 5, Stewart et al, 2006
\textsuperscript{79} IBID page 1
\textsuperscript{80} IBID, page 1
\textsuperscript{81} IBID, page 2
\textsuperscript{82} IBID, page 3
1. A shared governance and management structure which connects generalist and specialist providers together for the purposes of implementing the integrated palliative care service as well as building mutual respect and good communication. In addition, sustained leadership from generalist and specialist providers is required to represent and inspire various interests.

2. Equal input from generalist and specialist health providers. The role of a specialist nurse (Palliative Care Coordinator) as well as being an expert clinician, is critical to building strong effective relationships between general practice providers (and referrers) and specialist services. Key aspects of the role are building and sustaining an effective partnership between general practice providers and the hospice interdisciplinary team and mentoring or undertaking one-to-one education with general practice providers.

3. A specific funding stream for integrated palliative care enables the majority of care to be delivered in general practice or at home, at no/minimal financial cost to the patient. From a general practice provider perspective this leads to developing and retaining generalist palliative care skills. From a patient perspective, funding enables patients and family to access care.

4. A care pathway to facilitate collaboration. Mandatory induction and annually updated interprofessional education (rolled out over several years allowing new entrants), use of a specialist nurse, and supply of decision support to support care are key components of a standardised pathway.

5. A planned change management process. A change management process that is steady but not rushed allows all involved to adapt and to build the new pathway into ‘usual care’. Maximising favourable forces to support the change is a useful strategy and these can include an overall commitment to providing palliative care by all stakeholders, favourable timing, the ‘good’ reputation of hospice staff and the high level of agreement that palliative care is core business for general practice providers.

6. Early entry into the service. It is important to be able to refer patients early-on into an integrated palliative care service at the request of general practice team and/or patients/family. This is especially so for those with chronic illness when the palliative care trajectory is uncertain and when it can be more difficult for clinicians to identify when the palliative care stage is being reached. Early access to a specialist assessment and support can be hugely beneficial.

7. Culturally appropriate care. An integrated palliative care service must take account of the patient/family culture in its widest sense (ethnicity, spirituality, social).

8. Involvement with community organisations. It is important to have links to community based organisations such as a respiratory or cardiovascular or motor neurone disease association or cancer society, to assess resources and supports. Having links to a home based nursing services is critical, particularly one which supplies overnight care.

9. Provision to support nursing staff caring for older adults with palliative care needs in residential care settings. Providing appropriate palliative care for people residing in residential older adult care facilities is an internationally recognised care issue, as there are a significant and growing number who also have complex health care needs associated with long-term conditions.
In-built quality assurance processes. These should include systems for routine data collection, audit of clinical practice at generalist and specialist level, ability to examine variances in the care pathway and evaluation of patient/family and referrer satisfaction and an ability to create feedback loops for quality improvement. Using palliative care outcome scales or performance indicators would be ideal however developing these is still being undertaken and it is known to be difficult to implement them in clinical practice. Evaluation of client outcomes such as preference for place of death, unrelieved symptoms or unintended public hospital or hospice admission may be appropriate.

The above characteristics informed the subsequent development of the CCM which was piloted within general practice during 2009 and 2010 with support from the Primary Health Care Strategy Innovations Fund. Evaluation of the Assessment of Chronic Illness Care (ACIC) scores for the participating practices show improved chronic care capacity in both practices. The authors of the completion report state; “Both general practice teams’ ACIC scores showed an increase from time 1 (T1) to time 2 (T2) for all system components within each chronic condition, thus indicating comprehensive system change.”

A number of constraints were noted to affect the project over time. The greatest constraint related to information technology where; “the provision of suitable assessment tools, the completion of individualised (computerised) care plans, and standardised documentation are key ways of improving the way that chronic care management is provided.” The development of better electronic assessment and care planning processes is one of the key recommendations.

The lack of data in regard to the tracking of changes in health outcomes and the resultant impact on secondary care utilisation that was noted in 2006 remains of concern in 2010 with no noticeable improvement being made. The practice based patient management software (PMS) needs to be linked with population software that has the functionality to track changes in health outcome and resultant secondary care utilisation patterns.

Competing priorities of practice teams were seen as “causing disruption to the project”. While chronic conditions are acknowledged as being best controlled in the primary health care sector the system within which the care is delivered can have an influence on the effectiveness and efficiency of clinical care. The authors of the CCM completion report cite the MacColl Institute in this regard; “Improving the health of people with chronic illness requires transforming a system that is essentially reactive – responding mainly when a person is sick – to one that is proactive and focused on keeping a person as healthy as possible.”

At the time of writing, the dominant way of structuring general practice services within the MidCentral region was through an acute model of health care delivery. The ‘business as usual demands’ identified earlier as a barrier to change were also noted within the CCM project.

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84 Page 7 IBID
85 Page 7 IBID
86 Page 40 IBID
87 MacColl Institute as cited within; Completion Report, Primary Health Care Strategy – Innovations Fund 2009, Health Care
The assertion that the ‘practice model is stuck’ refers to the dominant and at times overwhelming acute model of ‘business as usual’. In that the CCM project has demonstrably produced comprehensive system change, it provides insight into how the ‘stuckness’ of general practice can be interrupted and transformative change facilitated.

The authors of the completion report again cite the MacColl Institute in this regard, “Senior leadership must identify care improvement as important work, and translate it into clear improvement goals and policies that are addressed through application of effective improvement strategies including use of incentives, that encourage comprehensive system change.”

The importance of clinical leadership identified within the integrated palliative care service is reinforced within the chronic care management implementation pilot alongside the characteristics of care pathways to facilitate collaboration, planned change management process and in-built quality assurance programmes.

From a funding perspective, practice teams could “apply for ‘release time’ funding on five separate occasions across the project in accordance with meeting key milestones or requirements. A total of $10,000 could be claimed by each practice.” Project milestones were clearly articulated and the funding available clearly aligned with key milestones that practices were required to meet before funding would be released. A Memorandum of Understanding was developed between the Health Care Development Team, MidCentral DHB and the participating practices that clearly defined and outlined the project purpose, outline and obligations of the parties.

The IPCS and CCM projects both clearly demonstrate that transformative change can be achieved when clinicians are resourced and supported to improve care in line with clear goals and policies through the application of effective improvement strategies including the use of incentives. The fact that success here has required another layer of complexity in the form of specific funding streams can be addressed by the changes recommended in this paper.

**Success Stories: Kidney Health Horowhenua (KHH)**

The Kidney Health in Horowhenua (KHH) project provides an additional case study of practice transformation from which insight can be gained. In addition, the KHH provides a striking example of the cost effectiveness of effective primary care provision.

As outlined earlier, MidCentral DHB has committed considerable resource to primary care to assist with the better management of chronic conditions in the community. However it was noted in 2009 that “despite this investment access to specialist renal services by patients continues unabated and real limitations as to what can be offered are being faced.” The KHH project was a targeted quality improvement initiative designed to assist general practice teams improve the way that chronic kidney disease (CKD) is managed in the MidCentral district.

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88 Page 38, IBID
89 Page 20, IBID
90 Page 8, Completion Report, Primary Health Care Strategy- Innovations Fund 2009, Health Care Development MCDHB, July 2010
91 Page 12 IBID
Specific funding was secured from the Primary Health Care Strategy (PHCS) Innovation Fund to complete the project. The project budget included $2,000 per practice for Practice Participation Payments which were dispersed in accordance with the relevant letter of agreement. Each part payment was made in accordance with the practice achieving an agreed project milestone. For example: Allocation 1 of $500 was paid when practices could demonstrate: Practice team completed kidney health assessment tool, Practice team completed kidney health action plan and set timeframes, Practice team provided data (and report) and development of disease register for CKD, Attendance at CKD education sessions by two thirds of team members.  

The project had a specific funding stream and a planned change management process that was aligned with clearly specified deliverables. In addition, there was input from both generalist and specialist health providers and a care pathway to facilitate collaboration. As a result of the project change was effected within general practice in such a way as to promote the provision of primary care that increases health outcomes at a decreased cost.

In 2009, the average treatment cost for a person “requiring renal replacement therapy ranges from $34,000 to $64,000 per annum. However if District Health Boards (DHBs) were able to delay dialysis by one year in one individual (per 10,000 patients) they could recoup the entire cost of managing CKD.” In this instance, the cost incurred with the necessary change management process is potentially able to be recouped relatively quickly. The cost benefit of change is reinforced later when the authors state, in regard to the MidCentral district wide Renal Services Plan; “Analysis of the options showed that “the unusual aspect of renal care is that the ongoing cost of best-practice care is less expensive than the current practices. Whilst investments will be required to bring about changes, once implemented they provide a far better cost profile.”

The project team had assumed that practices would have systems in place to identify patients with CKD; this was however not the case. Three out of the ten participating practices “had existing registers for patients already diagnosed with CKD. Anecdotally other practices were aware of patients with CKD within their practices but no formal disease register or list was maintained. This meant that the majority of practices did not have any recall systems in place for this patient group.”

By contrast, as a result of the project 691 patients have been identified as having CKD, recall systems are in place in nine of the ten participating practices and at risk registers are either in place or in progress at nine of the ten participating practices. When the ten participating practices are examined as a whole the contrast between pre and post project is striking. The authors state; “At the conclusion of the project it was clear that the numbers of patients known to have CKD were greater than prior to commencement, with nine out of ten practices having completed disease registers for those patients having identified as CKD”. The one remaining practice has the development of the register in progress.

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92 Appendix B unpaginated, IBID  
93 Page 8, IBID  
94 Page 8, IBID  
95 Page 31, IBID  
96 Page 11 IBID
The Kidney Health in Horowhenua project provides insight in how practice transformation can be planned incentivised and managed. The following table illustrates the before and after gap:

<table>
<thead>
<tr>
<th>Practice ID</th>
<th>Number of Patients Identified with CKD at Commencement of Project</th>
<th>Number of Patients Identified with CKD at Completion of Project</th>
<th>Recalls in Place</th>
<th>“At Risk” Register Developed</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>50 GP had been vigilant in coding and staging patients with CKD prior to commencement of project.</td>
<td>54 Important to note some patients with CKD left the practice due to staffing issues prior to project commencement</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>2</td>
<td>Unknown</td>
<td>122</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>3</td>
<td>Unknown</td>
<td>55</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>4</td>
<td>Unknown</td>
<td>30</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>5</td>
<td>5 to 8</td>
<td>75</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>6</td>
<td>37 GP had been vigilant in developing a disease register</td>
<td>103 Inclusive of 44 patients on Care Plus</td>
<td>Yes</td>
<td>In Progress</td>
</tr>
<tr>
<td>8</td>
<td>Data unable to be obtained</td>
<td>Disease register not completed</td>
<td>Data unable to be obtained</td>
<td>Data unable to be obtained</td>
</tr>
<tr>
<td>9</td>
<td>Unknown</td>
<td>99</td>
<td>Yes</td>
<td>In Progress</td>
</tr>
<tr>
<td>10</td>
<td>Unknown</td>
<td>77</td>
<td>Yes</td>
<td>In Progress</td>
</tr>
<tr>
<td>Total</td>
<td>Unknown</td>
<td>691</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

All practices involved in the KHH project were small practices with the majority of practices supported by one general practitioner. The ubiquitous time pressure of ‘business as usual’ caused the authors to comment: “Once again the general day-to-day acute business of general practice and time constraints has been noted as a cause for delay.” The corner dairy model in this instance in not well equipped for transformative change due to the nature of the business model. Consolidated and amalgamated practices may provide greater capacity in this regard.

At the commencement of the project while all GPs in the MidCentral district had computerised Practice Management Software (PMS) systems which; “could be used to improve the systematic management of people with significant grades of CKD, not all practices had systems in place to identify and therefore effectively manage patients with CKD. MedLab Central provided a list of patients with abnormal results over the last five years to each general practice team thus enabling the identification of patients.

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97 The Full table is on page 45 of the Completion report
98 Page 33 IBID
99 Page 21 IBID
Feedback received at the end of the project stressed the value of such information; “The best aspect of the project was the MedLab printout – this allowed us to go through and classify patients and gave us a base to start from ... the lab results are really needed – and it must be ensured that these are given to the practices as without this info the algorithm etc wouldn’t be useful.”

By linking the PMS with population software that has the functionality to track changes in health outcome and resultant secondary care utilisation patterns the resultant financial modelling would inform future planning and funding decisions.

**Conclusion**

As outlined above, the MidCentral experience provides insight into a health system where transformative change is simultaneously frustrated and facilitated. The ten characteristics of success identified as a result of the IPCS have informed the CCM and KHH projects through which system change has been achieved. Together these projects illustrate the effectiveness of clinical leadership used in conjunction with a planned change management process that is clearly aligned with specified deliverables. In addition, input from both generalist and specialist health providers was supported with a care pathway to facilitate collaboration. As a result of the projects change was effected within general practice in such a way as to promote the provision of primary care that increases health outcomes at a decreased cost.

The CCM and KHH projects both noted the dominance and time pressures experienced within the acute model of practice as a barrier to change. This was reinforced within the MidCentral conversations that formed part of the background for this paper. The questions; “Where is the time to think? Where is the time to vision? are partially answered with the Practice Participation Payments that comprised part of the allocated project budget. The practice participation payment enabled practitioners to take time out from the practice without compromising practice income.

Transformative change by necessity must be resourced and supported in accordance with the stated purpose, objectives and planned outcomes of the proposed change management process. The KHH project demonstrates that the up investment necessary to deliver primary care differently is able to be recouped due to the resultant shifts in care utilisation. The success stories demonstrate how processes of care can be changed to strong effect. But the requirement to add a specific funding stream only exacerbates the complexity which results from such an approach to incentives, as highlighted in the PHO capacity paper.

Section Three of this paper examines international examples of high performing health systems in this light.

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100 Page 31, IBID
Section Three
High Performing Health Systems: Common international and local themes. Structure (systems and processes) follows strategy; culture is important, as is a consistent set of characteristics, robust management systems and aligned incentives. Advance incentives can work.

International research into high performing health care delivery systems provides both insight into how practice transformation can be achieved to produce increased health outcomes in a sustainable manner and supports the case study learnings gained through the MidCentral Experience.

Commonwealth Fund case study analysis of high performing health care delivery systems identifies overarching themes to inform the development of high performance and system transformation. The overarching themes endorse and resonate with the MidCentral characteristics of success providing further support for the proposed solution.

The Group Health Co-operative pilot demonstration of the patient-centred medical home (PCMH) model of primary care clearly demonstrates that the initial “up front” investment necessary in order to deliver primary care differently is able to be recouped due to the result shifts in care utilisation. The cost benefit of change evidenced in the MidCentral KHH provides a current New Zealand example of such change where the investment required to bring about change is able to be recouped and the ongoing cost of best-practice care has proven to be less expensive than the model previously used within general practice.

Research from the Kings Fund clearly identifies the clinical microsystem as the priority area to focus on in the quest to produce more value from scarce resources.

In 2009, the Commonwealth Fund\textsuperscript{101} published fifteen case studies to illustrate how different and diverse organised health care delivery systems promote and achieve high performance. The organisations that together comprise the fifteen range from large integrated delivery systems covering the full scope of health care services to independent physicians in private practice and include public systems, not-for-profit systems, professional corporations and public-private collaborations.\textsuperscript{102}

Together, the fifteen case studies illustrate how diverse types of organised health care delivery systems promote higher performance through:

- information continuity
- patient engagement
- care coordination
- team oriented care delivery
- continuous innovation and learning
- convenient access to care

These six attributes are consistently present within all fifteen case study organisations while being exhibited in different ways and to varying degrees.

\textsuperscript{101} The Commonwealth Fund is a charitable foundation whose stated purpose is to promote a high performing health care system that achieves better access, improved quality, and greater efficiency. The Fund supports independent research.

The six attributes are in turn supported by values-driven leadership, interdisciplinary teamwork, integration and aligned incentives (both at the organisational and provider level), accountability and transparency. The organisations were selected through a ranking process that used performance benchmarking data, experts’ recommendations and professional literature as the basis for the ranking. Kaiser Permanente, Mayo Clinic and Mayo Health System, Geisinger Health System, Group Health Co-operative and Hill Physicians Medical Group are among the fifteen organisations studied.

Commonly reported results of the high performing organisations are; “improved clinical quality of care and control of chronic diseases, increased patient satisfaction, shorter waiting times, and reduced hospitalisations, emergency visits and prescription drug expenses.” The Commonwealth Fund research further adds to an international body of research and evidence that documents; “how diverse types of integration of providers and services – in combination with effective leadership, aligned incentives, and a supportive organisational mission and culture – facilitate the creation of high-functioning local health care delivery systems.”

The diversity of the fifteen case study organisations and the variation of structures and systems among them are of central importance. There is not one correct structure, or system of care management, that if replicated would give rise to high performance. However the presence of the six attributes and the overarching themes of values-driven leadership, interdisciplinary teamwork, integration, aligned incentives, mutual accountability and transparency can inform the development of high performance in a variety of contexts and communities.

The characteristics of success that were distilled from the MidCentral IPCS and used to inform both the CCM and KHH projects are reflective of the overarching themes as identified by the Commonwealth Fund. Values driven leadership, interdisciplinary teamwork, integration, aligned incentives and transparency are of particular relevance and are evident within the MidCentral examples where comprehensive system change has been effected.

Group Health Co-operative, one of the Commonwealth Fund case study organisations undertook a demonstration of the patient-centred medical home (PCMH) model of primary care in 2007. The pilot was undertaken following a series of reforms between 2002 and 2006 that were intended to improve efficiency and access. However, while the reforms succeeded in improving patient access and satisfaction, physician workloads were also increased resulting in fatigue and decreased work satisfaction. Reductions were also noted in nationally reported quality of care indicators alongside an increased utilisation of speciality care, emergency care and inpatient days.

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103 Page 1, IBID
104 Page 9, IBID
105 Page 10, IBID
At the time of the pilot there was a “growing enthusiasm and desire that the PCMH be fast-tracked”\textsuperscript{107}, it was however deemed necessary to undertake a pilot to provide more information and therefore more certainty. The pilot, in this respect, was a means by which proof of concept could be tested. Researchers were particularly interested in the impact the PCMH would have on the concerning trends of increased fatigue and workload alongside decreased quality of care indicators and increased secondary utilisation.

The objectives of the demonstration were to:

(1) maintain or enhance patient care experience
(2) reduce physician and care team burnout
(3) improve clinical quality scores
(4) reduce emergency, speciality and avoidable hospitalisation use and costs\textsuperscript{108}

The PCMH demonstration delivered primary care very differently that the 19 other clinics involved\textsuperscript{109}. Significant “up front” investment of an “estimated $16 per patient per year was made in primary care.\textsuperscript{110} The authors note; “it appears that this investment was recouped quickly (within 12 months), thanks to shifts in patients’ care utilization, particularly from savings from less use of emergency care.”\textsuperscript{111}

A prospective before and after evaluation was undertaken and after adjusting for baseline the following results were noted:

\begin{itemize}
  \item \textit{PCMH patients reported higher ratings than controls on 6 of 7 patient experience scales.}
  \item \textit{For staff burnout, 10\% of PCMH staff reported high emotional exhaustion at 12 months compared with 30\% of controls, despite similar rates at baseline.}
  \item \textit{PCMH patients also had gains in composite quality between 1.2\% and 1.6\% greater than those of other patients.}
  \item \textit{PCMH patients used more email, phone and specialist visits, but fewer emergency services.}
  \item \textit{At 12 months there were no significant differences in overall costs.}\textsuperscript{112}
\end{itemize}

Analysis of the results led the researchers to conclude that; “Evaluation of a 12-month demonstration of a PCMH in an integrated group practice demonstrated significant improvements in patients’ and providers’ experiences and in the quality of care. Despite the significant monetary investment in the PCMH redesign, the costs were recouped within the first year.”\textsuperscript{113}

\textsuperscript{107} Page, e71, IBID
\textsuperscript{108} Page e72, IBID
\textsuperscript{109} Page e78, IBID
\textsuperscript{110} Page e79, IBID
\textsuperscript{111} Page e79, IBID
\textsuperscript{112} Page e71, IBID
\textsuperscript{113} Page e81, IBID
As discussed earlier in section one, the more higher-care-needs patients are attached to a primary care practice, the lower the costs are for the overall health system. Hollander et al convincingly present this as a “major new finding in regard to the value for money of primary care services.” Their finding that the “majority of the cost reductions stemmed from decreases in the costs of hospital services” is consistent with the results of the Group Health PCMH demonstration pilot which was able to recoup the significant investment necessary required within the first year.

The Commonwealth Case studies provide transferable attributes and overarching themes to inform the development of effective and high performing health organisations. The Group Health pilot demonstrates that the effective provision of primary care can effect change at the level of secondary utilisation of services. There are economic benefits that accompany the improvements in physician experience and patient outcomes.

The burning platform of increasing demand alongside constrained resource necessitates analysis regarding how to utilise the available resources more effectively. Researchers from the King’s Fund address this issue within their paper *Improving NHS productivity; More with the same not more of the same.*

In 2009, the King’s Fund and the Institute for Fiscal Studies (IFS) joined forces to examine the implication of the economic crisis for the funding prospects of the NHS. They concluded that; “with no productivity improvement and no real rise in spending, the funding shortfall could still be around £21 billion by 2013/14” The “inescapable conclusion” of the joint King’s Fund and IFS analysis was that; “closing the gap would inevitably involve major improvements in NHS productivity.” The gap referred to here is the gap between required and actual funding with the corollary of the gap as the “necessary focus on productivity”.

The authors stress the importance of carefully selecting strategies which together, “produce more value from the same or similar resource – not the same for less.” They identify an attendant risk that the focus on productivity becomes an end in itself or the worst case scenario resulting in; “a misunderstanding that the NHS needs to dramatically cut budgets, reduce services for patients and sack staff.”

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114 Page 32, Hollander et al 2009
115 Page 32 IBID
116 The King’s Fund is a charity that seeks to understand how the health system in England can be improved. Using that insight, they help to shape policy, transform services and bring about behavioural change.
117 NHS = National Health Service of England
118 Page 1, Appleby, John, Ham, Chris, Imison, Candace, Jennings, Mark, (July 2010), *Improving NHS productivity More with the same not more of the same,* The King’s Fund 2010.
119 Page 1, IBID
120 Page 2, IBID
121 Page 2, IBID
122 Page 2, IBID
Inefficiencies in support services and back office functions alongside development and incentivisation of the workforce are identified as real opportunities. However, the most significant opportunities identified to improve productivity come from “**focusing on clinical decision-making and reducing variations in clinical practice.**” The “clinical microsystem” is identified as the most important area to focus on through the engagement of; “doctors, nurses, allied health professionals and others in delivering improvements in care.” The scope of the challenge facing practitioners within the clinical microsystem necessitates continuing investment in leadership and change management capabilities throughout the health sector.

Appleby et al provide concrete examples that clearly demonstrate “that improving the quality of care and releasing resources often go hand in hand.” They state: “By providing the right care the first time, and eliminating waste, the patient experience can be improved and unnecessary expenditure can be avoided.” A striking example of this concept is the £1,050 million savings realised through the better management of leg ulcers, preventing hospital admission. The implementation of NICE evidence-based guidelines resulted in savings of £600 million. The authors introduce a note of caution when discussing the magnitude of the savings produced as the value of the productivity improvements is calculated on a theoretical basis. They also note that while variable costs can be relatively easily realised, semi-fixed costs such as staffing and fixed costs such as buildings are more difficult to release.

While the most significant opportunities to improve productivity are located within the clinical microsystem, the biggest challenge identified facing the NHS is acting on the knowledge of what needs to be done and making it happen. The authors advocate translating analysis into action through excellent leadership and the spread of best practice starting with tackling variations in clinical practice at the clinical microsystem as a main priority.

The prioritisation of the clinical microsystem is due to the crucial importance and impact of the decisions that are made at the point of care. “**Clinical microsystems are important because they are the point at which patients experience care, and because it is within these microsystems that decisions are taken on the use of resources.**”

The authors note that practitioners and in particular GPs will need access to management expertise and real-time information about their services in order to produce the necessary productivity increases. They also advocate real incentives to reward the work involved in order to motivate GPs.

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123 Page 2, IBID
124 Page 2, IBID
125 Page 14, IBID
126 Page 14, IBID
127 NHS Institute for Innovation and Improvement (2009A) as cited by Appleby et al (2010)
129 Page 19, IBID
130 Appleby et al, borrow the term clinical microsystem from Mohr and Batalden (2002) and use it to describe the teams that deliver front line care. Page 19, IBID
131 Page 20, IBID
Section Four
Transferable Principles and Transformative Change: To get both you need a merger of medicine and management science

The transferable principles of values-driven leadership, interdisciplinary teamwork, integration, aligned incentives, accountability and transparency identified in the previous section are explored in regard to effecting transformative change at the clinical microsystem as identified by the researchers at the King Fund. This exploration is facilitated by an examination of Dr Richard Bohmer’s research that identifies the intersection of medical and management science as the space where the potential for transformation of health care delivery resides.

As health systems are also social systems an appreciation of social change is necessary to inform transformative change. Medical professionalism is discussed in this regard. The work of Mountford and Webb is examined with specific regard to clinical leadership and a resultant expansion of the professional identity of clinicians. Mountford and Webb demonstrate the value and benefit of clinical leadership through case study analysis.

Clinical leadership and informed decision making at the clinical microsystem are key transferable principles to underpin transformative change. An expanded professional identity that includes rather than precludes clinical leadership and management is an additional prerequisite for successful transformation to occur.

The Commonwealth Fund research outlined in the previous section builds on an international body of research that examines and analyses high performing health organisations and the key transferable principles that inform their success. Effective leadership, aligned incentives, and a supportive organisational mission and culture are all integral facets of high-functioning health care delivery systems.

By examining how to do more with the same and not more of the same, the King’s Fund researchers clearly demonstrate that the clinical microsystem is of paramount importance as the space where patients experience care and where decisions are made regarding the utilisation of resources. They also stress that GPs, in particular will need access to management expertise and real-time information about their services in order to produce the necessary productivity increases.

Dr Richard Bohmer of Harvard Business School describes the intersection of medical science and management science as the space where the potential for transformation of health care delivery lies. Dr Bohmer’s research, in focusing on the intersection between medical care and management practice, is in effect examining the clinical microsystem as described by the King’s Fund researchers. Of particular interest is the King’s Fund linkage of management expertise and real time service information in order to increase productivity. The linkage is representative of an intersection between medical and management science. For Bohmer, health care is “essentially a process of applying the best medical knowledge – both research and clinical – to solve patients’ health problems.” It is the juxtaposition of clinical expertise, management expertise and real time service information that is of importance.

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Clinical Expertise, management expertise and access to real-time information are key components of the successful transformation of the delivery of health services to Ireland’s 4.5 million people. Brendan Drum, MD, the first CEO of Ireland’s Health Service Executive reflects on the above factors when discussing the transformation that has resulted in more patients having access to high-quality primary care alongside a sharp decline in hospital waiting lists.134

A key part of the transformation process was the identification and introduction of relevant clinical metrics to inform productivity and performance in order to counteract the “dearth” of performance data that was previously available to clinicians. In addition, Drum reflects on a previous; “visible divide between the clinical community and the health system managers; the two groups did not have a constructive relationship.”135 This divide was bridged through the direct involvement of selected clinical leaders in the improvement of health services. Clinicians were further supported through the Forum of Irish Postgraduate Medical Training Bodies. Drum states: “The Forum’s endorsement made it possible for more clinicians to come out of the shadows and support the transformation agenda, which then made it easier to establish effective working relationships between clinicians and managers. I think other countries could find this approach helpful in driving forward health sector change.”136

The visible divide Drum describes separating clinicians from managers is not dissimilar to the perceived separation between GPTs and Hospice within MidCentral prior to the PCP project. The effective working relationships established provide the foundation for transformative change within both instances and are a precursor for success.137

The transformation within Ireland commenced within 2005, Drum comments further; “Our GPs are independent contractors, and it could have taken us 20 or 30 years to get them all to buy into the concept of primary care teams. So we gave them a financial incentive.” He continues: “This approach has been very successful in getting GPs to participate – so much so that they are delivering the new infrastructure more quickly than expected.” In this regard, the approach taken within Ireland echoes that undertaken in MidCentral where the use of financial incentives was a key component of successful transformative change.

There is another sphere that intersects with medical and management science and that is the sphere of social science. Health systems are also social systems. Transformative change must also be predicated on an appreciation and understanding of social systems and social change. Whānau Ora as an inclusive approach to providing services and opportunities to whānau as a whole rather than focusing separately on individual whānau members and their problems is in some ways representative of an intersection of the three spheres. This paper doesn’t seek to explore this in any greater depth because a three way integration is predicated on a prior merger of medical and management science.

135 IBID
136 IBID
137 Fragmentation of health services results in a multiplicity of such divisions. While outside the scope of this paper, further research into this key area would add value to the current debate concerning the provision of integrated services that by necessity cross the divide between primary and secondary care. The differentiation between primary and secondary care, in this respect, becomes an artificial divide that must be bridged in order to deliver cross system health efficiencies.
Medical professionalism plays a key role in transformative change of health systems. The changing nature of the world within which doctors work has resulted in the development of a new definition of medical professionalism deemed necessary for the 21st century. Medical Professionalism signifies a set of values, behaviours and relationships that underpins the trust the public has in doctors. Trust is an integral component of the moral and social contract that exists between the medical profession and society.

Professionalism within medicine has at times precluded management from the professional framework. There has been a separation of clinical practice and management where clinicians make the front line decisions and administrators administer organisations. Clinical decision making and budgetary management have been viewed as distinct and separate arenas, requiring differing fields of expertise, knowledge and skill. Undergraduate and postgraduate medical training often excludes professional management studies and clinicians who later pursue management roles are anecdotally referred to as having “gone over to the dark side”.

All professions have norms, codes of conducts, systems of ethics and standards by which the profession and the professionals define themselves. Medicine however, seems to be subject to stronger and more explicit codes of conduct. It is therefore essential than when addressing transformational change within health systems that the professionalism of doctors be taken into account. The central importance of trust to medical professionalism is reflected in the Better Sooner More Convenient assertion that: “A significant part of improving job satisfaction is offering trust, empowerment, and professional development.”

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138 The Royal College Working Party developed this definition between October 2004 and June 2005. It was published within Doctors in society: medical professionalism in a changing world. http://www.rcplondon.ac.uk/pubs/books/docinsoc/
Medicine as an ancient profession in a modern world is adapting to rapidly changing health systems. Clinical leadership and decision making have been identified as key components of high performing and productive health systems and organisations. Mountford and Webb undertake case study analyses of Kaiser Permanente and the Veterans Health Administration to demonstrate why clinical leadership matters.¹⁴²

In the late 1990s Kaiser Permanente Colorado was experiencing worsening clinical and financial performance when the new executive medical director made clinical leadership an “explicit force for improving outcomes for patients.”¹⁴³ Within five years, Colorado was Kaiser’s highest performing affiliate with a significant increase in patient satisfaction, a dramatic fall in staff turnover and a rise in net income from zero to $87 million.¹⁴⁴

Similarly the Veterans Health Administration (VA) was facing potential closure due to poor performance in the mid-1990s. A newly appointed CEO introduced an improvement programme within which clinical leadership played a central part. The CEO was a doctor. In addition to clinical leadership, the program also introduced “clinically relevant performance measures with corresponding rewards, and new information systems.”¹⁴⁵ The VA became a leader in clinical quality with the risk of death for men over 65 being 40 per cent lower than the US average and patient satisfaction rising to 83%, 12 per cent above the national average.

The improvements noted above came about as a result of clinical leadership where clinicians played an integral role in shaping clinical services. Mountford and Webb note a change in physicians’ professional identity and sense of accountability where; “There was a sense that clinicians were, more broadly, extending the responsibility they feel for their patients to the organization itself.”¹⁴⁶

Effective clinical leadership is widely recognised as lifting the performance of health care organisations. Hospitals with the greatest clinician participation in management scored about 50 percent higher on important drivers of performance in a joint McKinsey and London School of Economics study as cited by Mountford and Webb.¹⁴⁷

Mountford and Webb explore the barriers to clinical leadership and identify scepticism of clinicians, lack of a well-defined career path, financial disincentives and lack of leadership and management training in this respect. However, they locate the highest barrier in “the historical beliefs of clinicians themselves about the value of leadership and management.”¹⁴⁸

¹⁴³ Page, 2, IBID
¹⁴⁴ As cited by Mountford and Webb, Page 2, IBID
¹⁴⁵ As cited by Mountford and Webb, Page 2 IBID
¹⁴⁶ Page 3,IBID
¹⁴⁷ Page 3, IBID
¹⁴⁸ Page 6, IBID
Evidence of the value and benefits of clinical leadership can be provided through basic performance data as demonstrated in the case studies of Kaiser and the VA. Patients benefit when clinicians lead. Performance data provides evidence and can underpin transformation. The circulation of clinician-level performance data can prompt competition among clinicians thus supporting a shift in belief regarding clinical leadership.\textsuperscript{149}

Mountford and Wells also discuss training and development of clinical leaders, the removal of disincentives and the use of incentives to expand the professional identity of clinicians.

\begin{quote}
A deep commitment to patient care and to traditional skills will always remain the core of a clinician’s identity. To achieve the best and most sustainable quality of care, however, a commitment to building high-performing organisations must complement these traditional values.\textsuperscript{150}
\end{quote}

Clinical leadership and informed decision making at the clinical microsystem are key transferable principles to underpin transformative change. The most significant opportunities for productivity improvement will arise through a focus on clinical decision-making and a reduction in practice variation. An expanded clinical professional identity that includes rather than precludes clinical leadership and management is an additional prerequisite for successful transformation of productivity. Section five of this paper specifically addresses the use of incentives to transform the provision of care.

\textsuperscript{149} Mountford and Wells demonstrate the link between performance and enhanced clinical leadership. Page 7 IBID

\textsuperscript{150} Page 8, IBID
Section Five
Aligning Strategy, Policy and Practice: Incentivising Change: Enhance the current strategy by expanding and simplifying the incentive toolkit; create criteria for incentive eligibility; substitute contract complexity for trust

MidCentral DHB is currently establishing five integrated family health care centres (IFHCs) in line with the national primary care strategy. Full service integration is intended as an outcome of the establishment of the MidCentral IFHCs. The research undertaken for this paper would suggest that the proposed and incentivised alignment of funding and service provision will enhance the transformative change necessary to achieve service integration.

Further discussion of the Ontario Model of blended capitation and fee for service will be used to advocate the use of practice incentives alongside a better alignment of funding and accountability for service provision. As is the case in Ontario the introduction of incentives is closely aligned to the achievement of outcomes.

In order to deliver improved health outcomes with the current fiscal envelope, it is essential that any initial “up front” investment necessary in order to deliver primary care differently is recouped due to the resultant shifts in care utilisation. Health outcomes and primary and secondary care utilisation patterns must be defined and tracked at both practice and population levels as part of an ongoing evaluation. This will require a level of acceptance for and establishment of management processes which seamlessly merge with clinical processes.

The research undertaken for this paper would suggest that without the proposed and incentivised alignment of funding and service provision; integration will be compromised, resulting in further frustration.

Judith Smith (2009) notes widespread anecdotal criticism of the 15 minute GP consultation that has remained largely unchanged since the introduction of the primary care strategy in 2001. Smith subsequently questions whether or not this immovability is indeed a problem. She then calls for detailed work to be undertaken to establish just what different models of primary care including general practice would look like and then raises the issue of how far a capitation approach to funding is “being used to shift the paradigm of primary health care towards a more preventative and population focus.”

In 2010, the government sought expressions of interest to provide Better More Convenient Health Services through comprehensive IFHC models of care. Significant changes in the model of primary care provision were deemed necessary to secure overall health system efficiencies with specific reference being paid to the following service planning steps:

- Development of new models of care that shift services from secondary care to primary care and reduce demand on the DHB’s secondary care services
- Development of new workforce configurations and more flexible professional boundaries
- Development of new models of care enabled by new technology

The service planning steps above will, in effect, produce the detailed work called for by Smith in 2009.

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151 Page 20, Judith Smith (2009)
152 Steps required to complete a successful IFHC proposal
In order to achieve the above service integration change must be effected at the level of general practice. The transferable principles identified within sections three and four of this paper can be applied to the MidCentral context with specific reference being paid to the IFHC process. The six overarching themes as identified by the Commonwealth Fund will be interpreted as enablers and drivers of change. The alignment of incentives will be shown to be both a key driver of transformative change and an area where policy can have the greatest impact. The specific overarching themes are addressed in turn:

Values driven leadership – the proposed clinically-led alliance contracting approach will act as an enabler with a shared strategic vision that appeals to “common values, such as patient welfare, professional pride and shared accountability for outcomes.”\(^\text{153}\) In addition, the alliance can enable successful transformation through merging medical and management science through well-resourced clinical leadership within an environment of mutual trust and respect. The successful merger of management and medical science will enable general practice teams to achieve improvements in productivity by focusing on clinical decision-making and reducing variation in general practice.

Interdisciplinary teamwork – the alliance approach to the establishment of the IFHC is predicated on teamwork as an enabler of the coordination of care and brings together sector leaders, both clinicians and managers, to foster and develop standardised and evidence-based care processes. Interdisciplinary teamwork, in this respect facilitates the merger of management and medical science necessary to produce transformative change.

Integration – Integration is the goal of the IFHC and Alliance Contracting process and is enabled by bringing together services across the primary and secondary interface in order to secure overall health system efficiencies. The multiplicity of funding streams and contracting arrangements that currently intersect both the primary and secondary sectors can be simplified significantly through the integration of both services and funding streams. The conviction that health outcome gains are achievable through securing overall health system efficiencies will require increased management processes to be merged with clinical leadership and decision making. The merger of medical and management sciences can be fostered (as opposed to “forced”) in this way.

Aligned Incentives – the alignment of incentives is the key driver that is thus far underdeveloped within the proposed IFHC and Alliance Contracting approach. The transformational change that can be achieved through an alignment of blended capitation (bundled incentives) avoids the historical tendency of aligning specific funding streams to specified outputs.

Mutual Accountability – Alliance contracting and the fostering of a group culture can serve to reduce the impact of the “budget wars” and “turf wars” that have permeated health systems and organisations. The devolution of services between primary and secondary care will be best supported with mutual accountability as opposed to separate and competing interests, thus fostering an environment of trust.

\(^{153}\) Page 3 McCarthy and Mueller (2009)
Transparency – “rigorous performance measurement, reporting and recognition”\textsuperscript{154} are described as supporting a culture of accountability and would therefore serve to enable service integration and support the necessary transformation of practice. It is important to differentiate between the quantifiable and the qualitative. The “hard” reporting and measurement is closely aligned with engendering trust through openness and inclusiveness. Transparency fosters reciprocity of trust and represents an additional area for further development in line with models of care.

As identified above, the alignment of incentives is underdeveloped within the proposed system. Alignment occurs by integrating care and setting budgets accordingly, “so that services can be organized in ways that make the most sense”\textsuperscript{155} In addition, incentives are created to “support and reward higher performance.”\textsuperscript{156}

The integration of funding and the alignment of incentives and outcomes represent the area where government policy has the largest impact. All other overarching themes are dependent on the development of effective strategic relationships and ways of working together within the district alliance leadership teams.

Smith identifies a dearth of specificity regarding, “just what the government was looking for in terms of primary health care provision in return for significant new investment of funds” and “how new patterns of care might be bought into being”\textsuperscript{157}

The dearth of specificity identified by Smith is in stark contrast to the degree of specificity provided within the MidCentral CCM and KHH projects regarding how new patterns of care would be bought into being. As a result of the MidCentral specificity and the alignment of project deliverables, milestones and outcomes change was successfully facilitated.

As discussed earlier, the Ontario model of blended capitation alongside specified outcomes and incentives has achieved practice transformation and increased outcomes and is realising overall health system efficiencies. This is in line with Starfield’s assertion that payment for primary care services should be based on the achievement of evidence-based primary care over a period of time. She states: “Any payment system that rewards specific services will distort the main purpose of medical care: to deal with health problems effectively, efficiently and equitably.”\textsuperscript{158}

Canada has led the world in regard to alternative, non-fee for service provider remuneration methods.\textsuperscript{159} Canadian policy makers have experimented with alternative provider remuneration methods at the primary care level for 10-15 years.\textsuperscript{160}

\textsuperscript{154} Page 3 IBID
\textsuperscript{155} Page 3, IBID
\textsuperscript{156} Page 3, IBID
\textsuperscript{157} Page 20, Judith Smith (2009)
\textsuperscript{158} Barbara Starfield, PowerPoint presentation: The Primary Solution: The Case for Primary (Health) Care, presented at RNZCGO, Annual Quality Symposium, Wellington NZ, February 2009
\textsuperscript{160} IBID
Remuneration and other non-financial incentives have an influence on physician behaviour and health outcomes. Wranik and Durier-Copp note however that; “This impact is modified by patient behaviour and the clinical effectiveness of health care outputs.”\(^{161}\) Blended payments have been implemented in practice across Canada and lessons have been learned from the process. There were two main issues in regard to contracting identified by Wranik and Durier-Copp. These are: “(a) the need to make contracts attractive to physicians and (b) the need to clearly specify what is expected of physicians.”\(^{162}\) In addition, they clearly state: “Contracts should be designed based on respect for practice autonomy, practice security and the patient-physician relationship.”\(^{163}\) Trust is implicit within the necessary respect for the professionalism of family physicians. Trust in the clinical leadership is the essential prerequisite.

As discussed in section one, a 2010 analysis and discussion of Patient Centred Medical Homes in Ontario suggests that a combination of; “multidisciplinary teams and financial incentives for providing comprehensive care will lead to improvements in health, increase efficiency, and reduce costs while making practice more attractive for primary care physicians.”\(^{164}\)

The Alliance Contracting model discussed earlier incorporates all of the overarching themes necessary for high performing health systems bar one, the alignment of incentives. The lack of alignment represents a significant risk to the realisation of overall health system efficiencies achievable through integration. In order to unstick the practice model and achieve the necessary transformation of general practice incentives goals and outcomes must be aligned and clearly stated.

There is a consistent theme within the nine successful IFHC EOI’s that supports the integration of both funding and service provision within a system that aligns incentives and goals. The EOI’s collectively refer to the need for flexible and integrated funding streams. MidCentral and Wairarapa refer to form following function in a system that embraces flexibility.\(^{165}\) The National Maori PHO EOI makes specific reference to; “the utilisation of existing direct primary care resources into flexible funding models that support the proposed programmes.”\(^{166}\) The authors go on to refer to a commissioning approach where “services are developed on an agreed set of outcomes.”\(^{167}\) The Health and Alliance EOI authors seek devolved and flexible funding as a key enabler.\(^{168}\) The Eastern Bay of Plenty EOI makes reference to aggregation of funds, flexibility and pooling of resources leading into shared budget holding and risk sharing with the DHB.\(^{169}\)

\(^{161}\) IBID unpaginated
\(^{162}\) IBID unpaginated
\(^{163}\) IBID unpaginated
\(^{164}\) Rosser, Walter, W, Colwill, Jack, M, Kasperski, Jan, and Wilson, Lyn, Patient-Centred Medical Homes in Ontario,10.1056/NEJMP0911519 NEJM.org, 2010, page e7(1)
\(^{165}\) pp 185-187, MidCentral PHOs EOI, 2009, pp 118-119, Wairarapa EOI, 2009
\(^{166}\) Page 71, National Maori PHO Coalition Inc. EOI, 2009
\(^{167}\) Page 71, IBID
\(^{168}\) Page 19, Health + Alliance, EOI, 2009
\(^{169}\) Pp 78-79, Eastern Bay of Plenty PHO EOI, 2009
The EOIs were submitted as a response to the Government’s primary health strategy to provide Better More Convenient Health Services. The resultant Business Cases are intended to transform the provision of primary health services throughout New Zealand. The EOIs collectively call for flexible and integrated funding streams. The policy response of an alliance approach alongside a small set of national outcome measures, business case specific indicators and consolidation of some funding streams provides part of the means by which to support the transformation.

The central assertion of this paper is that in order to transform the provision of primary care services a parallel transformation of general practice is essential. Judith Smith in questioning how far capitation funding is being used to shift the paradigm of primary care provides part of the answer.

Enhancing capitation and consolidating supplementary funding into an integrated income stream that is pre-paid directly to providers will incentivise outcomes at a practice level. Such an incentive system has been demonstrated to shift practice behaviour in producing targeted health outcomes in Ontario and would work alongside the proposed alliance approach in the transformation of general practice and the provision of primary care in New Zealand.

The initial financial modelling that has been undertaken as part of the business case development gives a clear indication of the potential efficiencies achievable within the health sector. The MidCentral business case identifies the greatest area of resource conservation potential as the reduction of presentations to the emergency department (ED) and admissions to hospital. The aspirational target to reduce presentations to ED by 30% (five admissions per week, per practice population) equates to a potential saving of $8,520,000 over a period of 3 years.¹⁷⁰

In identifying reductions of presentations to the ED as the greatest area of potential resource conservation, MidCentral clearly demonstrate that the most significant opportunities to improve productivity come through the engagement of a multidisciplinary team delivering improvements in care.¹⁷¹ This is not unique to MidCentral with most of the cost reductions identified by Hollander et al, stemming from decreases in the cost of hospital usage.¹⁷² The Kaiser Permanente Collaborative Cardiac Care Service was estimated to provide “$3,000,000 annualized cost-savings, attributed to reduced hospitalisation.”¹⁷³

As clearly demonstrated in the previous examples there are significant system efficiencies that can be realised through changing the model of care and changing the model of general practice. In order to clearly ascertain the change in health outcomes and subsequent primary and secondary care utilisation patterns the outcomes must be defined, quantified and tracked at both practice and population levels. Kaiser’s sophisticated electronic medical records and health information technology supports both the achievement of targeted health outcomes and the subsequent analysis of hospitalisation usage and costs.

¹⁷⁰ Page 25, Transforming Primary Health Care Services, MidCentral Business Case – March 2010
¹⁷¹ Refer to Section three, particularly the work of Appleby et al (July 2010) Improving NHS productivity More with the same not more of the same, The Kings Fund.
The British Columbia General Practice Service Committee (GPSC) discussed in section one was set up to support family practice alongside an on-going evaluation regarding the return on investment that was generated through the extra investment in general practice.

The CCM and KHH projects that were developed and piloted within MidCentral represent an ideal opportunity to undertake a parallel evaluation of the subsequent secondary utilisation patterns and the resultant impact on system efficiencies. The CCM model will be further refined and implemented as part of the ongoing business case to transform primary health care services. The resultant changes in health outcome can be tracked at both a practice and population level through the relevant and appropriate information technology systems.

In order to deliver improved health outcomes and realise system efficiencies within the current fiscal envelope, it is essential that any initial “up front” investment necessary in order to deliver primary care differently is recouped due to the resultant shifts in care utilisation. The PCMH demonstration discussed in section three illustrates that the upfront investment necessary to delivery primary care very differently can be recouped relatively quickly due to shifts in care utilisation. The financial modelling that supported the KHH project where DHBs could recoup the entire cost of managing CKD by delaying dialysis by one year in one individual (per 10,000 patients) is also supportive of the concept of up-front investment.

The Ontario model demonstrates clearly how the use of incentives that are aligned with the achievement of outcomes can support the transformation of the family physician practice model. The Ontario blended capitation model is comprised of: capitation + fee for service + lump sum payments + special premiums. It is therefore proposed that a blend of enhanced capitation alongside the consolidation of additional SIA and CarePlus funding be paid directly to providers to incentivise outcomes at a practice level. The enhancement of capitation necessary in order to deliver primary care differently can be recouped relatively quickly, as demonstrated by the PCMH demonstration discussed in section three. The following diagram represents a virtuous cycle where the system efficiencies generated are reinvested into the system further incentivising and facilitating the transformation of primary care and general practice. The information gained from the parallel evaluation of the changes in secondary utilisation patterns as a result of the CCM and KHH projects would inform the sophisticated financial modelling necessary to formalise the proposed virtuous cycle.

**Primary Care Setting**

174 Reid et al (2009) as referred to in section three of this paper
The virtuous cycle proposed is entirely dependent upon the successful linkage of incentives, health outcomes and system efficiencies. The importance of linking incentives to the changes required is further illustrated in the discussion of integrated care below. While the above model is focused on the primary care setting the following analysis is illustrative;

Natasha Curry and Chris Ham define integration as being, “concerned with the processes of bringing organisations and professionals together, with the aim of improving outcomes for patients and service users through the delivery of integrated care”\(^{175}\). They further outline three levels of integration; macro, meso and micro.

The CCM and KHH initiatives within the MidCentral district are representative of meso level integration where providers, “seek to deliver integrated care for a particular care group or population”\(^{176}\) and micro level integration where providers, “seek to deliver integrated care for individual service users and their carers through care co-ordination, care planning, use of technology and other approaches.”\(^{177}\)

*Macro* level integration produces: “high levels of performance on many indicators for the populations they serve.”\(^{178}\) *Meso* level, “demonstrates positive results on many indicators.”\(^{179}\) While there is evidence to support *micro* level integration, the findings of evaluations are inconclusive.\(^{180}\)

Curry and Ham demonstrate that; “integration is unlikely to deliver on its promise of improving outcomes unless there is action at all levels.”\(^{181}\) By introducing the proposed model of incentivised blended capitation that is tied to KPIs and quality targets supported with population based software, MidCentral will be better positioned to begin the journey to delivering integration at a macro level thus achieving the dual goal of integration: “to improve the quality of patient care and patient experience and increase the cost-effectiveness of care.”

Curry and Ham examine Kaiser Permanente, Veterans Health Administration, and Geisinger Health System as exemplars of *macro* level integration. They note that, “Kaiser, Veterans Health Administration and Geisinger all have an alignment of financial incentives and rewards that are: “aligned to enhance quality and stimulate innovation.” Within Geisinger, alongside bundled payments,” high performance is incentivised by a pay-for-performance system, with 15-20 per cent of a physician’s compensation based on meeting performance targets related to cost-efficiency, quality, satisfaction and teaching.”\(^{182}\) All three systems are underpinned by a high-performing IT system and a common electronic medical record

By simultaneously tracking the change in health outcomes and the resultant impact on expenditure, MidCentral DHB will be able to assess the ongoing impact of initiatives to inform future planning.

\(^{175}\) Page 3, Curry, Natasha and Ham, Chris, (2010) *Clinical and service integration The route to improved outcomes*, The Kings Fund

\(^{176}\) Page 7, IBID

\(^{177}\) Page 7, IBID

\(^{178}\) Page vii, IBID, Curry, Natasha and Ham, Chris, (2010) *Clinical and service integration The route to improved outcomes*, The Kings Fund

\(^{179}\) Page vii, IBID

\(^{180}\) Page vii, IBID

\(^{181}\) Page 7, IBID

\(^{182}\) Page 14, IBID
Moving to an environment where funding streams are bundled more than fragmented; where services are integrated across culturally and professionally divided care models; where management and medical science shake hands in mutual respect, will require effort and some additional complexity. However this perceived complexity should be seen as at least a substitute for the workarounds required to embrace general practice as has been the MidCentral experience; at most as an investment in transformational change in line with policy to promote decision making by clinicians, and the best international evidence of the package of initiatives which work.

It is therefore proposed that, subject to the demonstration of capacity and capability, practices be able to access the integrated income stream “up front” in order to undertake the transformative change necessary. In addition, it is proposed that the achievement of agreed outcomes is further rewarded through a system of shared savings where the practices retain an agreed proportion of savings produced through transformative change. Such eligibility could include:

- Organised general practice with a collocated or an integrated model of care construct
- Effective management and measurement systems
- Physical capacity to accept devolution of services
- Willingness to be accountable for outcomes
Section Six
Preliminary Conclusions and Recommendations

The MidCentral experience is a case study example of the paradoxical situation in New Zealand where the health system characteristics simultaneously frustrate and foster change with the implementation of the Primary Care Strategy.

The ongoing traction of the MidCentral primary care strategy and the comprehensive system change effected provides insight into the way forward. The insight and learning gained through the MidCentral experience is reinforced and strengthened with international primary care success stories.

International research into high performing health delivery systems identifies overarching themes to inform system transformation within the New Zealand context. Clinical leadership and informed decision making at the clinical microsystem are key transferable principles to underpin transformative change. An expanded professional identity that includes rather than precludes clinical leadership and management is an additional prerequisite for successful transformation to occur.

The successful combination of multidisciplinary teams and financial incentives for providing comprehensive care has led to improvements in health, increased efficiency and reduced costs with the introduction of the Family Health Teams in Ontario. It is therefore strongly recommended that proof of concept demonstrations be undertaken within two or more locations to refine the proposed model prior to more widespread implementation.

The MidCentral experience is a case study example of the situation in New Zealand where the health system characteristics simultaneously frustrate and foster change with the implementation of the Primary Care Strategy.

MidCentral DHB is currently establishing five Integrated Family Health Care Centres (IFHCs) in line with the primary care strategy. MidCentral DHB is not unique in this regard. The planned establishment of IFHCs throughout New Zealand supports the Government’s goal of transforming primary health services, with the nine current EOI primary health care groupings covering 60% of New Zealand’s population.

Full service integration is intended as an outcome of the establishment of the MidCentral IFHCs. The research undertaken for this paper would suggest that incentivised alignment of funding and service provision along with many of the integration strategies already envisaged or in play, will complete the formula for transformative change necessary to achieve service integration. A further underlying theme is to see the recommendations as an investment in transformational change which ought to substitute for the transactional costs of today’s funding workarounds.

The ongoing traction of the MidCentral primary care strategy and the comprehensive system change effected through the IPCS, CCM and KHH projects provides insight into the way forward. The insight and learning gained from the MidCentral experience is reinforced and strengthened with international primary care success stories.

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183 The Government invited organisations and networks to submit Expressions of Interest (EOIS) to provide Better Sooner More Convenient Health Services. Nine EOIs were selected to progress to Business Case Development.
Clinical leadership and informed decision making at the clinical microsystem are key transferable principles to underpin transformative change. An expanded professional identity that includes rather than precludes clinical leadership and management is an additional prerequisite for successful transformation to occur.

The successful combination of multidisciplinary teams and financial incentives for providing comprehensive care has led to improvements in health, increased efficiency and reduced costs with the introduction of the Family Health Teams in Ontario. It is therefore strongly recommended that proof of concept demonstrations be undertaken within two or more locations to refine the proposed model prior to more widespread implementation.

Proof of concept demonstrations undertaken alongside a parallel evaluative process would provide much needed information in order to refine and inform the structure of the enhanced capitation and blended funding necessary to support transformational change.

The evidentiary vacuum within which Ruth Wilson referred to policy changes being made in Ontario that focused on remuneration and primary care renewal is not dissimilar to the situation within which policy decisions in New Zealand are being made in 2010. While there are no guarantees of success there is a wealth of international research and New Zealand and international case study evidence to support the proposed mechanism by which to support the transformation of general practice. In addition, the primary health sector is currently undergoing a process of transformation that is receptive to the integration and alignment of funding and service provision as articulated within the successful IFHC EOIs.

As discussed, clinical leadership and decision making regarding the use of resources at the clinical microsystem by necessity must be supported with an extension of medical professionalism that integrates both management and medical science. In addition, participating practices must have the demonstrated capacity and capability to deliver the outcomes necessary to qualify for the enhanced capitation and blended model proposed.

It is therefore recommended that over an 18 month period proof of concept demonstrations be undertaken within MidCentral and one other DHB alongside a parallel evaluative process which tracks and models changes in health outcomes and resultant system efficiencies.

Information from the proof of concept demonstrations can be used to refine and inform the enhanced blended capitation model prior to a more widespread implementation where practices are invited to submit an application to become an IFHC or consolidated general practice supported with integrated, outcome focused funding incentives.

Moving to an environment where funding streams are bundled more than fragmented; where services are integrated across culturally and professionally divided care models; where management and medical science shake hands in mutual respect, will require effort and some additional complexity. However this perceived complexity should be seen as at least a substitute for the workarounds required to embrace general practice as has been the MidCentral experience; at most as an investment in transformational change in line with policy to promote decision making by clinicians, and the best international evidence of the package of initiatives which work.

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184 Ruth Wilson, M.D., C.C.F.P. November 2006, Primary Care Renewal in Ontario – Focus on Remuneration. PowerPoint presentation
The MidCentral experience in facilitating transformative change within general practice teams provides a powerful insight into what works and why. The dearth of specificity identified by Smith is in stark contrast to the degree of specificity within the MidCentral approach to bringing new patterns of care into being.

Fundamentally; incentives enable change, clinical leadership embeds change, clinical systems lead to improved patient outcomes and finally, scale supports all these aspects of transformative change.

In summary the following comments and recommendations are made to further support the implementation of the Primary Health Care Strategy:

- **Organised general practices teams within the various proposed IFHC concepts will provide scale and capacity for transformational change:** *Keep up encouraging/incentivising practice collocation and development of infrastructure*

- **Integration of services across previously distinct boundaries of primary and secondary care will further facilitate sustainable change:** *Keep up the process of service integration and new models of care*

- **Measurement and feedback mechanisms first experienced with 90s budget holding and implicit in the approach to alliance contracting will foster professional pride and trust:** *Harness the information available and reward compliance with performance*

- **Larger and more complex practice teams will by definition require a bridge and ultimately a merger between clinical and management science and practice:** *Keep up encouraging/incentivising practice collocation and development of infrastructure*

- **Substitute the complexity of today’s funding and contracting environment with an investment in trust and contractual simplicity:** *Trust the alliance contracting process to deliver the specified outcomes in accordance with professional and informed clinical judgement and leadership.*

- **Promote an expanded professional identity within general practice teams:** *ensure productivity gains are achieved through clinical decision-making, reduction in variation in clinical practice, improved clinical outcomes and the achievement of agreed targets*

- **Practices (clinical Microsystems) which demonstrate the above characteristics and a willingness to be accountable for outcomes should be eligible for a package of incentives (enhanced capitation) both pre and post contract fulfilment:** *Incentivise those who do so by enhancing capitation, consolidating SIA and Care Plus finding and offer this up front to those who demonstrate the capacity, in exchange for targeted outputs/outcomes. Further reward the achievement of outcomes (shared savings).*
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