THE EVALUATION OF THE BETTER, SOONER, MORE CONVENIENT BUSINESS CASES IN MIDCENTRAL AND WEST COAST DISTRICT HEALTH BOARDS

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Glossary of Terms

BSMC	Better, Sooner, More Convenient
CCM	Chronic Care Management
ASH	Ambulatory Sensitive Hospitalisation
ED	Emergency Department
CHA	Comprehensive Health Assessment

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PREFACE

In November 2009, the West Coast and MidCentral District Health Boards (DHBs) had Business Cases approved by the Ministry of Health (MoH), focusing on improving aspects of health care in their regions. Each DHB began to implement the business cases from 2010 on. The Health Research Council of New Zealand and the MoH funded independent evaluations of the Business Cases, emphasising how the cases were being implemented and whether or not the aims and objectives of those cases were achieved over the three year period for the Business Cases.

This report sets out the findings of the two evaluations. These evaluations provide a particular set of findings, established at a particular point in time. It is important to note that most of our data collection took place in mid-2013; since that time further developments in the implementation of some of the Business Case initiatives have occurred, many with reported positive outcomes. For example, subsequent to the initial Business Case and evaluation time frame, the Shared Care Record has been implemented in MidCentral. This is a significant development as information technologies play a pivotal role in integrated health care. On the West Coast, there have also been some significant changes – including more consultation and engagement – and many of the barriers to successful implementation of the Business Case aspirations have been reported as having been addressed and/or removed (e.g. approval of the Grey and Buller Integrated Family Health Centre, with planning now underway).

The Business Cases were ambitious and from this evaluation it can be concluded that the implementation period of three years was too short a time frame to achieve and embed such significant change. In our view, and in the view of some of the participants in this research, ten years is possibly a more realistic time frame for achieving a system change of this nature. Certainly, some of those involved with the Business Cases see them as part of longer-term transformation agendas. It is also clear that evaluations of such initiatives need to begin earlier (to better establish baseline data) and to continue for longer periods (in order to capture results over a longer period of time).

It is our observation that a considerable amount of work went into the development of both Business Cases. In both locations, those involved gave many hours of unpaid time, worked many evenings and weekends, and were driven by a real commitment to move toward integrated health care provision in their area. In both locations, the various initiatives were not funded over and above existing funding arrangements. While some of the aspirational goals had not been realised at the point in time when the evaluations were completed, it is important to note the very real commitment of those who developed, implemented, and monitored the Business Case initiatives.

It is also worth noting that the work undertaken during the development of the Business Cases also facilitated many other positive developments; primary amongst these was the experience of working alongside a wide range of colleagues across primary and secondary care and health management, for some, for the first time. It is these now ongoing relationships that are seen by participants to be likely to lead to improved practice at both sites and also the likely realisation of a range of initiatives that are known to facilitate greater integration in the post evaluation period.

EXECUTIVE SUMMARY

In November 2009, the West Coast and MidCentral District Health Boards (DHBs) had Business Cases approved by the Ministry of Health (MoH), focusing on improving aspects of health care in their regions. Each DHB began to implement the business cases from 2010 on. The Health Research Council of New Zealand and the MoH funded independent evaluations of the Business Cases, emphasising how the cases were being implemented and whether or not the aims and objectives of those cases were achieved over the three year period for the Business Cases. This report sets out the findings of the evaluations, which took place between February 2013 and February 2014.

Focus of Evaluation

This evaluation research focussed on three key initiatives for the West Coast and MidCentral DHBs:

- Long-term conditions
- The Shared Care Record, and
- Frail older people,

and examined the extent to which these initiatives addressed and achieved their original Better Sooner More Convenient (BSMC) Business Case objectives, within the three year time frame established for the Business Cases (2010-2013).

We hypothesised that: Integrated service provision is being achieved through the creation of an alliance between primary and secondary health providers with the Integrated Family Health Centre (IFHC) playing a pivotal role in addressing quality and timeliness of care and improved patient experience in a resource constrained environment.

Methods

The evaluations were mixed method multi-level case studies conducted and analysed over the 12 month contracted period (February 2013-February 2014). The research involved three main methods. First, were quantitative data analyses of, Emergency Department Attendance Rates and Ambulatory Sensitive Hospitalisation Rates, which were examined longitudinally through the analysis of routinely collected data. These analyses cover the period between 2010 and 2013. Second, were questionnaire-based surveys of patient and health care providers, which were analysed descriptively; the results are presented in tabulated form in this report. The surveys were distributed in October 2013. Third, were face-to-face interviews, which offered a more flexible and qualitative approach, with a broader focus, necessitated by the complexities and evolution of proposed initiatives in the Business Cases.

Interviews were conducted at both sites with clinicians, managers, and allied health professionals. Interviews took place between February and November 2013. Interviews were generally of an hour's duration and were digitally recorded and transcribed verbatim. The transcripts were analysed employing standard inductive qualitative methods: i.e. thematic identification and an interpretative analysis informed theoretically by an eclectic range of theory addressing organisational change, theories of integration, models of chronic care, workplace culture, and behavioural change. Our research partners at the West Coast and MidCentral District Health Boards (DHBs), in acknowledgement of the context complexities, provided a wide range of contacts that enabled us to explore the dynamics driving the BSMC business cases. In addition, the PHOs at both sites facilitated the distribution of the staff survey and assisted with recruitment. Ultimately this meant that both evaluations were more comprehensive in scope and depth than was initially proposed.

Overview of Findings

The evaluations, both quantitatively and qualitatively, revealed a number of contradictory findings which are listed below and discussed in the body of this report.

A common view expressed by participants was that many aspirational goals were not realised. However, some work streams did produce results and many participants were of the view that since the BSMC initiative, communication had improved between primary and secondary health providers. It was also the view of some participants that their BSMC Business Cases had provided a platform for a greater focus on integration. This latter view was largely confined to managerial staff, however, and was not evident amongst front line health care professionals.

The objectives for the Business Cases were couched variously as "aspirational goals/targets/objectives" and many participants referred to the objectives as "aspirations". Overall, none of these aspirations were reached or fulfilled in full, at either research site, during the time frame of our evaluation. One participant thought having these aspirations did "stretch people, in a good way". However, the majority of participants were unaware of the monitoring of the objectives and assumed that there were no monitoring processes in place. The Alliance Leadership Team, however, were monitoring the objectives on a regular basis. For some participants, the aspirations that were not addressed, and the problematic nature of others, contributed to workplace discontent and cynicism. It should be noted that other systemic changes were also taking place concurrently, including a change in the model of nursing care and these changes may also have contributed to additional stress on front line staff.

While aspirational targets are not necessarily problematic in and of themselves, the process of attempting to realise these goals can be problematic. Having too many aspirations can compromise this process, and, we found, can have negative implications for managers and front line staff alike.

The pivotal role assigned to Integrated Family Health Centres (IFHCs) in facilitating greater integration was compromised because most of the proposed Centres were not established. In Tararua, the primary health provider had moved toward an integrated approach, which predated the BSMC Business Case and was fully realised at the time of our evaluation. Whilst not called an IFHC, these providers nonetheless provided what they termed integrated care that was greatly facilitated by information technology and the collective motivation of a range of health professionals in this region who also had the foresight (and who sought independent funding) to initiate a fully integrated shared care record system. The BSMC Business Case possibly contributed to the consolidation, but not the instigation, of a move toward an integrated system of health care in Tararua.

Findings Common to Both Business Cases

The Business Cases were considered by many participants to be too wide in scope and involved the roll-out of too many initiatives at once – both in terms of time and geographic scope and complexity. The initiatives were at times seen to be inadequately resourced, had inadequate oversight, and an absence of measures in place to evaluate progress and assess whether targets had been met.

Working in an environment that was described as one of "endless change" led to high stress for some staff, disillusionment and cynicism, staff retention issues, and an inability to maintain momentum for some initiatives in both regions.

While some of the proposed work streams were effectively established for both Business Cases, ultimately participants reflected that the objectives were largely aspirational and possibly not achievable within the three year Business Case period. It was also evident that some of the work streams proposed in the Business Cases were pre-existing initiatives and, in some instances, because of both the sheer number of initiatives and degree of overlap, some were merged and to a large extent no longer resembled those proposed in the Business Case.

In both MidCentral and the West Coast, progress was made with the elder care workstreams. In both locales, nurses reported a greater degree of integration and a shift toward a greater role for care in the community and caring for the elderly in their own homes.

With regard to the survey findings, the most striking was the disjunction between patient and healthcare provider views on the current state of care coordination and integration in their region. Clinicians tended to rate their adherence to the tenets of care coordination highly while patients tended to rate their experience of coordinated care less highly.[1]

Specific Business Case Objectives and Achievements

Here, we summarise the key findings relating to specific objectives and the extent to which they were achieved at the time of our analysis (February 2013-February 2014).

West Coast Business Case Buller (Westport): Reduce ASH rates:

- Aimed to reduce ASH rates. At the time of the Business Case development the West Coast ASH rates did not differ from New Zealand as a whole. There appears to be some downward trend for Māori; however, these relatively short term trends need to be interpreted with caution. There was no evident consistent downward trend for the population as a whole.

West Coast Business Case Buller (Westport): Integrated Family Health Centres – Information Technology Objectives were to:

- Implement communications and information technology that facilitates integrated care for patients. Telemedicine connections between the West Coast and Canterbury were established and are regarded as highly successful.
- Improve information flow between primary care, community nursing, and allied health clinicians by use of a shared electronic patient medical record. Greater access to MedTech for non-general practitioner clinical staff improved information flow, but a completely integrated shared electronic system was not implemented during the Business Case time frame.

[1] This has also been observed by other researchers (see for example: Carryer, Doolan-Noble, Gauld, Budge (2014)).

West Coast Business Care Buller (Westport): Frail Older People Objectives were to:

- Ensure all relevant health and support workers (in primary, hospital, community and residential services) are trained in a restorative goal-based model of care that focuses on the client being helped to regain and maintain their function and on pro-actively preventing illness and injury, including a strong focus on supporting carers to prevent/reduce care burnout. This work commenced prior to the Business Case (under the Complex Clinical Care Network initiative) and there was evidence of the best use of specialist Health of Older People "Assessment, Treatment and Rehabilitation" (AT&R) resources, such as community care nurses, outreach programmes, and the availability of services for people with chronic conditions.
- A greater proportion of AT&R Staff time was made available for consultation and support for primary health services, home care services and residential care.

Overall, the MidCentral Business Case aimed to:

- Reduce avoidable Emergency Department (ED) presentation rates by 30%. ED presentation rates have not decreased but the rate of increase may have slowed.
- Reduce Ambulatory Sensitive Hospitalisation (ASH) admissions for over 65-year-olds by 20%; there was no evident trend on this measure. The ASH rate remained essentially stable over the period of the Business Case.
- Develop clinical information systems that support integrated comprehensive assessment/care planning. This initiative had mixed results.
- Support increased long-term condition self-management. MidCentral attempted to improve long-term conditions management through developing the Comprehensive Health Assessment (CHA) and Client Care Plan (CCP) for use with clients with long-term conditions (LTC); implement the Chronic Care Model into General Practice (CCM-GP) to a selected number of general practice teams within the region in order to actively undertake health services re-design and in order to promote effective LTC management; and provide the Stanford Living a Healthy Life Group Self-Management Programme to people within the region. The CHA and CCP were developed for use with clients with long-term conditions, and the CCM-GP project was rolled out. There were a number of challenges with the original CHA software implementation which had workload implications for front line staff and general practices. The instrument was subsequently revised to make it more flexible and to address data retention problems.

- Implement decision tools in every day clinical practice. This was evidenced through the introduction and use of the 'Map of Medicine'.

The MidCentral Business Case Objectives for Comprehensive Health Assessment (CHA):

- Aimed to adapt a CHA assessment tool to meet the requirements of the Business Case (e.g. to include cardiovascular disease – CVD) and roll it out to general practices. The CHA assessment tool was adapted and rolled out to practices but there were evident technical issues which ultimately led to delays and required the reworking of the electronic tool.
- Patients who are enrolled in the LTC management programmes may well be better clinically managed, more engaged in their care, have improved self-reported general health and health-related quality of life (HR-QoL), and report an improved patient experience of care as a result of the programme. These "softer", though important, outcomes are not captured in the ASH and ED statistics, however.
- Aimed to reduce ASH rates for those aged 65 years and over by 20%. There was no evidence of a reduction in ASH rates during the Business Case period. These rates were, however, lower than those forecast.
- Aimed to reduce ED rates for those aged 65 years and over by 30%. There was no evidence of a reduction in ED rates during the Business Case period. These rates were however slightly lower than those forecast.
- Aimed to have 100% of health professionals with access to up-to-date patient records within the three year Business Case period. The Shared Care Record was still a work in progress.

The MidCentral Business Case Objectives for the Shared Care Record:

- Aimed to have 100% of enrolled patients with access to their own health records by 2013. The Manage My Health Project has yet to be rolled out.
- Aimed to have virtual IFHCs – where professionals would be able to share patient records more easily. This was achieved in Tararua but not at other sites in MidCentral nor on the West Coast.

Conclusions

The report concludes with a number of recommendations and critical reflection on a range of essential components that need to be considered when reforming complex systems, with the caveat that the evaluations were undertaken at a point in time that could be considered a very early phase in the ongoing development of the Business Cases. The components highlighted in the conclusion have been identified in a wide range of reflective and theoretical literature addressing quality improvement in health care. The results from the MidCentral and West Coast evaluations also demonstrate the importance of the early identification of potential barriers and facilitators when implementing reforms of this nature.

Reflections and Recommendations for Alliance Leadership Teams

The findings of the two evaluations point to a series of important recommendations for alliances which, since mid-2013, are required between PHOs and DHBs throughout New Zealand. In the spirit of learning from the pilots and building highly-effective alliances, the evaluations suggest the following:

- The alliance model is an innovative governance framework built around pre-existing governance arrangements and models of care. For this reason, building an alliance is complex and requires considerable navigation of pre-existing arrangements. Effective navigation, strategy development and service redesign in this context demands trust between the members of the alliance. This takes time, a shared vision, and commitment to working in good faith amongst the members and partners. Our evaluations illustrated that building foundations for an effective alliance had been challenging. Alliances, therefore, need to be cognisant of the time and effort required for this.

- There is a need to set moderate goals and limit the number of initiatives that an alliance agrees to, and ensure that all members of the leadership team and partners in an alliance are fully committed to these.

- Communications are particularly important across the region and, especially, with service providers an alliance is working with. The evaluations showed that concerns, especially from interviewees, were often around information flows and expectations.

- Front-line staff likely to be affected by alliance decisions need to be engaged in the decision-making processes from the outset and need to see tangible progress being made after decisions are made. The evaluations highlighted that health professionals were often concerned about the scope and pace of expected change; some experienced increasing workloads through commitment to governance activities and then did not see anticipated changes transpire. It is important, as spelled out in the national alliance charter, decision making – whether the leadership team or service level alliances be clinically-led wherever possible. The literature stresses the importance of respected clinicians being significantly involved at all levels

1.0 INTRODUCTION

Since the late 1980s, New Zealand has engaged in a range of health care reforms and faced policy challenges over health system performance, quality, information management and technology, workforce issues, and system sustainability. Primary health care reform and the need for fully integrated primary health care has been prescribed as a potential panacea for high income countries, who have historically invested disproportionately in hospital-based services and technology (Gauld, 2008; Cumming, 2011). The *Better, Sooner, More Convenient* (BSMC) Primary Health Care Initiative, and its operationalisation through nine Business Cases (sometimes called Alliances) throughout New Zealand, has involved the introduction of a range of initiatives which aim to facilitate the horizontal integration of a wide range of primary health care services, and the vertical integration of primary health care and hospital services, in order to realise improved efficiency and quality of care. The concept of integrated care has a variety of components, including: integration of organisations and organisational activities; clinical integration activities; patient care that is co-ordinated across professionals, facilities, and support systems (over time and between visits); and care that is tailored to meet the needs of the patient and care based on shared responsibility for realising optimal health outcomes (Singer et al, 2011). Integration is, thus, a multi-dimensional construct.

All of the Business Cases were required to address eight broad BMSC objectives, and all have introduced initiatives which seek to address current health care burdens and the goal of greater integration. All of the Business Cases put forward by the various Alliances responded to the BSMC objectives of establishing Integrated Family Health Centres (IFHCs) with multi-disciplinary health care teams; realising better management of people with chronic conditions; and recognised the need to be cost-effective while ensuring quality and safe care for patients.

For this reason, three initiatives are common to most Alliances - those focusing on: (1) Long-term conditions (chronic care management); (2) Information and management systems (Shared Care Records); and (3) Older people (Frail Older People). Central to these initiatives are the associated objectives of realising integrated and co-ordinated care across the different levels of care; improved patient experience; and efficiencies and cost reductions gained through reduced Emergency Department (ED) admissions and Ambulatory Sensitive Hospitalisations (ASHs) and greater co-ordination of service delivery.

Our evaluation research of the Business Cases for Mid-Central and the West Coast DHBs focussed on three initiatives as discussed above, as each was a focus of the two Business Cases, and based on the assumption that comparative findings would be useful for both the two Business Cases and for others who are attempting greater integration and co-ordinated care across different levels of care, while ensuring quality and safe care for patients in a cost effective manner.

This report sets out, in Section 2, the background to the Business Cases. In Section 3, it outlines the aims, objectives and methods employed for the two evaluations. In Section 4, it presents the quantitative and qualitative results. The report concludes in Section 5 with a discussion and recommendations.

2.0 BACKGROUND

2.1 Long-term Conditions

An aging population, longer life expectancy, increasing numbers of people with chronic conditions and the burden of meeting the needs of these people through health services are all issues that the Primary Health Care Strategy (2001) and the BSMC Primary Health Care Initiative sought to address. Integrated care is acknowledged internationally as a central challenge for health care delivery for people with long-term conditions (Singer et al, 2011), and is a challenge in New Zealand (National Health Committee, 2012; Cumming, 2011). The challenge of achieving integration is particularly testing when providing health services for those with multiple, complex chronic conditions and in an environment when there is a need to address efficiency and costs (Schoen et al, 2007; Bodenheimer, 2008) and greater co-ordination of efforts (Nolte & McKee, 2008).

Self-management approaches are increasingly being utilised to address the needs of those with long-term health conditions (Barlow et al, 2002) and are seen as a means of bridging the gap between patient need and health system capacity. There are a range of self-management approaches, most of which are multi-component and use a wide range of outcome measures falling broadly into the following categories: physical, psychological, social health status, knowledge of condition and treatment; laboratory tests, use of medication; self-efficacy, self-management behaviours, use of health care resources and cost (Cumming & Mays, 2002). Most approaches focus on adults.

A number of BSMC Business Cases address long-term conditions with many employing Wagner's Chronic Care Model (Wagner, 1998) and the Continuum of Care Approach (WHO, 2002). There is some evidence that this model and approach, where services are integrated with coherent frameworks for organisational design, can improve health outcomes (Singer et al, 2011; Coleman et al, 2009; Homer et al, 2008).

2.2 Quality and Efficiency through Health Information Technology

For many countries, information technologies are increasingly considered a means to address patient safety, quality of care and efficiency of health care services (Rozenblum et al, 2011). In addition, information and communication technology is taken to be a major driver for health care integration and information exchange (Gauld, 2011). With an integrated system, information and funding follows the patient, ensures the experience and delivery of service is seamless, and prevents duplication of assessments (Gauld, 2011). The World Health Organisation (WHO) World Alliance for Patient Safety has identified a lack of communication and co-ordination as the first priority for patient safety in developed countries (Gauld, 2003). Personal electronic health records have been embraced as one means that can contribute to the realisation of the new care model, where technology facilitates storage and information exchange, provides a mechanism for engagement with self-management, and supports continuity of care. Thus, information technologies intersect with the BSMC objectives and integration work programme priorities.

To date, policy development and implementation in this field in New Zealand has been problematic, with issues surrounding overlapping databases, data collection inconsistencies, a lack of co-ordination across the sector, incompatible systems, and complex organisational realities that are not always conducive to realising the efficiencies that these technologies potentially offer (Gauld, 2011). There is a need to empirically explore issues surrounding the implementation of health information technology. A number of BSMC Business Cases address information and communication technologies with a view to their potential for realising integration, quality of care and cost efficiencies (Tihei Wairarapa, 2010).

2.3 Older People

Frail elderly people who suffer from functional decline, co morbidity and are at risk of not managing everyday life increasingly require effective integrated interventions (Deneckere et al, 2012). Internationally, addressing these challenges involves implementing information technologies, team delivery of care, and patient and family engagement to help in the management of the health of aging populations (Schoen et al, 2009). Yet, generally, while there is evidence that co-ordinated and integrated interventions which target frail elderly people reduces health care utilisation and associated costs, there is insufficient knowledge about how integrated and co-ordinated care affects caregivers (Eklund & Wilhelmson, 2009; Gustafsson & Edberg, 2009). There is also insufficient attention given to elderly and frail elderly views about what they want and value (Katz et al, 2011). Disparities in access to quality primary health care for frail older people continues to be an issue in many high income countries and these disparities serve as a barrier to optimal prevention and management of chronic illness amongst older people (Ryvicker et al, 2012).

Integrated care offers the potential to address the burden of chronic conditions and associated complications for older people, particularly when people traditionally receive care from multiple providers. Research has demonstrated that integrated health delivery for older people is often suboptimal (Epstein, 2001; O'Neil et al, 2010). Some research suggests that older people's ability to access health care can be sensitive to a combination of low availability and travel barriers (Fortney et al, 2002; Mobley et al, 2006). In New Zealand, the evidence suggests there is a need to integrate primary, community and hospital/specialist and residential care services, employ a single point of entry and provide multidisciplinary assessment and case management. A number of the BSMC Business Cases focus on older people and plan for access and support services that are timely, flexible and appropriate to individual patient needs and the needs of their carers (MOH, 2002; MacAdam, 2008; MOH, 2001).

3.0 AIM, OBJECTIVES AND METHODS

We conducted two evaluations, each addressing one of the Business Cases, with the intention of generating comparative insight into differences and commonalities with respect to implementation in two different locales. At the time of the Business Case development and in order to realise greater integration, reduce duplication of services, and garner greater cost efficiencies, a range of structural changes were discussed and ultimately in both cases an Alliance contracting approach was adopted by the Business Cases. This involved introducing a collaborative model of governance, drawing from industry, and comprising an Alliance Chair, Alliance Leadership Team (with representatives from primary and secondary care and allied health professionals). Alliances adopted a value system based on sharing resources, collective trust and the pursuit of mutually agreed upon goals and objectives.

3.1 Aim

The overarching aim for both evaluations was:

To evaluate whether the Business Case initiatives and objectives have led to the realisation of integrated and co-ordinated care across the different systems of care; have improved patient experience; and whether efficiencies and cost reductions have been gained through reduced ED admissions and ASHs and greater co-ordination of service delivery. The evaluations focused on the achievements of key Business Case initiatives and objectives during the three year Business Case period. The evaluations took place in 2013. I.e. 2-3 years into the Business Case development and implementation period.

3.2 Objectives

The two evaluations shared similar objectives, which are outlined separately below.

3.2.1 The West Coast Better, Sooner, More Convenient Business Case Buller (Westport and Greymouth)

Following a contestable 'Expression of Interest' (EOI) process, The West Coast Primary Health Organisation (PHO) and the West Coast District Health Board (DHB) were invited to submit a Business Case for BSMC Primary Health Care. At the centre of this Case was the aim of integrating services provided by the PHO and community delivered services provided by the DHB. Underpinning the organisational change necessary for integrated service provision was the need to address a number of health care issues. These included: the quality and timeliness of care; serious resource constraints; and patient experience of health care service and delivery as there were concerns about continuity of care and the patient experience (West Coast PHO and DHB Business Case, 2010).

The Business Case proposed integrated services and improved patient experience could be realised through the development of three Integrated Family Health Centres (IFHCs) in Westport, Greymouth and Hokitika, with satellite clinics in surrounding rural centres. Embedded within these primary health care provider entities were a range of initiatives. Our evaluation explored how integrated primary health care was, or was not, meeting the BSMC health care goals in this locality.

Integrated primary health care plays a critical role in addressing the health needs of people with long-term conditions, the elderly and vulnerable populations with poor health status. It is important to understand the processes which facilitate or undermine initiatives intended to strengthen integration and provide sustainable primary health care. Our evaluation research focussed on three initiatives: (i) Long-term conditions; (ii) The Shared Care Record; and (iii) Frail older people, introduced by the West Coast Alliance in Buller (Westport and Greymouth).

We hypothesised: Integrated service provision is being achieved through the creation of an Alliance between primary and secondary health providers with the Integrated Family Health Centre playing a pivotal role in addressing quality and timeliness of care and improved patient experience in a resource constrained environment.

The objectives were:

- To examine the extent to which the three initiatives:
    - Long-term conditions;
    - The Shared Care Record; and;
    - Frail older people

  have addressed the original BSMC objectives.
- To explore the extent to which the Business Case has achieved its stated outcomes.
- To document successful and unsuccessful aspects of the business case, the barriers and enablers, and identify the key lessons from the implementation period.
- To assess the impact of the implementation process, including unintended consequences.
- To assess how the needs of vulnerable populations have been met and how effective the implementation has been for enhancing patient outcomes.
- To address the long-term sustainability of the Alliance's business case and identify aspects that need to be improved and those that are transferable to other locales.
- To build a BSMC-specific evaluation research toolbox for evaluation use across other BSMC cases.

We conducted a multi-level case study employing quantitative and qualitative methods and worked in partnership with the West Coast Alliance Leadership Team and the Buller Implementation Team.

3.2.2 The MidCentral Better, Sooner, More Convenient Business Case

The evaluation of the MidCentral Business Case focussed on: (1) Chronic Care Management, (2) Comprehensive Health Assessment, and the (3) Shared Care Record initiatives, in addition to the implementation of an Integrated Family Health Centre and Multidisciplinary Health Teams. We assessed whether the key objectives were met and contributed to greater service integration and improved patient experience.

The objectives were:

- To evaluate the impact of initiatives against the stated objectives of the business case.
- To identify the barriers and facilitators to effective implementation of the initiatives and identify the critical success factors for effective implementation.
- To document unintended consequences of initiative implementation.
- To identify lessons to inform the development and implementation of future initiatives.
- To determine the generalisability/transferability of the initiatives.

- To measure the impact of initiatives on integration, patient experience of health care and health care service delivery.
- To assess the impact of initiatives in reducing health inequalities between Māori, Pacific peoples, the socio-economically disadvantaged, and other population groups.
- To measure the impact of initiatives on staff (morale, job satisfaction, burn-out).
- To produce an evaluation framework and develop and pilot a toolkit of assessment instruments to measure integrated care from the perspective of both the patient and the provider.

We hypothesised: The implementation of the Business Case initiatives is associated with increased integration of health services, a reduction in ED and ASH, improved patient experience of care, and reduced health inequalities.

4.0 METHODS

4.1 West Coast and MidCentral - Better, Sooner, More Convenient Business Cases

We employed a collaborative descriptive and exploratory multi-level, mixed method case study design for both the West Coast and MidCentral initiatives. Given the relatively short time-frame for data collection and analysis (one year), the research drew on the eclectic methods of Rapid Evaluation and Assessment as described by McNall and Foster-Fishman (McNall and Foster-Fishman, 2007). We employed a pragmatic mixed methods (quantitative and qualitative) design (Johnson and Onwuegbuzie, 2004) which included both process and outcome measures. Routine, interview and survey data were collected. The process aspects of the evaluation focused on how the initiative was implemented, and was primarily qualitative. The outcomes measures examined the initiatives' impact in relation to the aims and objectives of the initiatives, and included both quantitative and qualitative data.

For the West Coast Alliance BSMC initiative, we focused on Buller and the implementation of the Integrated Family Health Centre, multidisciplinary team care delivery and three initiatives: (1) Long-term Care, (2) Shared Care Record, and (3) Frail Older People. For the MidCentral BSMC initiative, we focused on (1) chronic care management, (2) Annual Comprehensive Health Assessment, and (3) Information Management (Shared Care Record) initiatives.

The multi-level case study design allowed for mixed method data collection and enabled us to address policy, implementation and the experiences of staff, patients and carers (Patton, 1997; Hill & Hupe, 2002).

Initial engagement with members of the Implementation Committee on the West Coast commenced in February 2013 and continued throughout the project. For the MidCentral evaluation, an advisory group comprising members of Compass Health was formed, members of which provided guidance throughout the evaluation process.

For both evaluations, we summarised and reviewed the original documentation – including the scope of the Business Cases and the specific initiative focus for each evaluation.

4.2 Quantitative Data Collection

4.2.1 The Patient Experience Questionnaire

The Patient Experience Questionnaire was designed by the research team and employed for both the West Coast and Mid-Central evaluations. The questionnaire was designed to measure patient experience and perception of the integration and co-ordination of their health care. It was distributed by post. The contact details and names of patients with chronic conditions and/or the frail elderly were provided by the West Coast DHB and the mailout administered on the West Coast by a DHB employee and by a team in MidCentral.

The survey instrument was finalised in consultation with our research partners and the survey was considered suitable for the BSMC West Coast and MidCentral contexts. From the outset it was known that building a representative cross-sectional sample was not feasible and that for the research time frame a rapid situational analysis of a complex environment was demanded. The survey instrument drew on items from relevant studies including: a range of questions (with some adapted for the New Zealand context) from health care provider surveys, including the Diabetes Care and Co-ordination Survey (Sarah Derrett, personal communication); The Commonwealth Fund 2009 Survey of Federally Qualified Health Centres; and surveys evaluating the organisational, provider and staff involved in e.g. the Patient-Centred Medical Home (Lewis et al, 2012) (See Appendix A). The survey development was informed by Wagner's Chronic Care Model (Wagner, 1998). It also referenced Singer's (Singer et.al., 2011) framework for measuring integrated patient care. Thus, it addressed Singer's seven constructs: (1) Coordinated within care team; (2) Coordinated across care teams; (3) Coordinated between care teams and community resources; (4) Continuous familiarity with patient over time; (5) Continuous proactive and responsive action between visits; (6) Patient centred; (7) Shared responsibility, with an addition of (8) distance and time to travel to Integrated Family Health Centre and/or ED. The survey instrument also drew on survey items from the following instruments: Ambulatory Care Experiences Survey (Safran & Karp, 2002); 2008 Commonwealth Fund International Health Policy Survey (Harris, 2008); Primary Care Assessment Survey (Safran, 1998); Consumer Assessment of Healthcare Providers (Agency for Health Care Research, 2007); Patient Assessment of Chronic Illness Care Group Health Version 8/13/03 (MacColl Institute, 2003); Primary Care Assessment Tool (Starfield, 1998) and the Modified Patient Assessment of Chronic Illness Care (MPACIC) (Carryer et al. 2010a).

The survey also addressed the Shared Care Records initiative, implementation issues and uptake. In the case of the MidCentral Evaluation a survey specifically addressing the Shared Care Records was also conducted (see Appendix B). The surveys were administered in October 2013.

Note that this survey was only undertaken at one point in time; we were not in this evaluation able to assess experiences prior to the roll out of new initiatives, nor administer the surveys for a second time to identify how change was occurring over time.

4.2.2 The Care Co-ordination and Integration Questionnaire

The Care Co-ordination and Integration questionnaire was employed for both the West Coast and Mid Central evaluations.

The aim of the Care Co-ordination and Integration questionnaire was to document clinician, allied health professionals and management perceptions of distinct aspects of patient care; experiences of co-ordinated care and integration at the organisational level, the integration of organisational activities; clinical integration of activities, co-ordination across the professions, facilities and support systems. In addition we explored perceptions of capability, staff morale and job satisfaction, as the success and sustainability of integrated primary care is dependent on provider and staff buy-in.

The survey was designed to assist with rapid situational analysis and was conducted with relevant clinicians, allied health professionals and management. Given the small numbers of potential respondents involved on the West Coast we did not aim for quantitative generalisable results; rather we aimed to provide a qualitative appraisal of staff responses to this survey. For the MidCentral evaluation, Compass Health identified all current staff members who had been involved in the management of long-term conditions (some of whom had employed the Comprehensive Health Assessment (CHA)); this mail out included those at the Horowhenua IFHC and the Virtual Integrated Family Health Centre in Tararua. We employed a range of questions (with some adapted for the New Zealand context) from health care provider surveys, including the Modified Patient Assessment of Chronic Illness Care (MPACIC) (Carryer et al, 2010) (to assess the implementation of Wagner's Chronic Care Model); The Commonwealth Fund 2009 Survey of Federally Qualified Health Centres; The Provider Experience Survey used in Patient-Centred Medical Home Characteristics and Staff Morale in Safety Net Clinics (Lewis et al, 2012) and the Staff Experience Survey used in Patient-Centred Medical Home Characteristics and Staff Morale in Safety Net Clinics (Lewis et al, 2012). The Care integration

aspect of the questionnaire was informed by earlier work By Derrett, Gunter and colleagues (Sarah Derrett, personal communication) at the University of Chicago, who had developed a Diabetes Care and Coordination Survey, items from which were used or adapted for the New Zealand context.

A pre-test of the survey was conducted with the instrument being reviewed for clarity, comprehension, flow and timing. Modifications to the survey instrument were made as necessary. An invitation to participate in the survey was made on site on the West Coast. This was a variance from the planned postal contact as there were unanticipated delays starting the fieldwork on the West Coast, in part related to changes in personnel at the various sites. The survey was paper copy and self-administered for both evaluation sites and for those who completed the survey after our departure a paid response envelope was provided. The survey took between 20-25 minutes to complete.

Note, again, that this survey was only undertaken at one point in time; we were not in this evaluation able to assess experiences prior to the roll out of new initiatives, nor administer the surveys for a second time to identify how change was occurring over time.

4.2.3 Routine Data Collection

Routinely-collected quantitative data was drawn from hospital datasets (ED presentations, ASH admissions, length of stay) and primary health care Practice Management System (PMS) data (frequency of PHC presentations, contacts with chronic care initiatives). The MidCentral PMS data managed by Compass Health are reliable, valid and complete. This allowed us to access patient-level data dating back over ten years, making it possible to use historical data to analyse trends and provide data to constitute an historical control group for a quasi-experimental analysis of the impact of the CCM initiative (outlined below). In addition to analysis of PMS Read coding, Compass Health has developed a sophisticated textual analysis tool to interrogate clinical notes for diagnostic and other patient information and this has been employed for the MidCentral evaluation.

4.2.4 Quantitative Analyses - Service Utilisation

In analysing data on service utilisation, we focused principally on ED presentations and ASH admissions as key variables, as all the initiatives have a focus on reducing these events. The list of conditions considered to be ASHs was taken from the list of ICD-10 codes provided by Ling and colleagues (Ling et al., 2010). Descriptive statistics were used to document service utilisation patterns.

The MidCentral Business Case proposed a staged roll-out of practice re-design and the integration of the CCM into General Practice. By February 2014 when this research was finishing, two phases of roll-out had been completed, each involving five practices. This means that a total of 10 practices now have integrated CCM programmes, while the other practices in the region were at that point yet to undergo the re-design process. This situation, and Compass Health's archival data, allows for a quasi-experimental comparison between the CCM practices and others in terms of ED and ASH presentation rates. To conduct this study, the CCM practices' ED and ASH rates were compared with two control conditions: (1) The combined MidCentral non-CCM practices; and (2) an historical control of data from the CCM practices prior to the integration of CCM, i.e. the practices as their own control.

4.3 Qualitative Method and Analysis

Follow-up face-to-face structured and semi-structured interviews were conducted with a purposively selected sample of staff and other stakeholders (n=48). The semi-structured interview schedule was used to direct the face-to-face interviews and a dialogic method of interviewing was employed in order to explore and capture a more in-depth understanding of participants' perceptions of the implementation process (See Appendix C). These interviews took approximately 60 minutes with some interviews being between 90-120 minutes. The interviews took place between February 2013 and November 2013.The interviews were digitally recorded and transcribed verbatim. Twenty-four face-to-face interviews were conducted for the MidCentral evaluation and twenty-four face-to-face interviews were conducted for the West Coast evaluation. The number of interviews conducted was determined by achieving saturation: the point at which no new information is being conveyed by the participants and saturation of the key research questions was achieved.

The analytical framework employed is interpretive and narrative (Clandinin & Connelly, 1991; Wolcott, 1994). The specific approach followed the five standard steps for inductive analysis, sometimes referred to in applied policy research as “framework analysis”. These five steps are (1) familiarization; (2) identifying a thematic framework; (3) indexing; (4) charting, and (5) mapping and interpretation (Ritchie and Spencer, 1994). These steps in the analytical process ultimately provide a comprehensive picture of the various stakeholders’ views on the implementation and performance of the relevant initiatives and allow scope to explore lessons learned from the implementation and operation of these initiatives. The verbatim transcripts were read by Dr Lovelock and Dr Martin, (familiarization); themes emerging from the transcripts were identified and discussed and following refinement (indexing, charting, mapping) an interpretative analysis was conducted (Merriam 2009)

5.0 CONTEXT AND RESULTS

This section of the report commences with an outline of the health care challenges for both jurisdictions and provides an outline of the scope of the respective Business Cases with a specific focus on three initiatives and the associated objectives that both DHBs hoped to realise through implementation.

5.1 The West Coast Alliance - Health Care Challenges on the West Coast

In addition to being geographically isolated, the West Coast has one of the most socio-economically deprived populations in New Zealand (West Coast PHO & DHB, 2010). The West Coast DHB is the most sparsely populated in New Zealand and covers 23,283 square kilometres; 515 kilometres separates Karamea in the North from Haast in the south. The West Coast population stood at 32,200 people at the time of the 2006 census and the population resides over three Territorial Local Authorities: Buller, Grey and Westland Districts. In general, long-term total population decline is anticipated and the area will comprise an increasingly aging population.

In Buller, there is a higher proportion of people over the age of 65 years. Buller is also more deprived than the District as a whole. The PHO at the time of the Business Case development provided some health services, and subsidised patient care through funding eight medical centres across the Coast. Five of these practices were owned by the DHB, two by independent health professionals, and one by the PHO. The key issues at the time of the Business Case development in 2010 included: workforce retention and recruitment (specifically an excessive reliance on locums, understaffing and high turn-over), high on-call demands and rural health issues - including the aforementioned low population density and significant socio-economic deprivation. Cumulatively, the workforce issues were seen to have contributed to poor access to care and reactive care rather than proactive care on the West Coast (West Coast PHO and DHB Business Case, 2010).

The West Coast has high morbidity and mortality rates and life expectancy is lower than the national average. Mortality data (2001-2005) reveals the leading causes of death as: cardiovascular disease, respiratory disease, cancers (particularly lung, colorectal, prostate and breast); and dementia. Hospitalisation rates are high and the leading causes of hospitalisation include: diseases of the digestive system, circulatory system, injury, poisoning, pregnancy, childbirth and the puerperium. However, Ambulatory Sensitive Hospitalisations (ASH) at this time did not differ from rates for New Zealand as a whole.

The lead causes of ASH were: angina, chest pain, cellulitis, upper respiratory and ENT infections, diabetes, congestive heart failure, dental conditions, myocardial infarction, gastroenteritis, pneumonia, asthma, skin cancers, epilepsy, kidney and urinary tract infections, and stroke (West Coast PHO and DHB Business Case, 2010).

West Coast Māori have poorer overall health status than non-Māori with the key indicators being cardiovascular disease, cancer, diabetes and respiratory disease. There is evidence of unmet need with under-representation in primary care utilisation data evident and discrepancies between hospitalisation and mortality rates for cardiovascular disease and registration and mortality rates for cancer. West Coast children and young people have poorer health status than the New Zealand average and have the worst oral health status in New Zealand. The main reasons behind ASH for children (0-4 years) are respiratory infections (29%), gastroenteritis (20%) and asthma (12%). The West Coast has higher rates of smoking than other regions, with Buller having the highest proportion of smokers. The number of older Maori on the West Coast is increasing (West Coast PHO and DHB Business Case, 2010).

The West Coast Business Case response was ambitious and involved 14 inter-related initiatives. It is, however, important to note that a number of the health concerns outlined above were being addressed through a number of initiatives introduced prior to the Business Case. For example, the PHO had three years prior to the Business Case initiated a long-term conditions management programme incorporating targeted care, self-management support, delivery system redesign and clinical information systems and navigation support for those with cancer. In addition, the DHB had invested in nursing competency and role extension, movement to models of care in which nurses provided front line services, greater use of nurses, closer working relationships with Canterbury for many services, and the development of an IT platform allowing for a single shared patient record across the DHB practices with access through to hospital sourced health information (discharged summaries, PACs radiology, lab results). Both the PHO and the DHB had also initiated, respectively, a Māori Health Plan and Māori health need analysis.

The West Coast Business Case comprised 14 inter-related initiatives:

(1) Integrated Family Health Centres (IFHCs)
(2) Core general practice redesign
(3) Acute Care
(4) Keeping people healthy
(5) Long-term conditions
(6) Integration – DHB community based services

(7) Integration – HealthPathways
(8) Improved access to diagnostics
(9) Referred services
(10) Mental health
(11) Frail older people
(12) Workforce
(13) IFHCs – Facilities
(14) IFHCs – Information Technology.

The Business Case also involved the establishment of project advisory and reference groups.

At the time of the development of the Business Case the key problems identified by the steering, advisory group, reference group and other stakeholders included: workforce shortages – which led to poor access to care and service fragmentation (where the problems in primary care contributed to high dependency on Emergency Department services at Buller and Greymouth). In addition, because services are not co-located in some areas access to healthcare was noted as being particularly difficult for the frail elderly and or those who do not have transport. At this time concern was also raised about a lack of community knowledge of the health system and that this lack of knowledge contributed to greater accessing of secondary health resources by Māori and those living in deprived areas.

A full evaluation of all of these initiatives over a 12 month contract period was not possible given time and budgetary constraints. Thus, working within these parameters, we initially focussed on three initiatives and the range of objectives for each initiative to be realised over a three-year period. However, the implementation issues within the specific work streams necessitated consideration of the broader context of the Business Case implementation.

5.2 Long-term Care

Objectives:

(i) To increase implementation of the programme so that over 70% of all patients with COPD, CVD and/or diabetes have an annual review followed by a timely package of care appropriate for their level of need;

(ii) To develop a Māori team within each Integrated Family Health Centre (IFHC) who will focus on improving access and health outcomes for Māori;

(iii) To review the management of Level 3 patients (those not managing, clinical problems (+/- social problems) and enhance the integration between general practice care and AT&R, Care Link and clinical nurse specialist (CNS) care and allied health;

(iv) To enable and empower people in the community to obtain process and understand health information and services needed to make appropriate decisions about their health;

(v) To develop health navigator support services for Level 3 patients who have difficulty accessing health care and social services;

(vi) To better integrate the support provided to patients by CNSs, allied health and medical centres through better communication and information sharing;

(vii) To link the activities described in the health promotion work scheme.

A number of actions were to be realised over a three year period, with Year 3 involving a review of outputs, outcomes and the implementation plan. The programme is based on the Wagner's Chronic Care Model (self-management support, community support, delivery system redesign, clinical information systems and decision support) and the Kaiser Triangle stratified care approach (MOH, 2001). The programme also meets the National Health Committee's objectives by providing effective chronic care management and co-ordination through using a population health approach to care delivery, based on level of need, both clinical need and need of self-management support (West Coast PHO and DHB Business Case, 2010).

Care Integration – The DHB community-based services initiative (the Complex Clinical Care Network) addressed the establishment of integrated multidisciplinary health teams and the provision of integrated and co-ordinated care. This initiative works in conjunction with the PHO Long-term Conditions Programme and addresses the two systems of care in operation at the time of the plan which were largely operating as parallel systems of care. Importantly for our evaluation, this initiative was signalled to be of benefit for those with long-term conditions and also a means of addressing the high numbers of admissions. This was the organisational response to co-ordination. The key indicators are ASH and ED rates.

5.3 Integrated Family Health Centres – Information Technology

Objectives:

(i) To implement communications and information technology that facilitates integrated care for patients;

(ii) To improve information flow between primary care, community nursing and allied health clinicians by use of a shared electronic patient medical record;

(iii) To improve information flows between primary and secondary care by establishing mechanisms for primary/community clinicians to view the hospital based electronic clinical medical record and vice versa;

(iv) Adopt electronic prescribing;

(v) To increase the use of telemedicine for both outpatient appointments, and for seeking management advice from a distance;

(vi) To enable and empower people in the community to obtain, process and understand the health information they need to make appropriate decisions about their health;

(vii) To prepare local IT systems so that the West Coast is in a good position to adopt national initiatives as they become available, e.g. a core set of personal health information available electronically to New Zealanders and their treatment providers, and electronic prescribing.

This initiative followed the BSMC Primary Health Care Business Case Development Process Information Pack principles:

(i)	Prioritisation and access to services (shared scheduling of primary care, community nursing and allied health appointments);
(ii)	Information sharing (shared electronic clinical record, sharing electronic information with pharmacy and between primary and secondary care);
(iii)	Quality and performance (HealthPathways, patient access to web support, i.e. Health Navigator).

5.4 Frail Older People

Objectives:

(i) To set up a clear pathway for accessing primary and community services. This would include:

a) A hub of shared client information available to all health and support services;

b) A triage function for logging all cases and directing cases to appropriate services, ensuring that complex cases receive multidisciplinary assessment, case management through chronic care programme and/or Care Link, and/or referral to specialist services;

c) Clear, agreed protocols for accessing services;

(ii) To co-locate Care Link with the IFHC and link staff to specific primary health teams, thereby giving those teams easy access to expert assessment (InterRAI), community based support packages and a case management function for people with long-term disabling conditions;(iii) To set up restorative home-based support service based on need, accessed through Care Link and closely linked to primary and community health services;

(iii) To ensure all relevant health and support workers (in primary, hospital, community and residential services) are trained in a restorative goal based model of care that focuses on the client being helped to regain and maintain their function and on proactively preventing illness and injury, including a strong focus on supporting carers to prevent/reduce care burnout; and

(iv) To make best use of specialist Health of Older People (AT&R) resources to:

a) Set up clear pathways to ensure timely transfer to specialist services for frail older people and anyone with a stroke;

b) Set up step/down admission avoidance beds in the main centres;

c) Provide a greater proportion of AT&R Staff time available for consultation and support for primary health services, home care services and residential care.

Specific organisational accountabilities are also identified in relation to the various entities (West Coast DHB GM Primary and Community Services; West Coast DHB GM Planning & Funding; West Coast DHB GM Secondary Services).

5.5 MidCentral Business Case: Health Care Challenges in MidCentral

To maximise effectiveness, community-based health programmes should be tailored to the needs and characteristics of the local population. MidCentral DHB's population is largely typical of the wider New Zealand population. There are, however, a number of specific locality differences that need to be considered: (1) There is a large proportion of transient population compared with other DHBs (for example, students, prisoners, and armed forces); (2) Palmerston North is a centre for refugee settlement and, while refugees make up a small proportion of the population, increases in their numbers are beginning to impact on demand for health services; and (3) Travel times from the edges of the district to key health services are up to 90 minutes. Rural and smaller urban communities are not necessarily well networked by public transport, either with each other or to Palmerston North. For some parts of the population, both transport and time barriers exist to accessing services.

As at January 2010, there were 158,800 people enrolled in MidCentral PHOs. When compared with expected rates extrapolated from the 2006 Census, it is estimated that 95% of the resident population is enrolled with a PHO. The largest enrolment gaps exist among people aged between 10 and 40 years; Māori; and Pacific people under the age of 50. In MidCentral district, Māori account for 17.3% of the total population, compared with a national figure of 14.6%. The geographic distribution of Māori is uneven, with higher percentages in Otaki and Horowhenua.

MidCentral district's proportion of people aged 65 and older (13.4%) is higher than the national average (12.1%), and the distribution of older people is not even, with higher percentages in the Horowhenua (18.6%) and Kapiti Coast (MidCentral portion) (19.8%) areas.

A number of key challenges for the MidCentral region were identified in the business case (MidCentral District Health Board, 2010):

- An ageing population: access to general practitioners (GPs) for older people and rest homes is an issue across the board but particularly in Horowhenua;
- Increases in chronic illness due to changing lifestyles; the top four diseases associated with ASH admissions are: cellulitis; cardiac; and respiratory - broken down into pneumonia and Chronic Obstructive Pulmonary Disease;
- Services for older people are fragmented and not responsive to need;
- Patient experience is variable as practices are under pressure;
- MidCentral DHB has unusually high rates of admissions and emergency department (ED) presentations for asthma;
- MidCentral DHB has relatively high pharmaceutical use and high consumption of diagnostic services;
- An ageing workforce: MidCentral's GP workforce is generally older than in the rest of NZ and GPs tend to have higher consultation rates then the rest of the country (so programmes need to focus on ensuring GP effort is focused on those most able to benefit);
- Considerable investment has occurred in recent years to up-skill the community health workforce, particularly nurses: in general, with the exception of GPs, this workforce is seen to be under-utilised relative to their skill capability;
- Poor systems of communication between health professionals currently exist: for example, duplication of work from laboratories and radiology, and poor access to shared information.

In order to address these issues, and to guide the development of the MidCentral business case, a list of "aspirational targets" were developed. This list provided a clear focus identifying what was to be achieved. The targets were to:

- Reduce presentations to the ED by 30%;
- Reduce ASHs in Medical Wards and Assessment Treatment and Rehabilitation for over-65-year-olds by 20%;
- Reduce polypharmacy in the over-65-year-olds by 10%;
- Reduce the rate of growth in total aged residential care (ARC) expenditure to 5% per year;
- Reduce the rate of growth of GP-referred pharmacy expenditure to 1% per year until MidCentral's expenditure is similar to national benchmark expenditure;
- Increase enrolment by Māori in PHOs to 100%.

MidCentral also set out to achieve the following:

- 80% of people aged over 65 with moderate complexity health needs will receive coordinated structured care through general practice teams;
- 100% of enrolled patients will have access to their own health records by 2013;
- 100% of health professionals will have access to up to date patient health records;
- All primary care providers will work within a common assessment and care planning framework.

The MidCentral Business Case presented a list of 15 new initiatives (of a total of 26) (often inter-related, and with overlapping objectives) that were to be implemented as part of the BSMC business case. Each of these specific initiatives was intended to contribute to at least one of the aspirational targets above. Of these, three were selected for the purposes of the proposed evaluation research: (1) chronic care management, (2) Annual Comprehensive Health Assessment for older people and people at risk, and (3) Information Management – Shared Care Record. The selection of these particular initiatives reflects the importance to BSMC objectives of the management of chronic conditions, the health of older people, and the role of information management as an enabler to assist in the integration of services.

5.6 Chronic Care Model into General Practice (CCM-GP) and Living a Healthy Life

The MidCentral implementation of Chronic Care Model into General Practice (CCM-GP) involved a process of service re-design to move from episodic care to structured care pathways for people with chronic conditions. It was informed by the Wagner Chronic Care Model (Wagner et al., 2001a) which includes six elements: self-management support, community support, delivery system redesign, clinical information systems and decision support. Evidence suggests that redesigning care using this model leads to improved patient care and better health outcomes (Coleman et al., 2009). Patient self-management (i.e. increasing the capacity of people with chronic illness to better understand and manage their own conditions) is a core component of the Wagner model.

In addition, MidCentral introduced the 'Living a Healthy Life programmes' based on the Stanford Model, a group-based patient self-management education programme. This is a generic (i.e. non-disease-specific) model that teaches patients a range of skills in a series of 2 hour sessions over a six week period. Subjects covered include: 1) techniques to deal with problems such as frustration, fatigue, pain and isolation, 2) appropriate exercise for maintaining and improving strength, flexibility, and endurance, 3) appropriate use of medications, 4) communicating effectively with family, friends, and health professionals, 5) nutrition, and, 6) how to evaluate new treatments. This evidence-based model is associated with enhanced patient self-management and improved health outcomes (Lorig and Holman, 2003).

5.7 Chronic Care Management

Objectives:

(1) Reduce ED presentations by 30%,
(2) reduce ASH admissions for over 65-year-olds by 20%,
(3) reduce poly-pharmacy in the over-65-year-olds by 10%,
(4) reduce rate of growth of GP-referred pharmacy expenditure by 1% per year,
(5) reduce rate of growth in total ARC expenditure to 5% per year,
(6) 80% of people over 65 years with moderate complexity health needs will receive coordinated structured care through general practice teams,
(7) Develop clinical information systems that support integrated comprehensive assessment/care planning,
(8) Create stronger community links to better utilise resources established within the community,
(9) Support increased long-term condition self-management through the establishment of self-management programmes,
(10) Implement decision tools in every day clinical practice,
(11) Improved chronic care management in the practice [pre and post Assessment of Chronic Illness Care (ACIC) scores (Bonomi et al., 2002)],
(12) 25% of practices per year adopting the Chronic Care Model into General Practice Project (CCM-GP) and all practices by 2013, and
(13) Increased number of patients are self-managing their own conditions.

5.8 Annual Comprehensive Health Assessment (CHA) and Client Care Plan (CCP)

There is evidence that a comprehensive (multi-dimensional) health assessment followed by the development of individualised health care plans for older or at-risk populations can aid early detection of health problems and improve outcomes (Stevenson, 1998, Boult et al., 2001). This initiative aimed to ensure that patients and their family/whānau with known health conditions or risk factors for developing health problems do not develop an acute exacerbation resulting in a presentation to the ED. The CHA and CCP tools have had the input of a large number of PHC practitioners, including Māori providers in the District.

An EnhancedCare+ programme emerged over the course of the Business Case roll out from the CHA and CCP tool development workstream, as it was realised that a LTC package of care was essential to effective chronic care management, and the CHA and CCP tools when used on an annual basis would not achieve the outcomes desired. The general age for eligibility for the programme is 65 years and over, but in recognition of the serious disparities in health (Ajwani et al., 2003), the eligibility age for Māori and Pacific populations is 45 years. The intervention involves up to five individual clinical contacts over 12 months, including a highly-structured CHA and the development of a personalised health-and-wellness plan during the first session (taking 45-60 minutes; this assessment can be spread over two sessions). Subsequent contacts may occur either within the general practice, by telephone or, in some cases, in the patient's own home. The CHA has structured content based on Gordon's model of functional health behaviours (Gordon, 1994), and includes an assessment component focussed on a Māori view of health and wellness (Durie, 1985). An innovative point of difference of the EnhancedCare+ programme is that eligible patients are proactively recruited into the programme; they are identified from Practice Management Systems (PMS) data at the PHO level and actively approached and invited to participate in the programme. In this way, well-integrated IT systems in PHC enable the detection of risk factors and the prevention or treatment of acute and chronic health conditions in primary care or community settings, which may avoid ED or ASH presentations.

5.9 Comprehensive Health Assessment (CHA)

Objectives:

(1) Adapt CHA assessment tool to meet requirements of this initiative [e.g. include cardiovascular disease - CVD] and roll out to practices.
(2) Establish recall systems to facilitate the CHA.
(3) Reduce presentations to ED by 30%.
(4) Reduce ASH admissions for over 65-year-old by 20%.
(5) Reduce rate of growth in total ARC expenditure to 5% per year.
(6) 80% of people over 65 years with moderate complexity health needs will receive coordinated structured care through general practice teams.
(7) 100% of health professionals will have access to up-to-date patient records.
(8) Earlier identification of deteriorating conditions requiring management.
(9) Identification of health risks in individuals who consider themselves healthy.

5.10 Information Management (Shared Care Record - SCR)

Programmes to introduce interoperable electronic health records (i.e. information technology (IT) systems that that allow sharing of patient health information across sites and between clinicians) are underway in a range of developed countries including Australia, Canada, England, Finland, France, Scotland, the United States and NZ – with varying degrees of success (Rozenblum et al., 2011, Greenhalgh et al., 2010, Greenhalgh et al., 2011, Coiera, 2011, Jones et al., 2009). SCRs are seen as key enablers in promoting integrated care. The principal drivers of these programmes and the expected benefits to be derived from them are: (1) better quality care (such as more informed care); (2) safer care (e.g. fewer medication errors, greater knowledge of existing patient allergies etc.); (3) more efficient and better coordinated care (e.g. less need for repeated assessments or duplication of lab work); (4) reduction in onward referral (e.g. fewer admissions to hospital); (5) more equitable care (e.g. for low literacy or limited English speakers); and (6) improved patient satisfaction (as the patient journey through the health care system is more streamlined and their quality of care improved (Greenhalgh et al., 2010)). Despite the substantial investment in these programmes there is very little literature concerning the benefits of SCR (Coiera, 2011), although gains in patient safety and effectiveness of health care have been reported (Jones et al., 2009).

In New Zealand, the concept of a national SCR has been a topic of interest for some years and is a key plank of the National Health IT Board agenda, which has an explicit goal to *"achieve high quality health care and improve patient safety, by 2014 New Zealanders will have a core set of personal health information available electronically to them and their treatment providers regardless of the setting as they access health services" (National Health IT Board, 2010).* Since the release of the 2001 government's health care information management and technology strategy (Wave Advisory Board, 2001), the 'vision' has been that IT will integrate the disparate parts of the health sector, bring together databases that will be accessible to multiple health service providers, facilitate portable patient records, and provide patient access to health information. This vision is very much in keeping with the BSMC aim of integrated health care. The implementation of the vision of integrated health IT has, however, been hampered by a lack of agreed standards, poor data quality, accessibility and information exchange problems, a lack of coordination between data collections and systems and problems with national data systems and governance (Gauld, 2004). The MidCentral implementation of SCR may provide useful lessons for any national or regional roll-out of SCR when the need arises.

In the MidCentral business case, the SCR may best be thought of as both a system improvement in its own right, and as an "enabler" of many of the other initiatives within the wider programme of work. Some benefits may derive directly from implementation of the SCR itself but more might be expected from the initiatives that it will enable and support, such as better and more integrated management of long-term conditions, improved patient safety, improved information flow between clinicians, and more efficient use of clinician time. The SCR combines patient-centric health information from PHC, pharmacy, hospital and other systems in the MidCentral district into a single virtual, SCR. Appropriate access is determined by the user's role, and a comprehensive access audit function is built in.

Objectives:

(1) 100% of enrolled patients will have access to their own health records by 2013;
(2) 100% of health professionals will have access to up-to-date health records by 2013;
(3) Virtual IFHCs will be able to share patient records more easily;
(4) The electronic transfer of care will streamline processes between general practice and intermediary care services and case managers;
(5) Benefit for the hospital of access to full patients' records will be the accuracy and speed with which information is obtained; and
(6) Reduction in the duplication of services and events such as poly-pharmacy admissions.

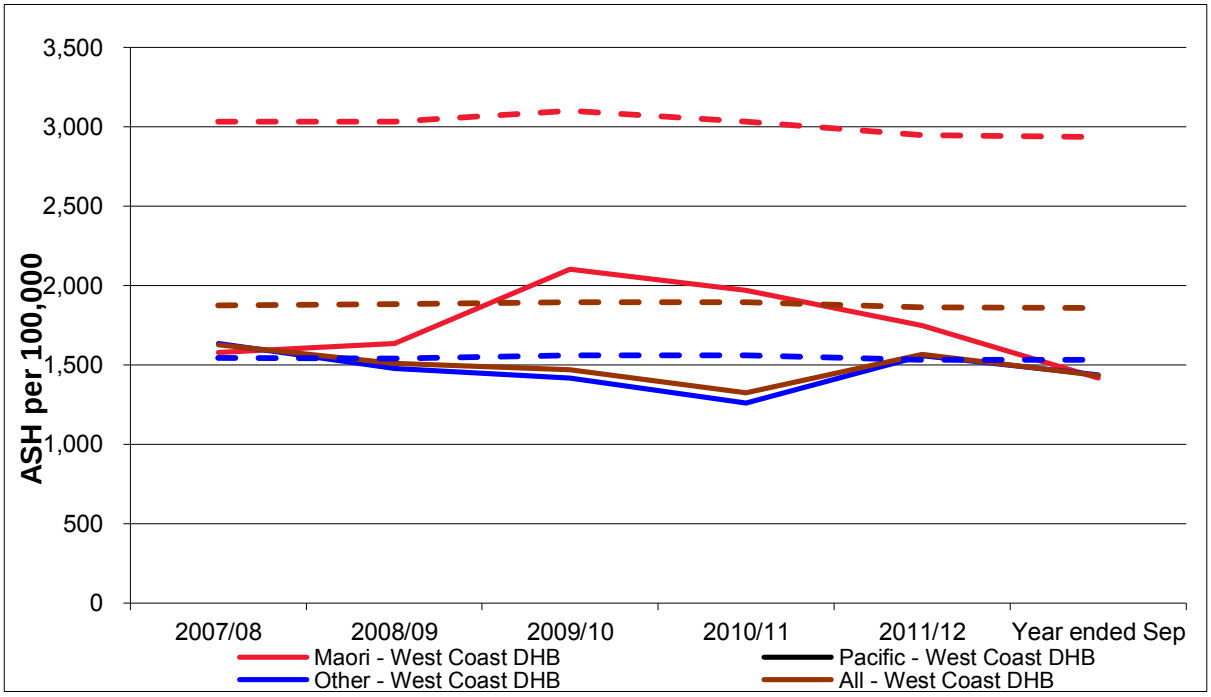
6.0 ED and ASH RESULTS

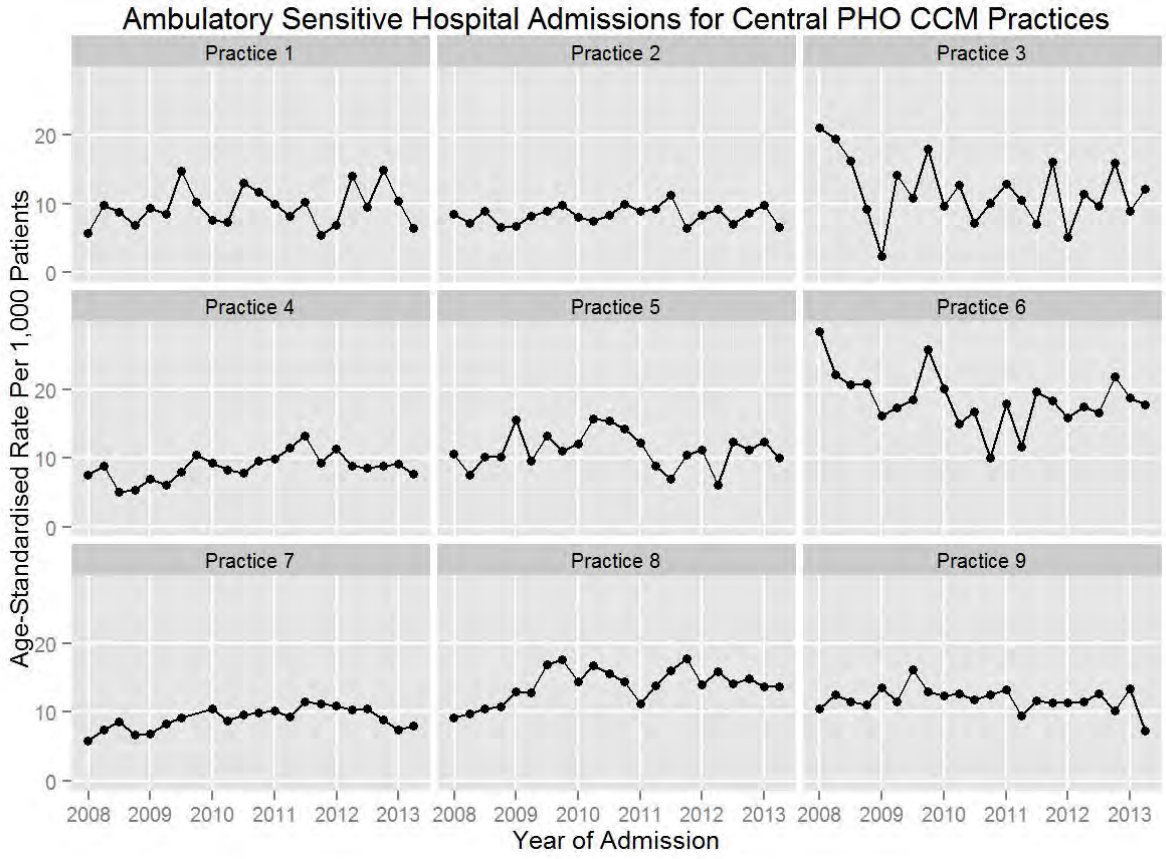
This section of the report provides the analysis of routinely collected data. West Coast ASH data analysis is followed by a detailed account of MidCentral ASH and ED data. Note that these data can only be reported over a short period of time. Although the business case set out to achieve changes within three years, longer term analyses are needed to ensure that any positive changes that do occur are sustainable. Staff and patient survey results for MidCentral are followed by the results of the health care provider survey on the West Coast. ED data was not available for analysis during the study period.

Both Business Cases aimed to significantly reduce ED and ASH admission rates, with MidCentral aiming to reduce presentations to ED by 30%.

Graph 1 shows ASH rates for the West Coast. At the time of the Business Case development, the West Coast ASH hospitalisation rates did not differ from New Zealand as whole. Business Case implementation commenced in 2009/10 and from this time until 2011/12 there appears to have been some downward movement particularly for Māori; however, these relatively short term trends need to be interpreted with caution. There were no ASH presentations for Pacific peoples in this period. There was no evident consistent downward trend for the population as a whole.

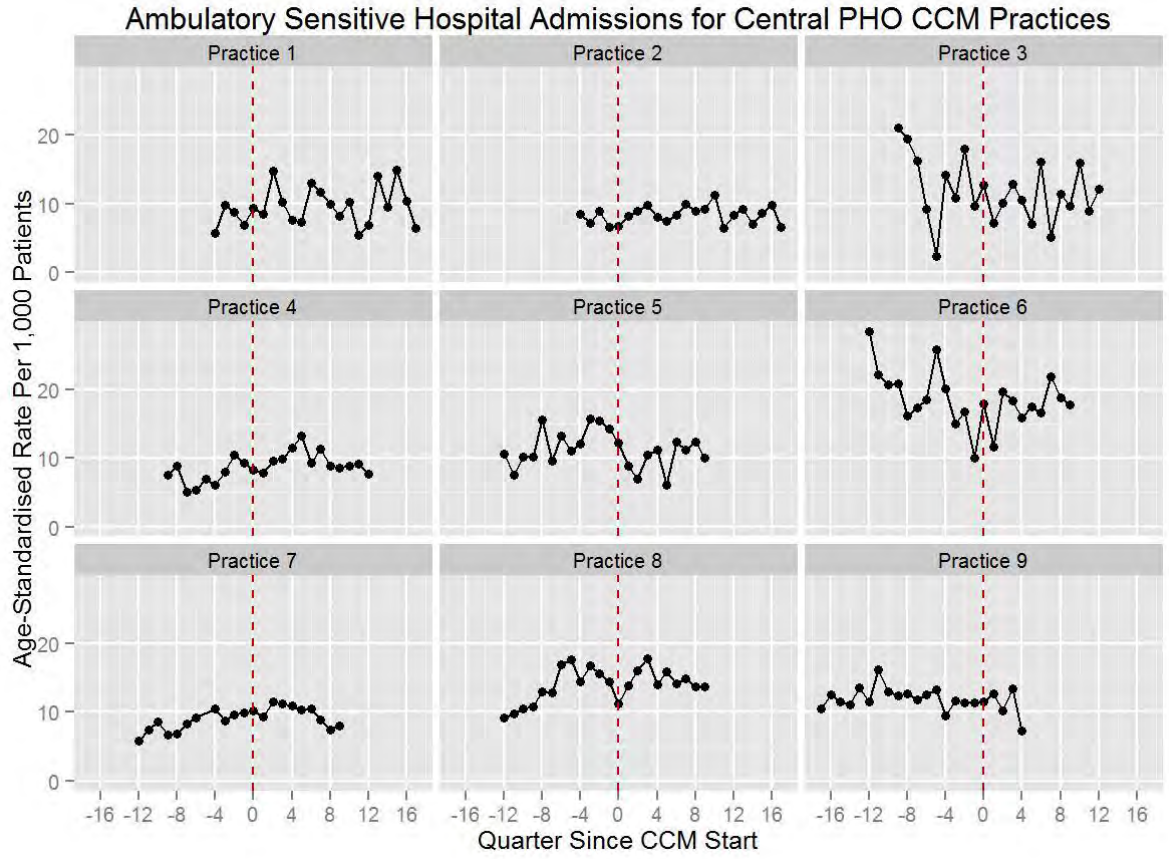
Graph 1: ASH Data for the West Coast





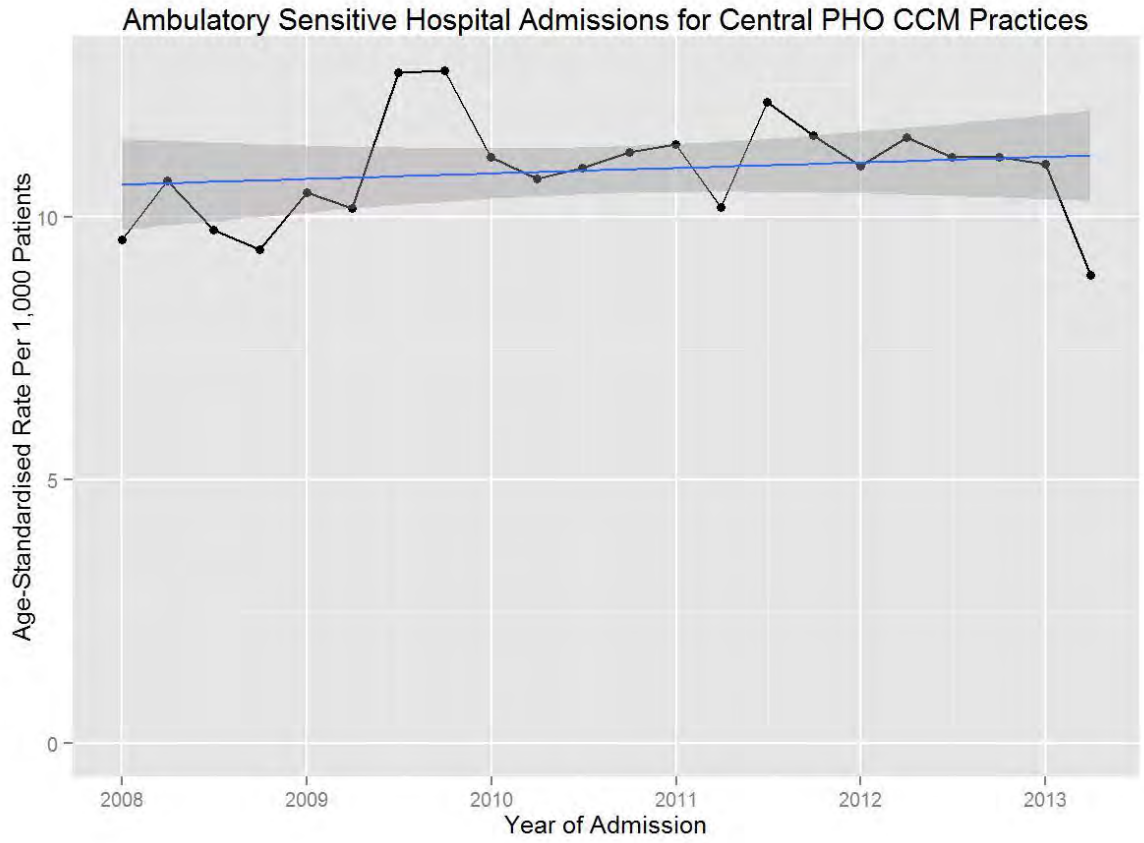
Graph 2: ASH Data for MidCentral Chronic Care Model By Year

The figure above (Graph 2) depicts the ASH rates for individual practices at the Central PHO that had implemented the Chronic Care Model. There is no clear overall trend evident; while a few practices appear to be trending down, most have fairly stable rates, while Practice 8 appears to be trending up. Overall there is considerable variability which makes it difficult to draw any firm conclusions about the impact of the Chronic Care Model.



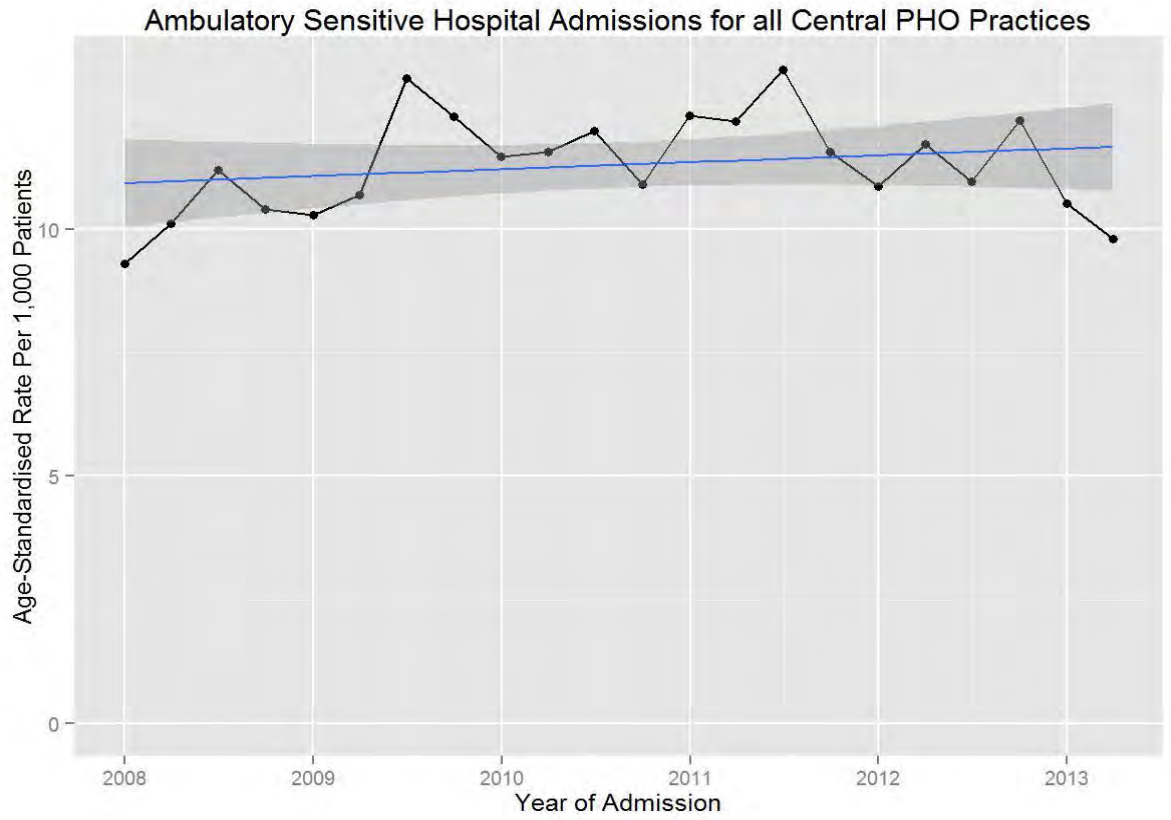
Graph 3: ASH Data for MidCentral Central PHO Chronic Care Model Practices – Over time Since Commencement of CCM

The figure above (Graph 3) depicts the ASH rates for all Central PHO practices that have implemented the Chronic Care Model, set out by quarter, and clearly identifying when the CCM began in each practice. Although each of these practices have implemented the Chronic Care Model, these CCM implementations did not take place at the same time i.e. some of the practices commenced implementation later than others. This analysis presented controls for the timing of implementation of the CCM by providing data on the ASH rates of the individual practices by quarter (of year) since commencement of CCM. It can be seen that one early adopter practice (Practice 5) had been running CCM for 16 quarters, while later adopters (e.g. Practice 9) had been running for 4 quarters. Again, there is no evidence of a consistent reduction in ASH rates resulting from the introduction of the CCM.



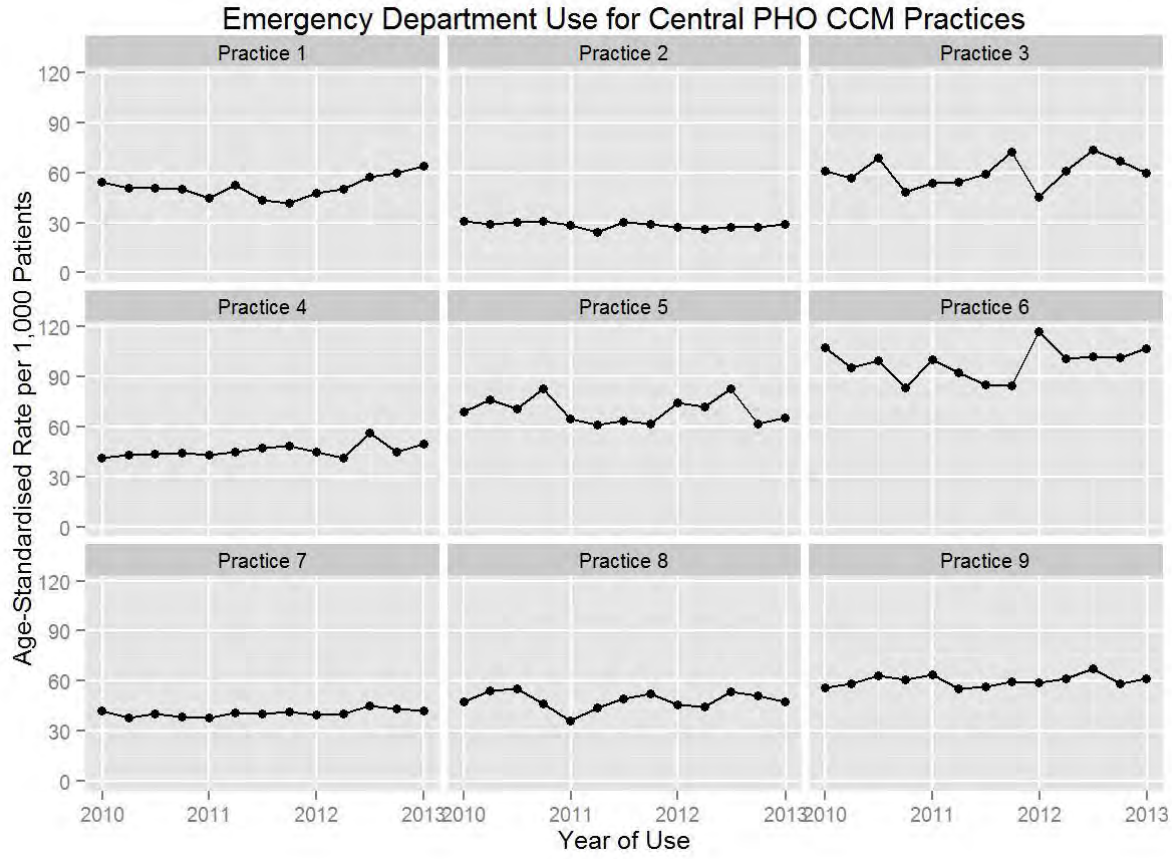
Graph 4: ASH Admissions for Central PHO CCM Practices

Data presented here (Graph 4) controls for the onset of CCM implementation and demonstrates the impact on ASH admissions post implementation of the CCM. The grey shaded area around the trend line represents the 95% confidence interval. There is no apparent trend and no evidence of a significant reduction in ASH admissions over time. That said, the apparent dip in 2013 is encouraging. More data are required to determine if this dip represents an actual change or measurement noise.



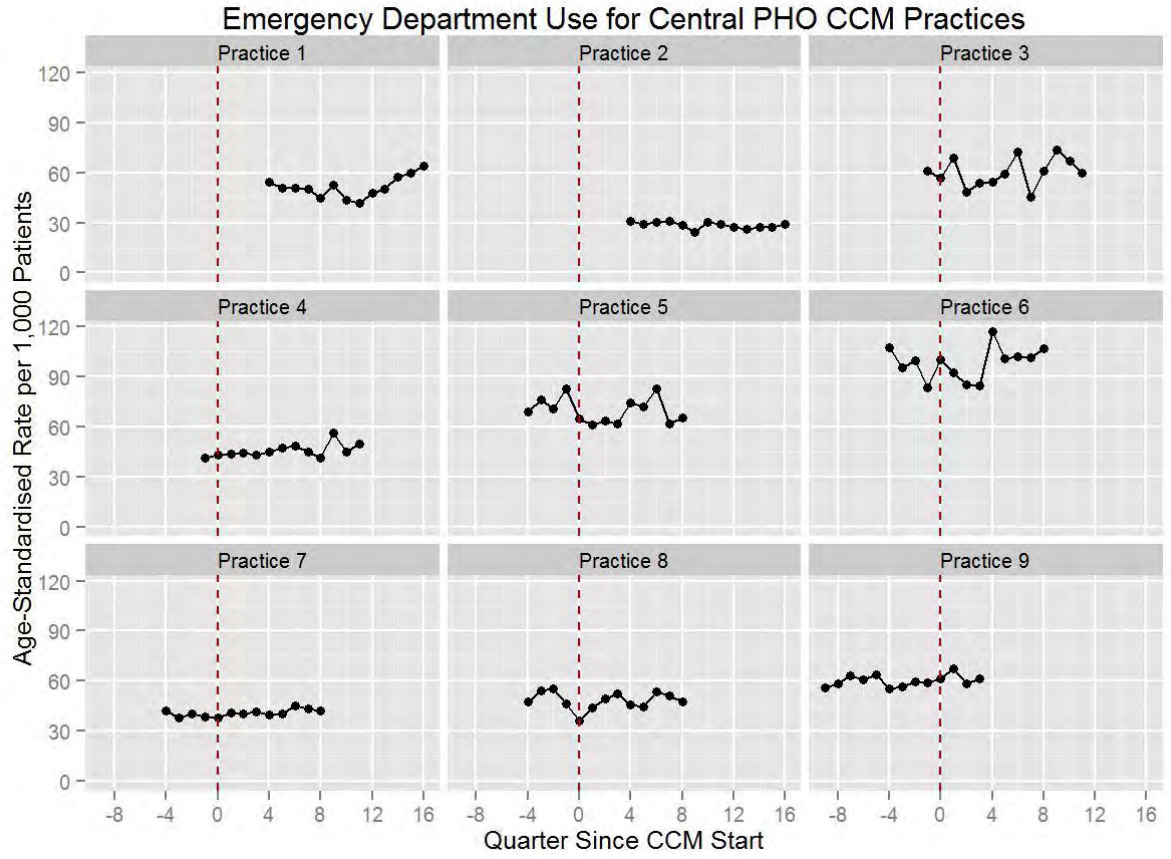
Graph 5: ASH Data for all Central PHO practices

This figure (Graph 5) presents data for all practices, rather than for only those who had implemented the CCM. A similar trend in ASH rates is shown to that found with to the CCM practices; however it must be acknowledged that the CCM data is included here.



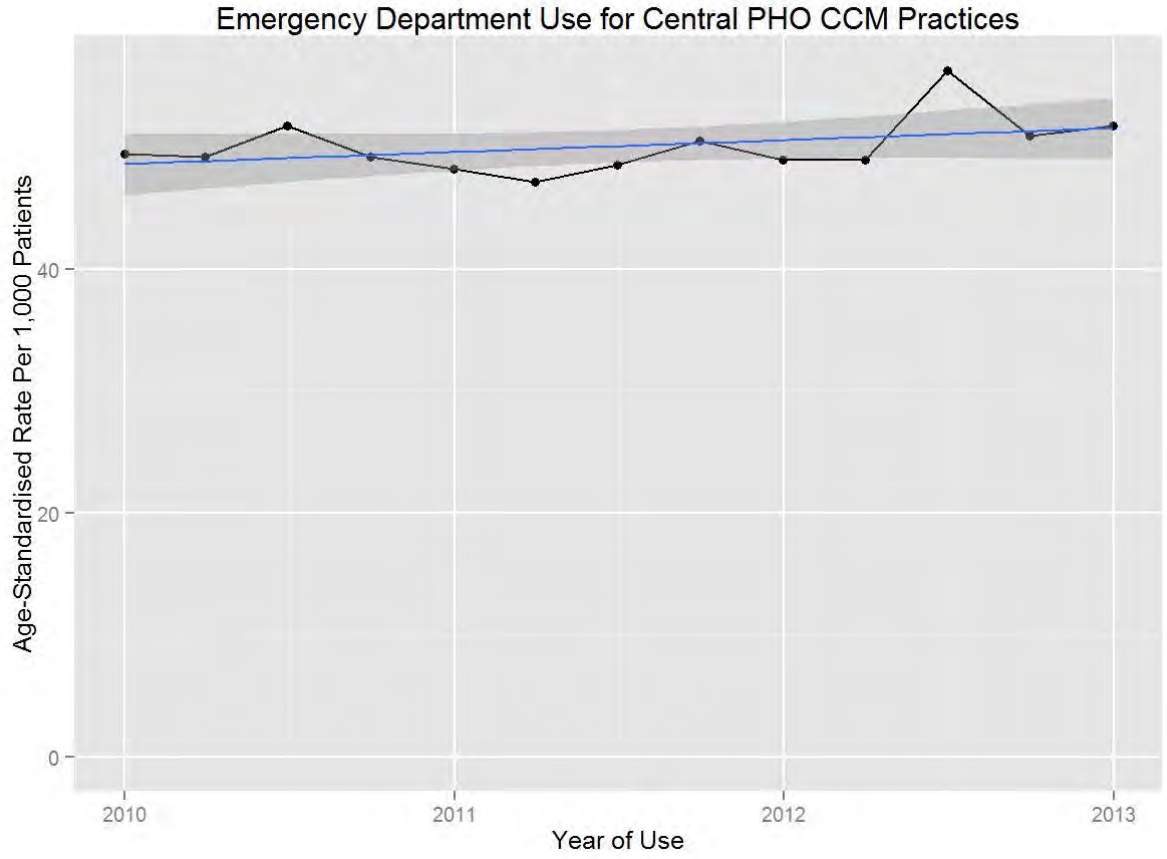
Graph 6: ED Use for Central PHO CCM Practices Over Time

For the CCM practices Graph 6 demonstrates that ED presentation rates have remained stable over the 2010-2013 period, contrary to Business Case expectations.



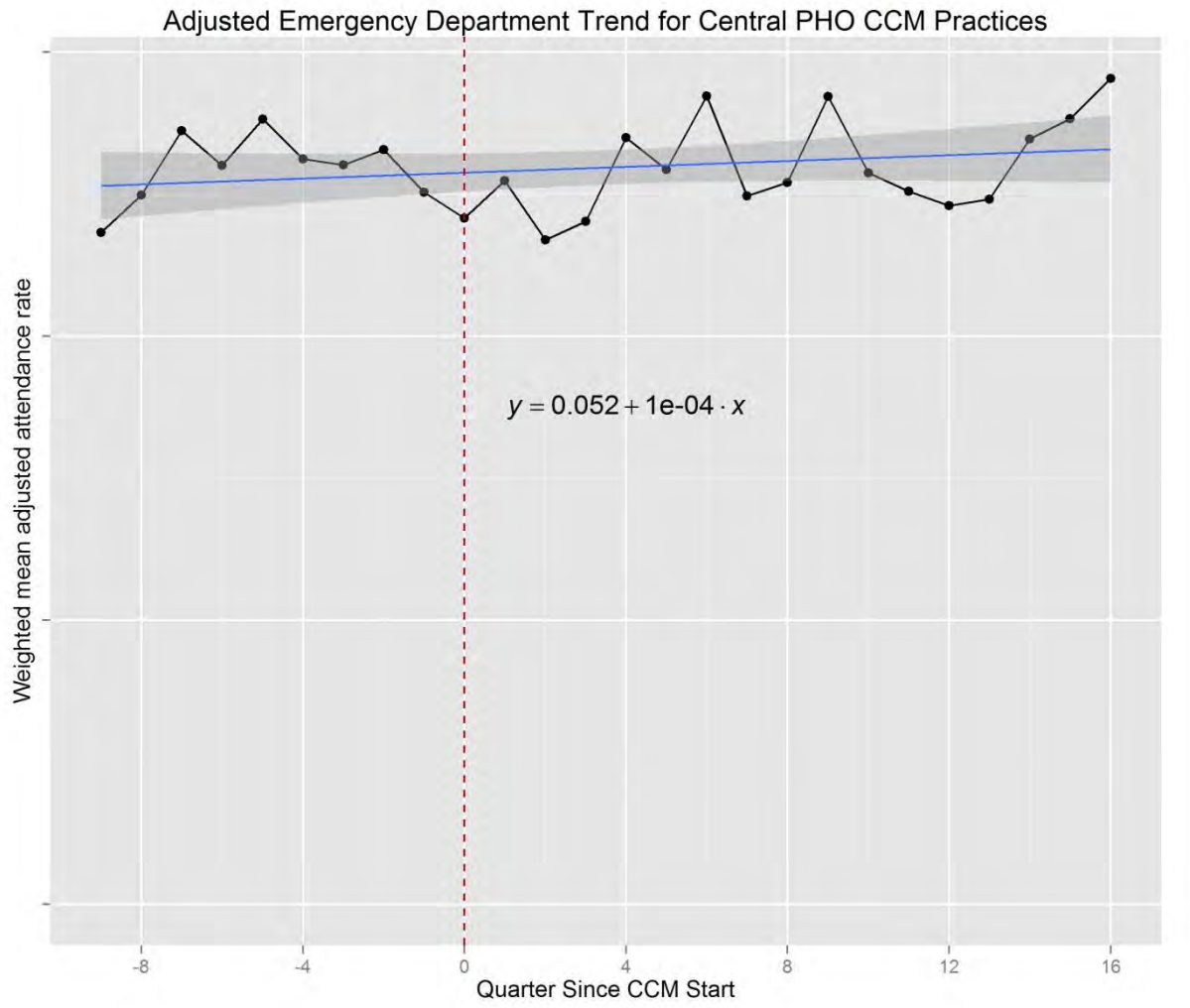
Graph 7: ED Use for CCM Practices by Quarter since the CCM Implementation

Graph 7 depicts the rate of presentation to the ED for each CCM practice, while controlling for timing differences in the implementation of the CCM model between practices. There is little clear evidence of change in ED presentation since the implementation of CCM.



Graph 8: ED Use for all Central PHO CCM Practices

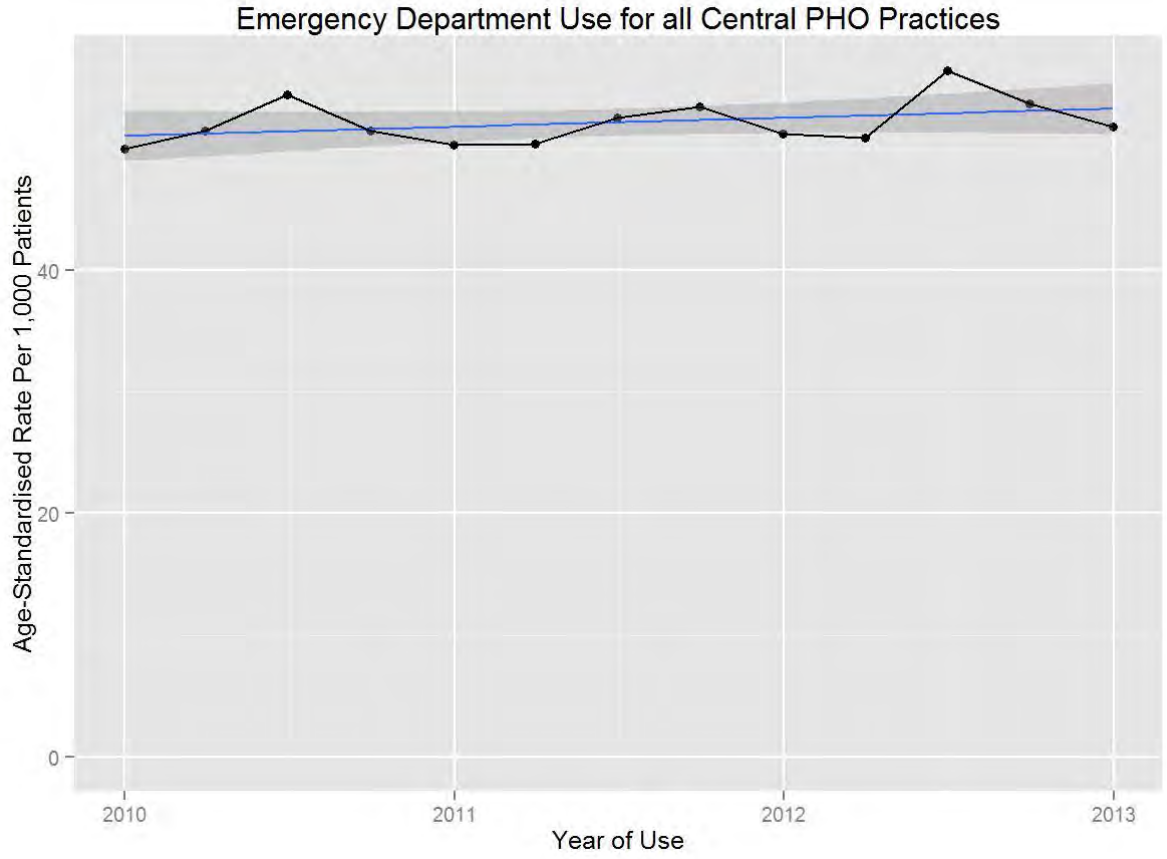
Graph 8 shows there is no evident change in ED use post implementation of the Business Case, although these data are not controlled for the timing of the implementation of the CCM.



Graph 9: ED Use for Central PHO CCM practices – Controlling for the timing of implementation

This figure (Graph 9) depicts the data for emergency department presentation rate for patients enrolled in practices that have implemented the CCM programme (adjusted to control for the timing of the CCM implementation). There is no evidence of any change in rate of presentation following the introduction of the CCM.

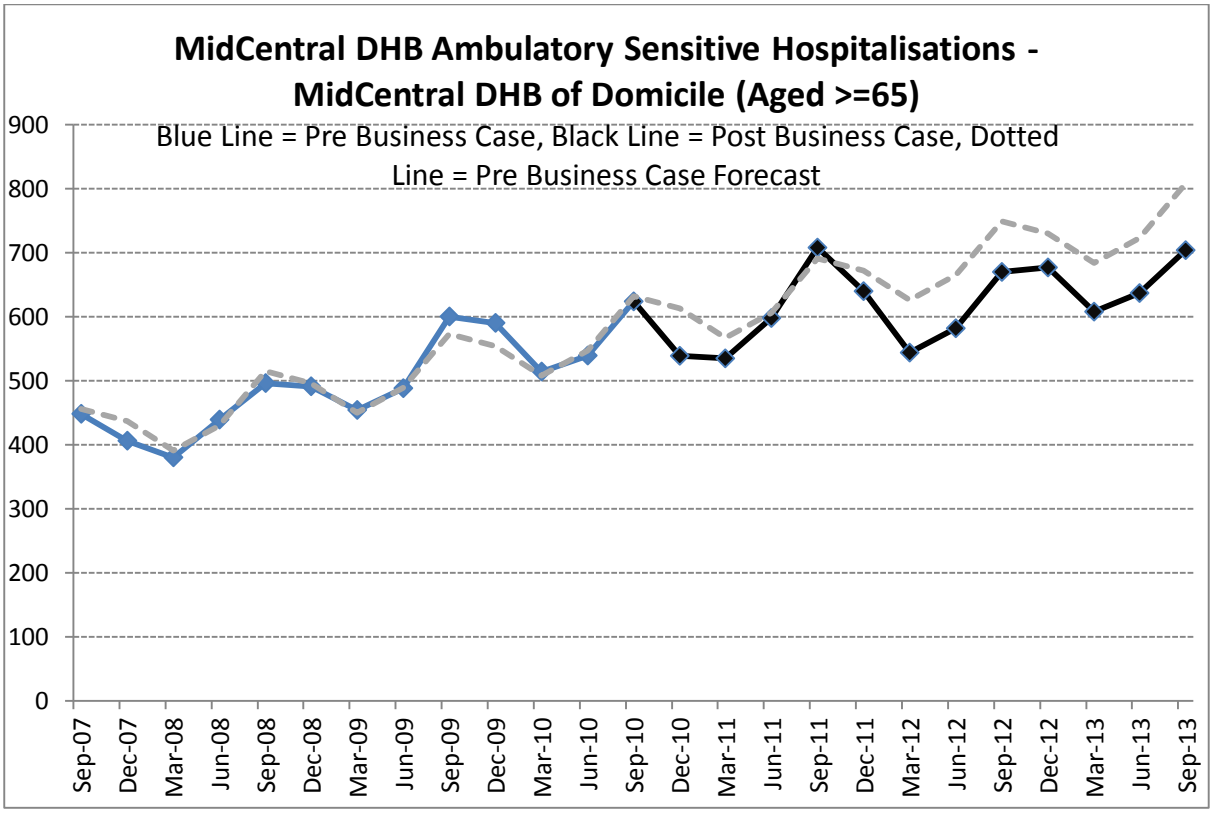
The fact neither ASH admissions nor ED presentation rates declined does not imply the CCM model itself has been a "failure". A number of initiatives in the Business Case were intended to contribute to the goals of declining ASH and ED rates. While it is desirable to have lower rates of secondary care use, ASH and ED presentation rates are blunt metrics by which to judge the success, or otherwise, of individual projects. Patients involved in chronic care programmes may well be better clinically managed, more engaged in their care, have improved health-related quality of life (HR-QoL), and report an improved patient experience of care as a result of the programme. These "softer", though important, outcomes are not captured in the ASH and ED statistics.



Graph 10: ED Uses for All Central PHO Practices – Across Time

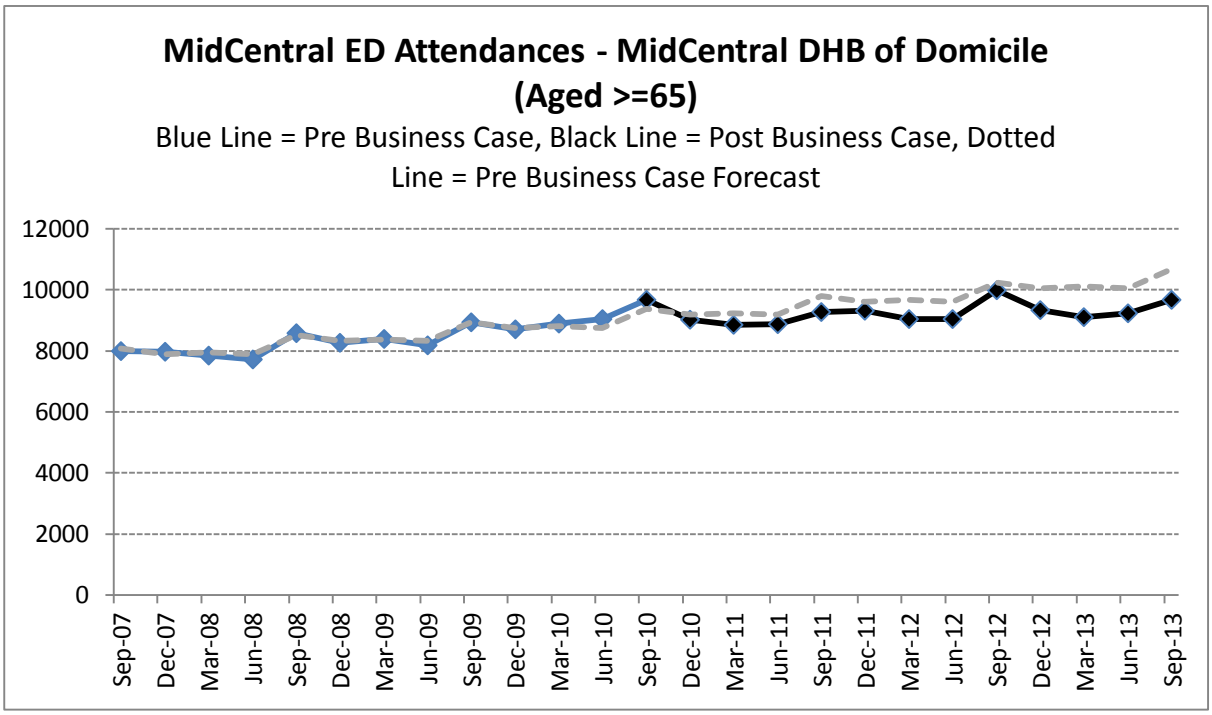
These data (Graph 10) suggest that overall there is either a flat or slightly upward trend in ED presentation rates post implementation of the Business Case.

Graph 11: MidCentral DHB Ambulatory Sensitive Hospitalisations



This graph depicts the number of Ambulatory Sensitive Hospitalisations in MidCentral from September 2007 to September 2013. The blue line predates the introduction of the Business Case, the black line shows ASH presentation rates post implementation of the Business Case. The grey broken line represents the forecast ASH rates over this period. It can be clearly seen that ASH presentation rates for 65 year olds and over trend upwards during the Business Case period. That said, post-Business Case rates in this age group were lower than was forecast. The aspirational goal of a 20% reduction outlined in the Business Case was not evident during this period.

Graph 12: MidCentral ED Attendances – MidCentral DHB of Domicile (Aged>=65)



This graph depicts MidCentral ED Attendances amongst those aged 65 and over. The blue line represents the rates pre Business Case, the black line represents implementation period of the Business Case and the dotted line is the forecast. As can be seen there was a slight increase in ED Attendances for those aged 65 and over during the implementation of the Business Case. The expected 30% reduction outlined as an aspirational goal in the Business Case was not evident during this period. As with the ASH data described above (Graph 11) there was some evidence that the rates diverged from those forecast.

7.0 STAFF AND PATIENT SURVEY RESULTS

7.1 Introduction

The following section reports the results from the Care Co-ordination and Integration questionnaire and patient surveys on the West Coast and in MidCentral. The aim of the Care Co-ordination and Integration questionnaire was to document clinician, allied health professionals and management perceptions of distinct aspects of patient care; experiences of co-ordinated care and integration at the organisational level, the integration of organisational activities; clinical integration of activities, co-ordination across the professions, facilities and support systems. In addition we explored perceptions of capability, staff morale and job satisfaction, as the success and sustainability of integrated primary care is dependent on provider and staff buy-in (See Appendix C). The aim of the patient survey was designed to measure patient experience and perception of the integration and co-ordination of their health care.

7.2 Mid Central Care Co-ordination and Integration Survey Results

The tables below present data from the MidCentral Care Co-ordination and Integration Survey n=96 and the Patient Experience Survey n=284.

The first table provides data from the survey of providers. The respondents reported their primary profession as “Nurse” (63%), GP (26%) and “Allied/other” (11%). The results are presented in a way that allows for a comparison of the staff providing EnhancedCare+ delivery and those who are not, i.e. each of the survey questions is presented three times, with responses reported for “total” (all participants), “Yes” (Actively involved in providing the EnhancedCare+ programme) and “No” (Not involved in). This allows for easy comparison of any differences between staff providing EnhancedCare+ and those who do not in their responses to each question.

Of those surveyed, almost one third (32%) reported that they were not aware of the BSMC Business Case in their area; it is possible that this result mirrors the findings of the qualitative interviews where many frontline staff stated they simply wanted to “get on and do my job”, and did not get involved with broader strategic issues. It appears that more of the staff involved in EnhancedCare+ delivery were aware of the Business Case (74%) than others (63%).

There are other differences between the two groups on items of interest; in response to the statement (Question 5) “the BSMC Business Case is improving management of patients in primary care settings”, 12% of staff involved with EnhancedCare+ delivery “disagree or strongly disagree” compared with 29% of non-provider staff. Other, clinically relevant, differences are evident between the groups, e.g. Question 10 (“ask them about their own goals for caring for themselves”) and Question 11 (“help them set specific goals and priorities in caring for themselves”) show significantly different patterns of response agreement between the two groups.

Overall, practice staff morale in MidCentral (Q 25) appears positive with 76% of all staff rating it as “good” or better. At the upper end 52% of non-EnhancedCare+ practices rated morale as “very good” or “excellent” compared with 40% of EnhancedCare+ practices; this could plausibly be associated with workload issues associated with practice re-design and implementation.

Measures of practice care co-ordination and integration (Questions 30-49) are generally positive, with some variation between the two groups (e.g. Questions 30, 32, 36 and 47)

Following the provider survey results is a table of the Patient Survey results (Table 2). The respondents were evenly split between genders, with a median age of 71 years (range 31-97). Further demographics are provided at the end of the table. The most striking thing about these data is the major disjunction between patient perceptions and provider perceptions on the process and content of care as measured by the ACIC/MPACIC questions. A glance down the “none of the time” columns of both surveys shows a very significant difference in perception, e.g. for the question: “how often..given choices about treatment options?”, 0% of staff reported this occurred “none of the time”, while 25% of patients endorsed “none of the time”. This pattern is repeated across numerous questions. Patients’ rating of quality of care (Q 32), however, was high with 86% of respondents rating their care as good (17%), very good (29%) or excellent (40%).

Table 1: BSMC PROVIDER SURVEY – MidCentral RESULTS PROVIDED BY Q29 (INVOLVED IN PROVIDING ENHANCED CARE+ PROGRAMME)[2]

[2] The following pages report on data from a series of survey questions, many of which were derived from tools developed by Derrett and Gunther (personal communication). This includes questions 30-48. We are grateful to them for providing advanced access to these questions.

SECTION 1: BETTER SOONER MORE CONVENIENT

		Yes %	No %	n	
1	Are you familiar with the Better Sooner More Convenient (BSMC) business case in your area?	69	32	89	Total
1	Are you familiar with the Better Sooner More Convenient (BSMC) business case in your area?	74	26	43	Yes - Actively involved in providing the Enhanced Care+ Programme
1	Are you familiar with the Better Sooner More Convenient (BSMC) business case in your area?	63	37	41	No - not involved in providing the programme

		Strongly disagree %	Disagree %	Neither agree nor disagree %	Agree %	Strongly agree %	n	
2	The BSMC business case is providing a whole of system approach to health care delivery.	0	14	31	50	5	64	Total
2	The BSMC business case is providing a whole of system approach to health care delivery.	0	15	21	62	3	34	Yes - Actively involved in providing the Enhanced Care+ Programme
2	The BSMC business case is providing a whole of system approach to health care delivery.	0	15	41	37	7	27	No - not involved in providing the programme
3	The BSMC business case is improving care co-ordination.	0	15	23	60	2	65	Total
3	The BSMC business case is improving care co-ordination.	0	12	24	65	0	34	Yes - Actively involved in providing the Enhanced Care+ Programme
3	The BSMC business case is improving care co-ordination.	0	21	25	50	4	28	No - not involved in providing the programme
4	The BSMC business case is providing greater certainty for our health professionals.	0	29	39	31	2	65	Total
4	The BSMC business case is providing greater certainty for our health professionals.	0	29	38	32	0	34	Yes - Actively involved in providing the Enhanced Care+ Programme
4	The BSMC business case is providing greater certainty for our health professionals.	0	32	32	32	4	28	No - not involved in providing the programme
5	The BSMC business case is improving management of patients in primary care settings.	2	17	32	45	5	65	Total
5	The BSMC business case is improving management of patients in primary care settings.	0	12	35	50	3	34	Yes - Actively involved in providing the Enhanced Care+ Programme
5	The BSMC business case is improving management of patients in primary care settings.	4	25	25	39	7	28	No - not involved in providing the programme

SECTION 2: HEALTH CARE DELIVERY FOR PATIENTS WITH CHRONIC ILLNESSES

	When caring for a person with a chronic illness, how often do you...	None of the time %	A little of the time %	Some of the time %	Most of the time %	Always %	n	
6	...ask for their ideas when making a treatment plan (care plan)?	1	2	17	46	34	92	Total
6	...ask for their ideas when making a treatment plan (care plan)?	0	0	16	37	47	43	Yes - Actively involved in providing the Enhanced Care+ Programme
6	...ask for their ideas when making a treatment plan (care plan)?	2	5	16	52	25	44	No - not involved in providing the programme
7	...give them choices to think about regarding their care or treatment options?	0	0	9	50	41	92	Total
7	...give them choices to think about regarding their care or treatment options?	0	0	7	37	56	43	Yes - Actively involved in providing the Enhanced Care+ Programme
7	...give them choices to think about regarding their care or treatment options?	0	0	11	59	30	44	No - not involved in providing the programme
8	...ask them to talk about any problems with medicines and their effects?	1	0	11	45	44	92	Total
8	...ask them to talk about any problems with medicines and their effects?	0	0	9	40	51	43	Yes - Actively involved in providing the Enhanced Care+ Programme
8	...ask them to talk about any problems with medicines and their effects?	2	0	9	50	39	44	No - not involved in providing the programme
9	...ask them if they ever have difficulty understanding information provided to them related to their medical condition/s?	0	5	24	44	27	92	Total
9	...ask them if they ever have difficulty understanding information provided to them related to their medical condition/s?	0	5	23	42	30	43	Yes - Actively involved in providing the Enhanced Care+ Programme
9	...ask them if they ever have difficulty understanding information provided to them related to their medical condition/s?	0	5	21	50	25	44	No - not involved in providing the programme
10	...ask them to talk about their own goals in caring for themselves?	0	3	31	39	27	93	Total
10	...ask them to talk about their own goals in caring for themselves?	0	2	21	37	40	43	Yes - Actively involved in providing the Enhanced Care+ Programme
10	...ask them to talk about their own goals in caring for themselves?	0	4	38	40	18	45	No - not involved in providing the programme
11	...help them to set specific goals and priorities in caring for themselves.	0	4	25	41	29	92	Total
11	...help them to set specific goals and priorities in caring for themselves.	0	0	30	30	40	43	Yes - Actively involved in providing the Enhanced Care+ Programme
11	...help them to set specific goals and priorities in caring for themselves.	0	9	18	52	21	44	No - not involved in providing the programme
12	...give them a copy of their treatment plan (care plan)?	12	19	33	28	9	91	Total
12	...give them a copy of their treatment plan (care plan)?	7	12	35	30	16	43	Yes - Actively involved in providing the Enhanced Care+ Programme
12	...give them a copy of their treatment plan (care plan)?	19	28	30	23	0	43	No - not involved in providing the programme
13	...encourage them to attend a specific group or class to help them manage their chronic condition(s)?	0	13	40	28	19	92	Total
13	...encourage them to attend a specific group or class to help them manage their chronic condition(s)?	0	12	42	30	16	43	Yes - Actively involved in providing the Enhanced Care+ Programme
13	...encourage them to attend a specific group or class to help them manage their chronic condition(s)?	0	16	39	30	16	44	No - not involved in providing the programme

14	...ask questions, either directly or in a survey, about their health habits?	3	10	21	40	26	92	Total
14	...ask questions, either directly or in a survey, about their health habits?	0	12	26	35	28	43	Yes - Actively involved in providing the Enhanced Care+ Programme
14	...ask questions, either directly or in a survey, about their health habits?	7	7	18	48	21	44	No - not involved in providing the programme
15	...consider their values and their traditions when recommending treatments?	0	2	15	35	48	92	Total
15	...consider their values and their traditions when recommending treatments?	0	5	19	23	54	43	Yes - Actively involved in providing the Enhanced Care+ Programme
15	...consider their values and their traditions when recommending treatments?	0	0	11	48	41	44	No - not involved in providing the programme
16	...help them to make a treatment plan (care plan) that they can carry out in their daily life?	2	9	24	39	26	92	Total
16	...help them to make a treatment plan (care plan) that they can carry out in their daily life?	2	2	21	40	35	43	Yes - Actively involved in providing the Enhanced Care+ Programme
16	...help them to make a treatment plan (care plan) that they can carry out in their daily life?	2	16	23	41	18	44	No - not involved in providing the programme
17	...help them to plan ahead so they can take care of themselves even in hard times or when they are unwell?	3	9	28	40	20	92	Total
17	...help them to plan ahead so they can take care of themselves even in hard times or when they are unwell?	2	12	23	42	21	43	Yes - Actively involved in providing the Enhanced Care+ Programme
17	...help them to plan ahead so they can take care of themselves even in hard times or when they are unwell?	5	7	34	34	21	44	No - not involved in providing the programme
18	...ask them how their chronic illness affects their life?	0	3	26	39	32	92	Total
18	...ask them how their chronic illness affects their life?	0	2	23	37	37	43	Yes - Actively involved in providing the Enhanced Care+ Programme
18	...ask them how their chronic illness affects their life?	0	5	30	41	25	44	No - not involved in providing the programme
19	... contact them after a visit or make a follow-up appointment at the time of the visit to see how things are going?	6	10	28	37	20	91	Total
19	... contact them after a visit or make a follow-up appointment at the time of the visit to see how things are going?	2	5	26	37	30	43	Yes - Actively involved in providing the Enhanced Care+ Programme
19	... contact them after a visit or make a follow-up appointment at the time of the visit to see how things are going?	9	14	33	35	9	43	No - not involved in providing the programme
20	...encourage them to attend programmes in the community that could be helpful?	0	11	40	30	20	91	Total
20	...encourage them to attend programmes in the community that could be helpful?	0	9	35	30	26	43	Yes - Actively involved in providing the Enhanced Care+ Programme
20	...encourage them to attend programmes in the community that could be helpful?	0	12	44	33	12	43	No - not involved in providing the programme
21	...provide referrals to other health professionals?	0	1	43	39	17	89	Total
21	...provide referrals to other health professionals?	0	0	43	38	19	42	Yes - Actively involved in providing the Enhanced Care+ Programme
21	...provide referrals to other health professionals?	0	2	47	37	14	43	No - not involved in providing the programme

22	...tell them about how visits with other health professionals (other than GP) help with their overall treatment (plan of care)?	0	5	39	38	17	92	Total
22	...tell them about how visits with other health professionals (other than GP) help with their overall treatment (plan of care)?	0	5	33	44	19	43	Yes - Actively involved in providing the Enhanced Care+ Programme
22	...tell them about how visits with other health professionals (other than GP) help with their overall treatment (plan of care)?	0	7	43	34	16	44	No - not involved in providing the programme
23	...ask about how appointments with other health professionals are going?	0	7	36	37	21	92	Total
23	...ask about how appointments with other health professionals are going?	0	5	33	37	26	43	Yes - Actively involved in providing the Enhanced Care+ Programme
23	...ask about how appointments with other health professionals are going?	0	7	43	32	18	44	No - not involved in providing the programme
24	...appropriately involve whanau/family in the care and management of their condition(s)	0	10	40	33	18	91	Total
24	...appropriately involve whanau/family in the care and management of their condition(s)	0	12	33	37	19	43	Yes - Actively involved in providing the Enhanced Care+ Programme
24	...appropriately involve whanau/family in the care and management of their condition(s)	0	5	47	30	19	43	No - not involved in providing the programme

SECTION 3: THE GENERAL PRACTICE

		Poor %	Fair %	Good %	Very good %	Excellent %	n	
25	Please rate staff morale at your general practice	3	21	28	38	10	96	Total
25	Please rate staff morale at your general practice	2	24	33	36	4	45	Yes - Actively involved in providing the Enhanced Care+ Programme
25	Please rate staff morale at your general practice	4	17	26	37	15	46	No - not involved in providing the programme

		Yes %	No %	Don't know %	n	
26	Do you currently use a shared electronic health record system (e.g. Manage My Health) to share patient medical information with ED or other healthcare providers?	32	57	10	96	Total
26	Do you currently use a shared electronic health record system (e.g. Manage My Health) to share patient medical information with ED or other healthcare providers?	33	53	13	45	Yes - Actively involved in providing the Enhanced Care+ Programme
26	Do you currently use a shared electronic health record system (e.g. Manage My Health) to share patient medical information with ED or other healthcare providers?	28	63	9	46	No - not involved in providing the programme
27	Do your patients have electronic access to their own medical records?	2	84	14	96	Total
27	Do your patients have electronic access to their own medical records?	4	89	7	45	Yes - Actively involved in providing the Enhanced Care+ Programme
27	Do your patients have electronic access to their own medical records?	0	80	20	46	No - not involved in providing the programme

		Yes %	No %	n	
28	Does your practice provide the Enhanced Care+ Programme?	77	23	95	Total
28	Does your practice provide the Enhanced Care+ Programme?	100	0	45	Yes - Actively involved in providing the Enhanced Care+ Programme
28	Does your practice provide the Enhanced Care+ Programme?	57	44	46	No - not involved in providing the programme
29	Are you actively involved in providing the programme?	50	51	91	Total
29	Are you actively involved in providing the programme?	100	0	45	Yes - Actively involved in providing the Enhanced Care+ Programme
29	Are you actively involved in providing the programme?	0	100	46	No - not involved in providing the programme

SECTION 4: OVERALL CARE OF PATIENTS AT YOUR GENERAL PRACTICE/HOSPITAL

		Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree		
At our general practice		%	%	%	%	%	n	
30	Patient care is well-coordinated among doctors nurses, and clinic staff	1	8	13	57	21	96	Total
30	Patient care is well-coordinated among doctors nurses, and clinic staff	2	13	9	58	18	45	Yes - Actively involved in providing the Enhanced Care+ Programme
30	Patient care is well-coordinated among doctors nurses, and clinic staff	0	4	17	57	22	46	No - not involved in providing the programme
31	Health professionals and staff meet frequently (e.g., group meetings) to plan for patient visits	9	22	28	29	12	96	Total
31	Health professionals and staff meet frequently (e.g., group meetings) to plan for patient visits	13	18	22	33	13	45	Yes - Actively involved in providing the Enhanced Care+ Programme
31	Health professionals and staff meet frequently (e.g., group meetings) to plan for patient visits	7	26	28	28	11	46	No - not involved in providing the programme
32	Good communication exists between health professionals and other staff	1	9	22	49	19	96	Total
32	Good communication exists between health professionals and other staff	0	16	20	51	13	45	Yes - Actively involved in providing the Enhanced Care+ Programme
32	Good communication exists between health professionals and other staff	2	4	26	44	24	46	No - not involved in providing the programme
33	Patient care is well-coordinated with external health care professionals (e.g., specialists, hospitals)	4	15	32	40	9	96	Total
33	Patient care is well-coordinated with external health care professionals (e.g., specialists, hospitals)	7	11	36	40	7	45	Yes - Actively involved in providing the Enhanced Care+ Programme
33	Patient care is well-coordinated with external health care professionals (e.g., specialists, hospitals)	2	17	30	39	11	46	No - not involved in providing the programme

34	We have good systems in place to track referrals to external health professionals	4	17	26	37	17	96	Total
34	We have good systems in place to track referrals to external health professionals	4	18	36	33	9	45	Yes - Actively involved in providing the Enhanced Care+ Programme
34	We have good systems in place to track referrals to external health professionals	4	15	20	44	17	46	No - not involved in providing the programme
35	We routinely receive discharge summaries after our patients are hospitalised	3	6	7	51	32	96	Total
35	We routinely receive discharge summaries after our patients are hospitalised	4	4	7	60	24	45	Yes - Actively involved in providing the Enhanced Care+ Programme
35	We routinely receive discharge summaries after our patients are hospitalised	2	9	7	44	39	46	No - not involved in providing the programme
36	Patient care is well-coordinated with community resources (e.g., support groups, meals on wheels)	1	12	35	43	10	95	Total
36	Patient care is well-coordinated with community resources (e.g., support groups, meals on wheels)	2	7	36	51	4	45	Yes - Actively involved in providing the Enhanced Care+ Programme
36	Patient care is well-coordinated with community resources (e.g., support groups, meals on wheels)	0	17	35	35	13	46	No - not involved in providing the programme
37	Health professionals and staff are well-informed about available community resources for patients	1	18	27	48	6	96	Total
37	Health professionals and staff are well-informed about available community resources for patients	2	13	24	58	2	45	Yes - Actively involved in providing the Enhanced Care+ Programme
37	Health professionals and staff are well-informed about available community resources for patients	0	24	28	37	11	46	No - not involved in providing the programme
38	We have established relationships with community agencies to facilitate our referrals to them	0	3	25	58	14	95	Total
38	We have established relationships with community agencies to facilitate our referrals to them	0	4	29	58	9	45	Yes - Actively involved in providing the Enhanced Care+ Programme
38	We have established relationships with community agencies to facilitate our referrals to them	0	2	24	57	17	46	No - not involved in providing the programme
39	Health professionals and staff are well-informed at the time of each patient visit about patients' medical history and current treatments	1	3	26	56	14	96	Total
39	Health professionals and staff are well-informed at the time of each patient visit about patients' medical history and current treatments	2	2	29	58	9	45	Yes - Actively involved in providing the Enhanced Care+ Programme
39	Health professionals and staff are well-informed at the time of each patient visit about patients' medical history and current treatments	0	2	24	57	17	46	No - not involved in providing the programme
40	Health professionals and staff are well-informed about patients' current social needs (e.g., housing, transportation)	2	19	46	31	2	96	Total
40	Health professionals and staff are well-informed about patients' current social needs (e.g., housing, transportation)	4	20	49	24	2	45	Yes - Actively involved in providing the Enhanced Care+ Programme
40	Health professionals and staff are well-informed about patients' current social needs (e.g., housing, transportation)	0	13	46	39	2	46	No - not involved in providing the programme

41	Patients see the same care team or doctor for routine clinic visits	7	9	17	46	21	96	Total
41	Patients see the same care team or doctor for routine clinic visits	7	13	18	56	7	45	Yes - Actively involved in providing the Enhanced Care+ Programme
41	Patients see the same care team or doctor for routine clinic visits	7	7	17	37	33	46	No - not involved in providing the programme
42	We routinely contact patients with chronic conditions to help them manage their conditions	3	13	37	34	14	96	Total
42	We routinely contact patients with chronic conditions to help them manage their conditions	2	13	40	31	13	45	Yes - Actively involved in providing the Enhanced Care+ Programme
42	We routinely contact patients with chronic conditions to help them manage their conditions	4	13	33	37	13	46	No - not involved in providing the programme
Between patient visits								
43	We routinely contact patients with chronic conditions to help them manage their conditions	5	15	35	34	10	96	Total
43	We routinely contact patients with chronic conditions to help them manage their conditions	4	11	33	44	7	45	Yes - Actively involved in providing the Enhanced Care+ Programme
43	We routinely contact patients with chronic conditions to help them manage their conditions	7	20	35	24	15	46	No - not involved in providing the programme
44	We routinely contact patients to remind them of regular preventive or follow-up visits (e.g., flu vaccine or routine lab tests)	1	1	9	55	33	96	Total
44	We routinely contact patients to remind them of regular preventive or follow-up visits (e.g., flu vaccine or routine lab tests)	0	0	7	71	22	45	Yes - Actively involved in providing the Enhanced Care+ Programme
44	We routinely contact patients to remind them of regular preventive or follow-up visits (e.g., flu vaccine or routine lab tests)	2	2	11	44	41	46	No - not involved in providing the programme
At our general practice								
45	We routinely contact patients to inform them of abnormal laboratory results	1	1	11	37	51	95	Total
45	We routinely contact patients to inform them of abnormal laboratory results	2	0	4	58	36	45	Yes - Actively involved in providing the Enhanced Care+ Programme
45	We routinely contact patients to inform them of abnormal laboratory results	0	2	17	20	61	46	No - not involved in providing the programme
46	Care is designed to meet the preferences of patients and their families/whanau	2	6	27	52	13	96	Total
46	Care is designed to meet the preferences of patients and their families/whanau	2	7	31	56	4	45	Yes - Actively involved in providing the Enhanced Care+ Programme
46	Care is designed to meet the preferences of patients and their families/whanau	2	7	24	46	22	46	No - not involved in providing the programme
47	Health professionals and staff view patients as equal partners in their care	0	10	20	48	22	96	Total
47	Health professionals and staff view patients as equal partners in their care	0	16	20	51	13	45	Yes - Actively involved in providing the Enhanced Care+ Programme
47	Health professionals and staff view patients as equal partners in their care	0	7	20	44	30	46	No - not involved in providing the programme

48	When developing a treatment plan, health professionals and staff routinely encourage patients to actively participate in setting goals	2	5	18	56	19	96	Total
48	When developing a treatment plan, health professionals and staff routinely encourage patients to actively participate in setting goals	2	4	18	58	18	45	Yes - Actively involved in providing the Enhanced Care+ Programme
48	When developing a treatment plan, health professionals and staff routinely encourage patients to actively participate in setting goals	2	7	17	57	17	46	No - not involved in providing the programme
49	Health professionals and staff routinely work with patients to develop self-management skills for managing their health conditions	0	8	16	62	15	96	Total
49	Health professionals and staff routinely work with patients to develop self-management skills for managing their health conditions	0	13	16	58	13	45	Yes - Actively involved in providing the Enhanced Care+ Programme
49	Health professionals and staff routinely work with patients to develop self-management skills for managing their health conditions	0	4	17	65	13	46	No - not involved in providing the programme

SECTION 5: ABOUT YOU

		Nurse	GP	Allied/Other		
		%	%	%	n	
50	What is your primary profession?	63	26	11	96	Total
50	What is your primary profession?	76	20	4	45	Yes - Actively involved in providing the Enhanced Care+ Programme
50	What is your primary profession?	50	33	17	46	No - not involved in providing the programme

		Min	1st Quartile	Median	Mean	3rd Quartile	Max		
		Years	Years	Years	Years	Years	Years	n	
51	How long have you worked in your primary profession?	0.6	5.0	14.5	15.8	25.0	48.0	96	Total
51	How long have you worked in your primary profession?	1.0	6.0	14.0	15.8	24.0	48.0	45	Yes - Actively involved in providing the Enhanced Care+ Programme
51	How long have you worked in your primary profession?	0.6	5.0	14.0	15.9	25.0	40.0	46	No - not involved in providing the programme

		Min	1st Quartile	Median	Mean	3rd Quartile	Max		
		Years	Years	Years	Years	Years	Years	n	
52	How long have you worked at this general practice or been aligned to this practice?	0.6	3.0	6.0	8.1	9.2	40.0	96	Total
52	How long have you worked at this general practice or been aligned to this practice?	0.6	3.0	6.0	6.9	8.5	30.0	45	Yes - Actively involved in providing the Enhanced Care+ Programme
52	How long have you worked at this general practice or been aligned to this practice?	0.6	3.0	5.4	9.2	10.7	40.0	46	No - not involved in providing the programme

		Min	1st Quartile	Median	Mean	3rd Quartile	Max		
		Hours	Hours	Hours	Hours	Hours	Hours	n	
53	How many hours per week do you work at this general practice?	1.0	20.0	32.0	31.0	40.0	85.0	96	Total
53	How many hours per week do you work at this general practice?	1.0	23.0	32.0	29.9	40.0	50.0	45	Yes - Actively involved in providing the Enhanced Care+ Programme
53	How many hours per week do you work at this general practice?	4.0	20.0	36.0	32.6	40.0	85.0	46	No - not involved in providing the programme

		Male %	Female %	n	
54	What is your gender?	23	77	96	Total
54	What is your gender?	16	84	45	Yes - Actively involved in providing the Enhanced Care+ Programme
54	What is your gender?	28	72	46	No - not involved in providing the programme

		Other %	Maori %	Pacific %	n	
55	Which ethnic group do you belong to?	91	8	1	96	Total
55	Which ethnic group do you belong to?	89	9	2	45	Yes - Actively involved in providing the Enhanced Care+ Programme
55	Which ethnic group do you belong to?	93	7	0	46	No - not involved in providing the programme

Table 2

BSMC PATIENT SURVEY (MidCentral)

SECTION 1: CARE OF CHRONIC CONDITIONS

		None of the time	A little of the time	Some of the time	Most of the time	Always	
		1	2	3	4	5	
	Over the past 6 months when I received care for my chronic condition(s) I was:	%	%	%	%	%	n
1	Asked for my ideas when we made a treatment plan (care plan)	27	9	16	25	23	264
2	Given choices about my treatment to think about	25	8	17	26	25	265
3	Asked to talk about any problems with my medicines or their effects	21	11	13	25	31	265
4	Asked if I had problems learning about my medical condition(s) because of difficulty understanding written information	42	9	14	18	18	252
5	Given a written list of things I could do to improve my health	31	9	16	21	23	263
6	Satisfied that my care was well organised	6	10	11	23	50	268
7	Shown how what I did to take care of myself influenced my condition(s)	15	10	14	24	37	259
8	Asked to talk about my goals and priorities in managing my condition(s)	19	13	14	25	28	264
9	Helped to set specific goals to improve my eating or exercise	17	13	17	26	26	261
10	Given a copy of my treatment plan (care plan)	32	7	12	14	34	256
11	Encouraged to go to a specific group or class to help me manage my chronic condition(s)	43	9	13	17	17	259
12	Asked questions, either directly or on a survey, about my health habits	27	12	18	17	26	263
13	Believed that health professionals within my general practice team thought about my values, beliefs, and traditions when they recommended treatments to me	16	8	14	22	40	266
14	Helped to make a treatment plan (care plan) that I could carry out in my daily life	21	7	14	24	35	263
15	Helped me to plan ahead so I could take care of my condition even in hard times, or when I was unwell	27	10	10	26	28	264
16	Asked how my chronic condition affects my life	25	13	14	22	28	265
17	Contacted after a visit (or had a second appointment made at the last visit) to see how things were going	20	7	17	23	33	271
18	Encouraged to attend programmes in the community that could help me, like a course on on managing my Long Term Condition(s)	48	8	13	17	15	261

19	Referred to a dietician, Physical Activity trainer, smoking cessation provider, social worker, counsellor, or mental health services provider	40	9	21	16	13	255
20	Told how my visits with other types of doctors, (like an eye doctor or other specialist), helped my overall treatment (plan of care)	28	13	16	20	23	262
21	Asked how my visits were going with other members of the health care team	38	11	13	17	21	263
22	Asked if I wanted my whānau/family involved in the care and management of my condition(s)	56	9	7	8	20	255
23	Asked for information on my whānau/family members	47	12	14	11	17	254
24	Given information for my whānau/family on the prevention of the chronic condition/s (where appropriate)	59	8	9	11	14	247
25	Given the opportunity to have my family/ whānau screened (where appropriate) - including for health risk factors	71	6	6	8	8	249
26	Asked if I wanted my care modified due to my culture, values and beliefs	78	4	4	6	9	252
27	Offered another culturally appropriate service if there was one available	80	5	4	4	6	248
28	Ask if there were any cultural or ethnic issues that my doctor or nurse needed to be aware of when working together to plan my care	73	4	5	6	12	251

SECTION 2: THE GENERAL PRACTICE

		Yes	No	
		%	%	n
30	Can you look at your own medical records electronically at home?	3	97	263

		Yes	No	Don't know	
		%	%	%	n
31	Are you enrolled in Enhanced Care Plus (EC+) or Long Term Conditions Care?	42	18	39	272

Please rate the following regarding your general practice		Poor	Fair	Good	Very good	Excellent	
		1	2	3	4	5	
		%	%	%	%	%	n
32a	Overall quality of clinical care received	3	11	17	29	40	281
32b	My satisfaction with the practice as a whole	5	11	19	24	41	281

SECTION 3: OVERALL CARE AT YOUR GENERAL PRACTICE

		Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree	
		1	2	3	4	5	
Care coordination - At my general practice		%	%	%	%	%	n
33	The staff at my general practice seem to work well as a team	1	3	13	45	38	280
34	Good communication seems to exist between health professionals and other staff within the general practice.	1	6	11	43	38	281
Coordination with external providers - At my general practice							
35	My care at the general practice is well-coordinated with external health care providers (e.g., specialists, hospitals)	1	6	14	44	34	283
Coordination with community resources - At my general practice							
36	My care at the general practice is well-coordinated with community resources, programmes, services and support groups that help me manage my condition(s) better, or help me to manage in my own home (i.e. Coordinate Home Help assistance, have referred me to attend local education programmes or support groups)	6	11	28	37	19	273
37	Health professionals and practice staff are well-informed about community resources available for patients	4	6	22	42	25	265
Familiarity with me as a patient - Between my visits to the general practice							
38	Health professionals and practice staff are well-informed each time I visit them about my medical history and current treatment (care plans)	2	5	15	46	32	281
39	Health professionals and practice staff are well-informed about my current social needs (e.g., housing, transportation)	6	13	30	35	17	269
40	I see the same care team or health professional for routine general practice visits	3	4	7	47	40	276
Contact between medical visits - Between my visits to the general practice							
41	I am regularly contacted about my chronic condition(s) to help me manage my condition	11	23	20	31	15	267
42	I am contacted to remind me of my regular preventive or follow-up visits (e.g., flu vaccine or routine lab tests)	4	7	12	48	29	278

43	I am regularly contacted about any abnormal laboratory results	4	12	19	38	27	271
Patient care - At my general practice							
44	Care is designed to meet my preferences and those of my family/whānau	5	8	28	41	17	270
45	Health professionals and staff communicate with me in a way that I understand (e.g., appropriate language)	1	2	10	52	35	281
Patients, health professionals and practice staff - At my general practice							
46	Health professionals and practice staff view me as an equal partner in my care	2	7	18	47	27	274
47	When developing a treatment plan (care plan), health professionals and practice staff routinely encourage me to actively participate in setting goals and setting priorities	3	10	21	42	23	278
48	Health professionals and practice staff routinely work with me to develop my own skills for managing my long term conditions (self-management skills).	4	11	27	37	21	276

		Number of times
49	Approximately how many times have you visited your general practice (to see a GP, Practice Nurse, or other health professional) in the last 12 months? (n=220)	
	Min	1.0
	1st Quartile	4.0
	Median	6.0
	Mean	8.8
	3rd Quartile	10.0
	Max	69.0

SECTION 4: ABOUT YOU

		Male %	Female %	n
50	What is your gender?	50	51	283

			Years
51	How old are you? (n=282)	Min	31.0
		1st Quartile	63.0
		Median	71.0
		Mean	69.4
		3rd Quartile	77.0
		Max	97.0

		Other %	Maori %	Pacific %	n
52	Which ethnic group do you belong to?	77	23	0	283

		Not enough 1 %	Just enough 2 %	Enough 3 %	More than enough 4 %	n
53	How well does your total household income meet your everyday needs for such things as accommodation, food, clothing and other necessities? Would you say you have: not enough money, just enough money, enough money or more than enough money?	28	31	36	6	284

Table 3

BSMC Patient Experience Survey - West Coast (n=147)

SECTION 1: CARE OF CHRONIC CONDITIONS

Over the past 6 months when I received care for my chronic condition(s) I was:	**None of the time** %	**A Little of the Time** %	**Some of the Time** %	**Most of the time** %	**Always** %
1. Asked for my ideas when we made a treatment plan (care plan)	44	9	21	14	11
2. Given choices about my treatment to think about.	40	14	20	16	10
3. Asked to talk about any problems with my medicines or their effects.	28	14	18	23	17
4. Asked if I had problems learning about my medical condition(s) because of difficulty understanding written information	55	10	12	13	10
5. Given a written list of things I could do to improve my health.	50	13	16	11	10
6. Satisfied that my care was well organised.	10	8	21	34	27
7. Shown how what I did to take care of myself influenced my condition(s).	33	12	21	23	12
8. Asked to talk about my goals and priorities in managing my condition(s).	44	13	16	16	12
9. Helped to set specific goals to improve my eating or exercise.	43	11	20	18	9
10. Given a copy of my treatment plan (care plan).	65	9	7	11	9
11. Encouraged to go to a specific group or class to help me manage my chronic condition(s).	66	9	9	10	6
12. Asked questions, either directly or on a survey, about my health habits.	41	15	21	14	9
13. Believed that health professionals within my general practice team thought about my values, beliefs, and traditions when they recommended treatments to me.	34	9	16	22	19
14. Helped to make a treatment plan (care plan) that I could carry out in my daily life.	43	13	11	22	11
15. Helped me to plan ahead so I could take care of my condition even in hard times, or when I was unwell.	43	13	18	16	10
16. Asked how my chronic condition affects my life.	36	19	14	20	11
17. Contacted after a visit (or had a second appointment made at the last visit) to see how things were going.	35	11	20	18	15
18. Encouraged to attend programmes in the community that could help me, like a course on on managing my Long Term Condition(s)	70	9	10	12	0

Over the past 6 months when I received care for my chronic condition(s) I was:	**None of the time** %	**A Little of the Time** %	**Some of the Time** %	**Most of the time** %	**Always** %
19. Referred to a dietician, Physical Activity trainer, smoking cessation provider, social worker, counsellor, or mental health services provider.	70	8	10	8	5
20. Told how my visits with other types of doctors, (like an eye doctor or other specialist), helped my overall treatment (plan of care).	63	13	9	8	8
21. Asked how my visits were going with other members of the health care team.	66	12	9	9	5
22. Asked if I wanted my whānau/family involved in the care and management of my condition(s).	78	2	9	5	6
23. Asked for information on my whānau/family members	65	17	12	5	2
24. Given information for my whānau/family on the prevention of the chronic condition/s (where appropriate).	73	9	9	5	3
25. Given the opportunity to have my family/ whānau screened (where appropriate) - including for health risk factors.	84	7	6	2	1
26. Asked if I wanted my care modified due to my culture, values and beliefs.	88	4	3	4	2
27. Offered another culturally appropriate service if there was one available	89	4	4	2	2
28. Ask if there were any cultural or ethnic issues that my doctor or nurse needed to be aware of when working together to plan my care.	84	9	2	1	4

SECTION 2: THE GENERAL PRACTICE

30. Can you look at your own medical records electronically at home?

Yes	No
%	%
1	99

31. Are you enrolled in Enhanced Care Plus (EC+) or Long Term Conditions Care?

Yes	No	Don't know
%	%	%
9	40	50

32. Please rate the following regarding your general practice:

	Poor	Fair	Good	Very Good	Excellent
	%	%	%	%	%
32a. Overall quality of clinical care received	3	13	33	27	24
32b. My satisfaction with the practice as a whole	8	15	33	23	21

SECTION 3: OVERALL CARE AT YOUR GENERAL PRACTICE

CARE COORDINATION	Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree
At my general practice	%	%	%	%	%
33. The staff at my general practice seem to work well as a team	2	9	15	53	21
34. Good communication seems to exist between health professionals and other staff within the general practice.	3	14	19	46	18

COORDINATION WITH EXTERNAL PROVIDERS	Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree
At my general practice	%	%	%	%	%
35. My care at the general practice is well-coordinated with external health care providers (e.g., specialists, hospitals)	1	10	22	52	14

COORDINATION WITH COMMUNITY RESOURCES	Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree
At my general practice	%	%	%	%	%
36. My care at the general practice is well-coordinated with community resources, programmes, services and support groups that help me manage my condition(s) better, or help me to manage in my own home (i.e. Coordinate Home Help assistance, have referred me to attend local education programmes or support groups)	5	11	38	35	10
37. Health professionals and practice staff are well-informed about community resources available for patients	0	8	35	43	14

FAMILIARITY WITH ME AS A PATIENT	Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree
At my general practice	%	%	%	%	%
38. Health professionals and practice staff are well-informed each time I visit them about my medical history and current treatment (care plans)	6	13	12	48	21
39. Health professionals and practice staff are well-informed about my current social needs (e.g., housing, transportation)	8	18	33	32	9
40. I see the same care team or health professional for routine general practice visits	30	23	7	28	12

CONTACT BETWEEN MEDICAL VISITS	Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree
Between my visits to the general practice	%	%	%	%	%
41. I am regularly contacted about my chronic condition(s) to help me manage my condition	15	33	23	22	7
42. I am contacted to remind me of my regular preventive or follow-up visits (e.g., flu vaccine or routine lab tests)	11	14	14	40	22
43. I am regularly contacted about any abnormal laboratory results	10	13	26	37	13

PATIENT CARE	Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree
At my general practice	%	%	%	%	%
44. Care is designed to meet my preferences and those of my family/whānau	5	15	41	32	8
45. Health professionals and staff communicate with me in a way that I understand (e.g., appropriate language)	0	8	16	55	20

PATIENTS, HEALTH PROFESSIONALS AND PRACTICE STAFF	Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree
At my general practice	%	%	%	%	%
46. Health professionals and practice staff view me as an equal partner in my care	2	10	25	47	15
47. When developing a treatment plan (care plan), health professionals and practice staff routinely encourage me to actively participate in setting goals and setting priorities	5	22	37	27	8
48. Health professionals and practice staff routinely work with me to develop my own skills for managing my long term conditions (self-management skills).	7	25	33	26	9

Number of times	Min	1st Quartile	Median	Mean	3rd Quartile	Max
49. Approximately how many times have you visited your general practice (to see a GP, Practice Nurse, or other health professional) in the last 12 months?	1.0	4.0	14.0	11.2	18.0	22.0

SECTION 4: ABOUT YOU

50. What is your gender?

Female	Male	Other
%	%	%
44	55	1

51. How old are you?

Min	1st Quartile	Median	Mean	3rd Quartile	Max
65.0	68.0	72.0	73.9	79.0	94.0

52. Which ethnic group do you belong to?

European	Maori	Other
%	%	%
97	1	1

53. How well does your total household income meet your everyday needs for such things as accommodation, food, clothing and other necessities? Would you say you have: not enough money, just enough money, enough money or more than enough money?

Not enough	Just enough	Enough	More than enough
%	%	%	%
10	33	49	8

7.3 West Coast Care Co-ordination and Integration Survey Results

Of the few staff (n=6) who completed the staff survey on the West Coast, all commented on the need for a Shared Care Record. With respect to Chronic Conditions and patient activation, most also indicated that their approach was patient-centred. When delivering care for a person with a chronic condition, those staff who responded felt that they provided sufficient information, felt they were doing a good job and that they showed the patient how to care most of the time. Goal setting for patients and the development of a treatment plan was reported as occurring most of the time. Responses to problem solving and contextual issues also indicated that these staff thought they considered values and traditions, helped the patient to make a treatment plan and helped them plan ahead, most of the time. With respect to follow-up and coordination respondents indicated that follow up occurred most of the time and with referrals to other professionals all of the time. Cultural sensitivity was considered important by all, but there was a range of responses from a little of the time to most of the time. Rating the care provided at the medical centre, all considered the quality of care, patient health and wellbeing outcomes, patient satisfaction and staff morale were good. Respondents agreed with the statement that patient care was well co-ordinated, health professionals met frequently and that there was good communication between health professionals and other staff. Given the small number of respondents these findings cannot be considered representative of the broader staff.

This stands in contrast to the patient survey results, which indicate that many feel they are not consulted or provided with adequate information (Table 3).

8.0 ANALYSIS OF QUALITATIVE DATA

In both districts, the Business Case initiatives aimed to address a range of population health challenges. During the implementation phase, there were a range of social and cultural workplace challenges that at times undermined the aspirational aspect of initiatives and associated objectives. This section of the report provides an analysis of the perceptions of those involved in the implementation of the initiatives, their understandings of what the BSMC entailed and what integration meant and currently means to these health professionals in theory and in practice.

8.1 Scope of the Business Cases, Timeframes and Implementation Issues

The realisation of the Business Case targets, for both sites, was challenged primarily by the scope and large number of initiatives being implemented simultaneously, in a number of different locales and across wide geographic territory. The three year window to implement the initiatives was considered too short and unrealistic for such significant changes to primary health care. There was a consensus that it would have been better to focus on two or three initiatives and to have done these well, to have had a more managed roll out – where piloting was done in one locale first, problems addressed and then, once adjustments had been made, implementation elsewhere.

Many front line staff noted that too little thought had gone into the implications for general practices and that general practices were “bombarded with new initiatives”, did not have the time to respond, and that this also led to difficult and strained relationships during the roll out – where the “new initiative” was perceived to be “just another burden being placed on them” and where the front line worker bore the brunt of a range of frustrations. It was also noted in MidCentral that there was a perception that the new initiatives were being imposed and that there should have been greater consultation before roll out and a more collaborative approach to both the development and implementation of initiatives. The following quote is illustrative of this view:

> *“PHOs were meant to be "bottom up" in setting goals to health provision. BSMC has been prescriptive and organised by anonymous "experts" going against that philosophy”.* (Open response, Care Co-ordination and Integration Questionnaire).

In addition, many noted that general practices were businesses and that business objectives can and do conflict with ideologically driven health initiatives (great idea) that are not sufficiently married to the realities of running a general practice and remaining economically viable (not going to work). For example, the lengthy consultation for the long-term conditions initiative – up to and at times more than an hour for consultation, goes well beyond the usual 15 minute time slot allowed for a general practice consultation. It was also noted that this mismatch undermines confidence in new initiatives, can and has led to a lack of co-operation from some general practices (in MidCentral) and for those who embraced the initiatives but struggled to make them work – disillusionment. Associated with this is a front line worker pride in being "pragmatic" and a suspicion that anything less than pragmatic has been designed by ministry staff, subcontracted consultants or at least personnel who will not be involved in implementation, and thus is a waste of time.

8.2 Silos and Turf Wars

It was widely reported that the key obstacles to implementation and maintaining momentum were pre-existing intra and inter-organisational politics. In particular, the pre-existing "silos" of primary and secondary care remained, with many noting there were "turf wars" over resourcing and who would control particular services. In addition, for many, sustaining so many initiatives, when from their perspective there were no tangible or measurable outcomes, was also difficult because of the workplace environment. This workplace environment, in particular in MidCentral and to a lesser extent the West Coast, was characterised as one undergoing constant change as a consequence of responding to a wide range of other initiatives and directives. This constant change in turn led to staff retention issues, people being very stressed and uncertain of what was expected of them, loss of motivation and, for some, cynicism replacing initial enthusiasm. A number noted that poor communication was at the heart of most barriers to implementation – and conversely when communication was good this facilitated implementation. For the West Coast staff retention and recruitment issues have remained a source of stress for front line workers and the workplace environment was described by a number of participants as one where they had learnt to "survive" – working with limited resources and personnel meant they had adapted and worked in and around the system to provide quality care for their patients for many years. This was also considered to be a typical cultural response to social challenges on the West Coast and while a source of stress was also a source of pride.

Constant change and the introduction of many initiatives simultaneously provoked a range of responses to the BSMC. For some front line workers it meant they retreated, or disengaged from meetings and discussion forums, to focus on what they believed they were meant to be doing – addressing the health needs of the local population. The BSMC and associated initiatives were perceived by these front line staff as an unnecessary distraction from the task of addressing health needs and providing quality care. In contrast a few participants felt that they had not been adequately consulted about the initiatives and would have liked the opportunity to have been more involved. While many considered that clinicians should be involved in decision making and the development of initiatives, time constraints provoke a constant tension that is usually resolved by the clinician choosing to prioritise their clinical work.

8.3 Good to be Stretched?

While for most, the scope and number of initiatives were considered excessive and unmanageable, a minority of participants (n=1) felt that the scope and number of initiatives was a good thing, that it was good to be stretched and good to be ambitious. Others noted that the Business Case(s) provided a "platform" to encourage a "focus on change", and that although many of the initiatives were not implemented as planned and in some cases not at all, the focus on change had encouraged improvement in directions otherwise not anticipated. Thus, for these participants the business case(s) were less of a blue print for change and more of an inspiration to change.

The following quotes are illustrative:

> *I think, I just think you know too much at one time, if you don't have the right resources you know..I understand the drive behind it and I understand the vision and all that sort of stuff, but I think it is too quick and if you don't have the resources and buy in from staff, you know. One minute there is [this] you know, I know there is stuff happening with the Map of Medicine, there is that happening and then there is Manage My Health and then there is Enhance Care Plus and, it is just too much stuff, you know..*[MidCentral, BSMC 005M]

> *"I am not sure that the BSMC model has changed anything in the way primary care is providing care to the patients. The only difference over the years is that we need to provide more PPP stats to the PHO this does not necessarily provide better care for our patients. "*
> [open response in Care Co-ordination Questionnaire, MidCentral]

It should be noted that the majority of participants expressed concern over the Business Cases, their implementation, the size and complexity of the cases, issues surrounding governance and accountability and in the words of one (which conveys a majority view):

> *"The BSMC was a disaster".*

These participants also requested that the research team accurately record their experiences and concerns, as they hoped that lessons could be learned from the more negative outcomes of the implementation of the business cases.

8.4 Business as Usual

Many were of the opinion that the business case(s) continued what was already being done – particularly with respect to managing long-term (chronic conditions) and that work had already commenced to address the frail elderly. There was some variation in how the BSMC was perceived by people and some confusion about what it was called and what it involved. This was particularly the case amongst front line workers who had no involvement with either meetings connected to the BSMC or the ALT yet who were, ironically, ultimately central to implementation.

As one participant on the West Coast observed when asked about their understanding of the BSMC and what their expectations had been of this initiative:

> *…I don't think I really understand it very well at all, except that it seems like somebody thought it was a good idea to have a one stop shop for everything and that maybe we should all be trying to go down that path…the first thing I heard about it was when the PHO medical leader at that stage came and said "well look, we've got this opportunity to go down this path with this..there [s] this chance to look at the way we do everything and become more integrated and it seemed like a good idea…but I had a real..I just couldn't quite get it..I didn't really understand because we were already doing that…….anyway so I don't really see the point of putting all the time and effort into it [the paper work] when we're already doing it…* (West Coast, BSMC 059M)

Or another in MidCentral

> *..It was a long time ago now. I guess the expectations were that we could do things a little bit smarter, and a little bit quicker..than had been done in the past. And a lot of that was around..reorganising what was already in place and using funds from one thing and changing it to another…*(MidCentral, BSMC 011M).

8.5 Special individuals and Egos

A number of participants observed that for some initiatives momentum was sustained by people who were very committed to the initiative objectives and anticipated outcomes. These people were described as "passionate" and/or "committed". It was also observed, however, that when such individuals left the organisation and were not replaced by someone with equal enthusiasm that the initiative lost momentum. It was also observed that sometimes the passionate and committed staff member could lose objectivity and take "ownership" of an initiative, making team input difficult. While not intentionally obstructive, critical reflection on whether the initiative was realising the objectives and generating tangible improved outcomes for patients was limited in some instances.

Some observed that people with strong egos could also obstruct team work and lead to tensions within multi-disciplinary teams. The same observation was made about the group dynamics on the Alliance Leadership Teams (ALT), discussed more fully below.

8.6 Integration: Ideal versus Reality

The concept of integrated care has been likened to "a Rorschach test", in that "integrated care has many meanings; it is often used by different people to mean different things" (Kodner and Spreeuwenberg, 2005; Nolte and Mckee, 2005). While definitions in the health literature often focus on the integration of organisations and organisational activities, integration efforts may or may not result in the integration of care provided to patients. This is explored more fully in the next section of the report which focuses on the patient survey.

All of the participants commented positively on the idea of "integrated care", there were a range of definitions, including for example:

> *..having all the services together, talking to each other..actually having them working with each other, because you can talk to each other and not work with each other. ..Actually having the patient at the centre of the care, actually to be integrated care for a patient..they need to be the focus of care and it should be, I always think, it should be like a little daisy flower, you know, you can't have the daisy petals unless you've got the centre of the flower, and it is that centre that is the patient and all the others, all those little loops feed into the care for that person to make sure that person is well, and to me that is integration, talking to everyone and actually making sure that they have got access to all the services..* [West Coast, BSMC, 068M].

> *…it means to me, because I have worked in, so many years up there in secondary care and it has always been kind of divided, we are here they are there..but..integration to me is bringing together all the services and kind of like, I look at it as a patient journey like from out here if they need to go to hospital they will come back out and they will be just picked up and all services [will] be talking to each other….I think the biggest thing for me for integration is like the communication link as well as the link of the care..from wherever the patient journeys are up to, whether it is GPs, NGOs ..it needs to be integrated with this person as the centre, the patient as the centre of that integration, that is my understanding of what integration is..* [MidCentral, BSMC 003M].

> *To me…like nobody's really explained really what it means in this sense. But if I had to say what it would mean to me it would mean..that I would be able to have somewhere that I could look and get a patient's complete health overview from all the people that they're seeing* [West Coast, BMSC, 080M]

But the idea was not always manifest in practice, as the same participant went to explain:

> *I'm just getting my head around all these different services and who to put people in touch with. But it does seem like every-day, and I don't know if I am completely on the wrong track with what I'm talking about right now with integrated services, but it seems a bit silly to me that every day I write my notes and file them in a filing cabinet, and we read them as a team, but nobody else has a clue what's going on…then we've got MedTech which is cool. We'll put things on there, which can be shared with Buller Med, but then there's you know other things that are happening that I'll be like, "oh well I had no idea that they were, you know, seeing that person" or yeah things will get..and I'll be like "oh I put that on Medtech" and somebody will go "oh we don't have access to that"* [West Coast, BSMC, 080M).

Many of the participants focused on "improving the patient journey" and the importance of "people working together for the benefit of the patient" and that good communication is central to facilitating effective integration.

The participants in both of the evaluations revealed clearly that inter and intra organisational integration does not always occur because there is a plan or where this is the aim, rather pre-existing and emergent politics, inter-personnel relationships and communication, both good and bad, can undermine organisational integration. Interestingly, while they observed that it had been problematic, in both locales, participants also noted that the BSMC had at least facilitated a greater degree of engagement between and within organisations and that a positive outcome had been that people at least "knew other people" and had had the opportunity to "build relationships"; all of these participants thought that this was ultimately key to greater integration of care. Some also considered that the silos – primary and secondary care had been positively eroded by the BSMC:

> *We were all, you know, even though we all worked here together, those separate silos around funding and teams and things has forever kept everyone separate. But over the last couple of years I've noticed because of the Better, Sooner, More Convenient, everyone's had to be together to talk about how the unit will work and how we can interact and things, and that's broken down a huge amount of silo thinking, and I think funding thinking elsewhere. I hope* [MidCentral, BSMC, 074M].

Interestingly, while there had been greater communication within and between organisations and some believed that the patient journey had been improved because of this, overall communication with the respective communities was poor and most health professionals in both locales acknowledged this. The move toward greater care being provided in the community and keeping older people at home was an example used to illustrate the lack of awareness of the shift in the community, as the following participant observed:

> *..we need to do a lot of education with the community..the community aren't aware of the new way of working…I have a lot of families who are booking times to go visit a rest home and we don't even know about them…so they aren't aware..[of] why people do better at home..and [do not need] to go into a rest home and what else we can do, there's no awareness at all …*
>
> *…the natural supports of family or neighbours or whatever, are vital as well, but going back to the environment, we have a really bad problem with poor housing here, so if a person's in a really poor [area] ..I know somebody who has not power on, often people heat with the coal range and they've got boarded up windows and we can't put a caregiver in to help with vacuuming, there's no power, so there's a very lack of any community type housing…it's very hard to get a housing New Zealand house.*
>
> [West Coast BSMC 075M].

Similar observations to those above were made by front line staff in MidCentral where improving the patient journey is not simply about greater institutional integration but also engaging with the community and the social determinants of poor health.

Related to this is the observation that while considerably more work is being done in the community by front line nursing staff there are gaps in care provision amongst the most vulnerable that these front line staff are increasingly encountering.

> *..it's like taking a scab off a wound, all these people are suddenly you know appearing, it's kinda like, I guess they'd been managed you know, by the community maybe neighbours looked after them or, you know, she's just a bit eccentric kind of thing, managed like, but um, yeah no, they're being missed and they may present to the GP and say look I'm fine, and obviously sometimes people look fine for a five minute appointment……GP doesn't..even think..they need to be…to have CT scan or anything…*[West Coast BSMC 075M].

8.7 More Work for Less People: Pressure on Front Line Staff

> *…Better, Sooner, Faster, More Convenient* [sic] *I have to say when it first came out and I did some looking at it, not in depth, though I have to say..it just seemed like more work for less people…it just seemed they were trying to squish more into roles. I could certainly see the benefits to it and I felt to a huge degree we were already doing a lot of that because we have a lot of nurses working in dual roles..*[West Coast, BSMC 056M].

For the West Coast the key issues at the time of the business case development in 2010 included: workforce retention and recruitment (specifically an excessive reliance on locums, understaffing and high turn-over), high on-call demands and rural health issues - including the aforementioned low population density and significant socio-economic deprivation. Cumulatively, the workforce issues were seen to have contributed to poor access to care and reactive care rather than proactive care on the West Coast.[2] These continue to be an issue on the Coast, in particular the heavy reliance on locums, understaffing and the difficulties in recruiting staff when staff leave and the subsequent length of time that position remains unfilled and services cannot be offered; this clearly impacts on continuity of care. Many participants reported that patients were unhappy and disconcerted when unable to have a consultation with the same practitioner, undermining their ability to develop a relationship with a specific health professional. At the time of the evaluation the physiotherapy position was unfilled, general practitioners were still being sought, the vacant social worker position had not been filled and from the perspective of some staff the inability to draw on all disciplines significantly undermined the objective of multidisciplinary delivery of health care – as one of the key aspects of integration. For some participants, the BSMC was a positive initiative yet it was also perceived to be another burden for front line staff, particularly when understaffed.

> *It's an aging population and basically we're trying to keep everybody in their homes now. ..So yeah the workload is just going to keep increasing with every bit of workload that increases there's more paper work and more 't's to be crossed and 'I's' to be dotted and that kind of thing…I guess just making sure that we've got enough staff to continue with that…..I feel like we're pretty vulnerable out there and there's people, where people are it seems like they're just waiting to pounce on any little thing, yeah, especially out in the community. It feels very vulnerable and some days you're just like "oh na" I'd just rather go sweep floors 'cause then I don't have to worry about losing my registration and whether I've done right by somebody…"*
> [West Coast BSMC 080M)

Others noted that the increased workload also meant that they felt unable to spend the time they would like to with patients and that this compromised their ability to provide holistic patient centred care.

There had been considerable effort put into up-skilling front line community nursing staff in both MidCentral and the West Coast and the participants on the West Coast were particularly appreciative of the support for further training that they had received. However, the move toward a greater reliance on front line delivery had also placed considerable pressure on these staff, which was at times compounded not just because they were now required to deliver a wider range of services but also because they were compromised by the lack of progress with information technology and a lack of compatibility between IT systems (this is discussed more fully below) and the subsequent duplication of effort to update records that this incompatibility ensured.

8.8 Rurality, Isolation, Integration and Physical Space: The Integrated Family Health Centre

Rurality was an issue in both localities and geographic distance a challenge to achieving integrated care. This was arguably more compelling on the West Coast where considerable distances were covered by nursing professionals, where patients often had to travel long distances for various hospital based procedures and tests, and where remote area poverty remains an issue for many patients. Most participants thought considerable progress had been made in addressing some of the issues, many noted that specialist support provided by Christchurch had made a substantial difference to their ability to provide quality care, and most understood that it was unrealistic to have all services available on the Coast. A number however also observed that the community had a poor understanding of the challenges of health care provision in remote areas and continued to focus and fear loss of services rather than to see that greater integration could provide them with all of the services necessary for their health needs. Typically these issues were raised in relation to the Integrated Family Health Centre and the debate around how this would be realised as a physical entity in Buller. This situation had remained unresolved for the course of the BSMC implementation period and has only very recently been resolved with the funding provided to construct a single building incorporating both primary and secondary care and the multidisciplinary team in Buller.

While most staff did not think that integration was wholly dependent on "bricks and mortar", they also realised that the current configuration of buildings on the site, the physical separation of primary and secondary care provision did support and sustain an established culture of "separate" care provision. Not surprisingly the discussions around what shape this new multi-purpose building will become remains political and contentious for some. In the last six months (November 2013) Dr Martin and Dr Lovelock revisited the West Coast and it was clear that moves had been made to relocate people so that they are now in close proximity to those working in the same work streams. Significant efforts had also been made to address long standing space (resource) issues for staff working in cramped conditions and our most recent site visit enabled us to observe considerable improvement in staff morale.

> *..I am firmly supportive of the idea [of] establishing integrated family health systems and a joined up system. And for me a joined up system necessarily involves services outside of, outside the West Coast. That is a difficult concept for some….there are a variety of reasons. One is around self-esteem and autonomy..and people say, oh yeah it used to be ok here and we used to have a reasonably good system but you buggars have messed it up somehow, or rather..and another very strong threat, until relatively recently was the only thing making us sustainable was insufficient funding – that was a sea change….there is the financial downturn and like suddenly there was this wake up and everyone was thinking, "oh there isn't going to be more money""* [West Coast BSMC 069M].

The Integrated Family Health Centre was central to integration in both of the Business Cases. On the West Coast the integration was slower to be realised than had been hoped and much emphasis was placed on having an adequate building and space to facilitate multi-disciplinarity.

In MidCentral, the Tararua Integrated Family Health Centre was held up as an exemplar. On one site providing primary and secondary care to a wide rural area, this Family Health Centre commenced a number of initiatives prior to the MidCentral Business Case. Key to the integrated service provision in this case was electronic connection – the ability to share records within and between physically separate service providers over a large territory with high speed broad band width communication. In addition, this success was also an outcome of communicating the mutual benefits of collaboration.

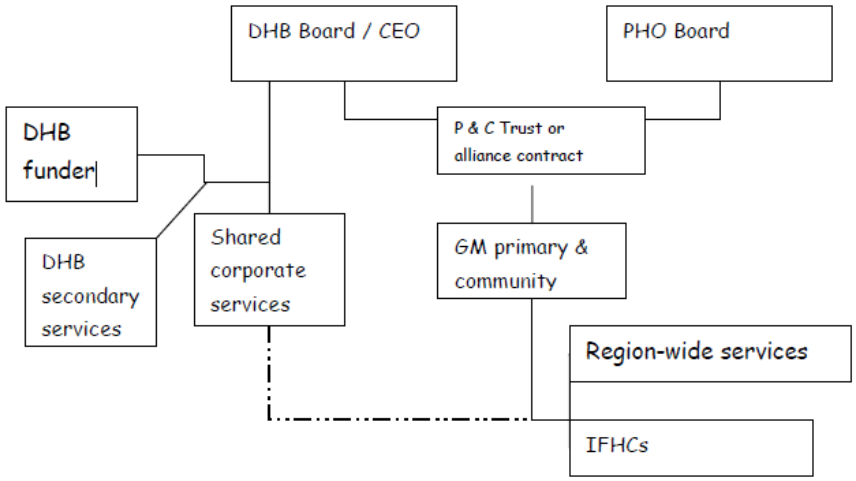
In addition, in Tararua many of the Business Case initiatives had already been introduced and were in some instances largely established before the Business Case was approved and rolled out. The care of the elderly in Tararua is a clear success story with a team of dedicated clinicians and reliable connection between Tararua and Palmerston North the patient journey is smooth and care is patient centred. This initiative, however, was driven by an enthusiastic and committed clinician. This clinician was able to establish an effective network encompassing other clinical services and numerous community groups.

Various individuals in both MidCentral and on the West Coast have a comprehensive understanding of what integrated patient centred care means in practice and have developed initiatives outside of the Business Cases and where resourcing is independent of the Business Cases (and associated resources).

8.9 Governance Issues

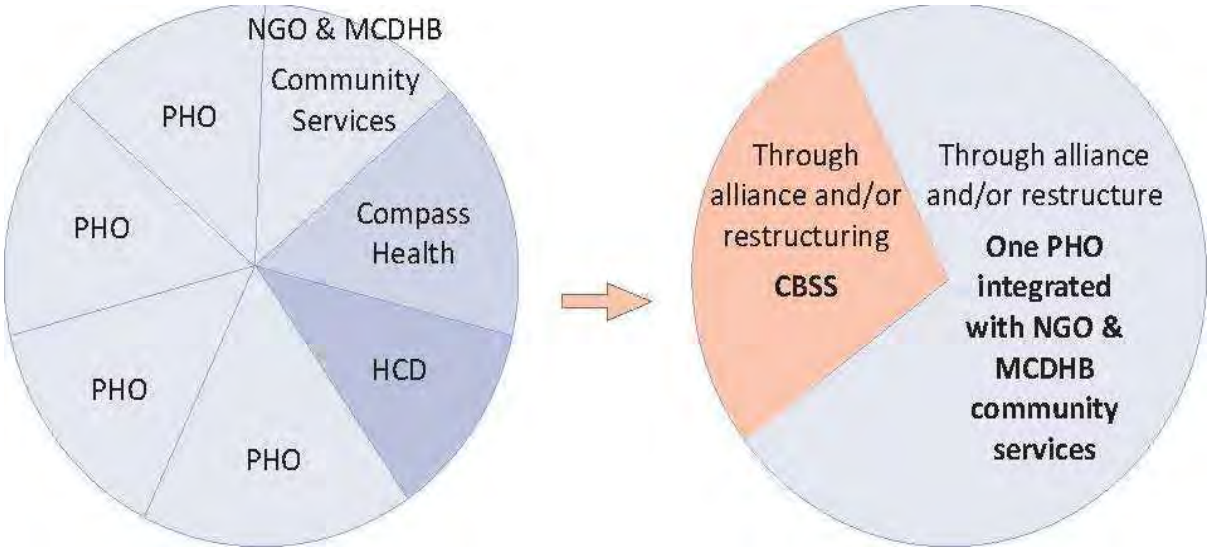
At the time of the Business Case development for the West Coast a range of governance structures were proposed and the option depicted in the figure below was adopted.

Option D: PHO/DHB jointly owned Primary & Community services entity



Under this option the DHB and PHO Boards form an alliance either using contractual arrangements or a joint venture entity, to achieve integrated management of primary and community services. Over time, the continued need for the parent bodies could be assessed.

The structural changes in governance in MidCentral were intended to integrate a number of functions and resources and this was intended to be achieved either through restructuring or formal alliances. The changes in structure are illustrated below:



8.10 The Alliance Leadership Team (ALT)

For both the West Coast and MidCentral, there was wide spread confusion about the role of the Alliance Leadership Team, and uncertainty about who comprised the Alliance Leadership Team for those who were not members. Many also highlighted they were uncertain what the relationship was between the role of the ALT and their role as front line staff. Many thought the ALT was divorced from the realities of day to day health care delivery and that in many respects their "decisions" were irrelevant, their existence evidence of "over governance" and that not enough support had been provided for those who were engaged in providing primary health care.

It was also the case that some members of the current ALTs (in both cases there had been personnel changes on these teams – discussed more fully below) were uncertain of their role – or the role of the team. As one participant observed:

> *…when I first got put into the ALT ..they sent all the papers and I read all the papers and in amongst [these papers was] the contract you had to sign..it said in the terms and stuff..it kept mentioning the Alliance Charter…and I asked..I wrote back and asked well I haven't got a copy of that, can you send me a copy..because you are signing the document to do [with information that was provided] in the Charter. I was told..the reply was "Well we don't normally give that to members (laughter) um, so you know, you sign this thing obviously, but yeah, the Charter, as far as the Charter, you know, it said you can contact so and so and so and so will have a copy, if you really want to read it, but we don't normally give it out, so you know.. and…I haven't read it yet.. so…….I haven't read it yet , so you know, I just ended up signing the document because another meeting had gone by and I thought, I'll give up, who cares, I've got enough on my plate, I'm not going to chase it* (BSMC 058M)

Overall, front line staff and in particular clinicians resented the amount of time put into meetings connected to the BSMC as they could not see any immediate tangible outcomes and already had heavy workloads.

8.10.1 Decision-making

For those who were aware of the ALT (in both locations) there was a common perception that they had no real decision making power during the time of the BSMC implementation. The lack of decision making power was evidenced by their seeming inability to change resourcing streams – constraints of DHB planning and funding. Those who were involved with the newly configured ALTs (2013) in both locations thought that the team would now be able to address this historic shortcoming, as an Alliance Management Group, a tier below the ALT, had been added to allow for funding allocation and follow-through from the ALT decision making group.

At the time of the Business Case implementations, the ALTs were not perceived as genuine collaborative governance bodies. Many participants stressed that these teams were large and comprised individuals/representatives with conflicting agendas and that there were members who dominated discussions – described as "egos" or "ego driven" and where their politic ultimately undermined the functionality of the ALT, led to membership retention problems and disillusionment amongst other team members, particularly front line clinicians. This was particularly the case on the West Coast, however, "ego politics" were also noted in MidCentral as an undermining dynamic of ALT meetings and outcomes. The then configuration of the ALT on the West Coast and the new leadership has been an attempt to redress the former problems and there is now evident will to follow through on initiatives that were not implemented during the implementation period. Considerable emphasis has been placed on the necessity for "Trust" between the Alliance partners, and the Charter emphasises this.

8.10.2 Accountability

A number of participants observed that there did not appear to be any accountability for ALT actions during the implementation phase and some members of the ALT could not describe the ALT's core functions. An apparent lack of real accountability led to, particularly on the West Coast, a constant re-litigation of issues and decision making inertia.

8.10.3 Barriers to Change

Barriers to change identified at the time of the West Coast Business Case development:

- Some primary care providers are overworked and lack energy for change
- GPs not having time to participate in planning workshops
- Some health providers are comfortable working within the current model of care and do not see the need for change
- There are concerns that changes in the current model of care may lead to a decrease in the quality of care
- Some staff may be concerned about erosion of current terms and conditions of employment, and/or reduced support for professional development
- Recruitment on the coast is difficult, whereas health professionals generally find it easy to get jobs elsewhere if they are not successfully engaged in the new models of care

Barriers to change identified at the time of the West Coast Business Case development do not appear to have been effectively overcome during or following implementation.

8.10.4 Hierarchy, Politics and Egos

> *…I was involved with it up until the last couple of years…but there were things..I wasn't sure I wanted to talk about it..it was just um…..one of the questions..which we'll get to later, barriers to change and I listed the main ones were hierarchy, political and egos* [West Coast, BSMC 057M].

Barriers to change were noted in terms of workplace culture, in particular a reluctance to embrace new initiatives because of parochialism and/or people who had worked in the organisation for a long time and who were reluctant to embrace change because they felt they had been doing a good job for years and in some instances because they were resisting losing control over an area or domain.

> *Change is difficult for some and is an on-going process. I am optimistic over time we will get there*.

Poor communication was considered by most participants to be a major barrier to successful implementation of initiatives and ultimately integration.

> *Unless we address micro and macro structures with antiquated and out-dated systems we will spend more on such programmes as BSMC with little real effect on patient health or outcomes especially for Maori and Pacific islanders* [Midcentral, open ended response CCI Questionnaire].

9.0 LONG-TERM CONDITIONS

In MidCentral, initially the Chronic Care Management into General Practice (CCM-(GP) project and the development of two tools the Comprehensive Health Assessment (CHA) and the Client Care Plan (CCP) were separate work streams. Over the Business Case implementation period, these workstreams (and the tools) contributed to the development of another large programme of work called EnhancedCare+ which was not detailed in the Business Case but evolved to address emergent issues.

It was evident at both sites that chronic care management initiatives were in place prior to implementation of the Business Cases was underway. In MidCentral, the Comprehensive Health Assessment (CHA) was a work stream and proved to be challenging in terms of development and roll out. Initially the CHA instrument itself was considered too long, inflexible and burdensome to implement by front line staff. Subsequently, the CHA was shortened and an electronic version developed. The software implementation of the CHA was flawed and the technical elements associated with this caused some dissatisfaction with some practices choosing not to participate and considerable frustration for staff.

> *It's a very bulky too..It is repetitive..I find it's very difficult. You do your comprehensive self-assessment, and then you and do a key plan and then your follow-up appointments, there's nowhere to input them. So you've got this comprehensive self-assessment, you've got your care plan on the internet, intranet, and then when you go and do your care plan two, three, four and five, there's nowhere to input that. …it is also not a running record as such. And the other frustrating thing is of course that the computer system doesn't link. So you input the data in the practice and then you input it here. You've got a paper copy. You can't access what you've put in from here at the GP surgery and it would much better if you could put it in wherever, input it and send it..*[MidCentral BSMC 006M]

> *It takes too long, when I first started to use the CHA, and the doubling up, you know like if you're in practice you know this is the hardest part, is the systems don't connect, absolute waste of time, ..because [I have to] take the paper version and enter it there..*[MidCentral BSMC 008M]

The subsequent redevelopment of the software made it more flexible and resolved data management and retention issues. While there were clearly challenges in the implementation of this initiative, the front line staff members involved in this work stream were committed to the current long-term conditions initiative.

10.0 SHARED CARE RECORD

The original shared care record initiative as described in the Business Case for the West Coast never eventuated. Some enhanced electronic record sharing was implemented by allowing non-general practitioners and clinicians access to MedTech; however, this was not done consistently.

In addition to the face-to-face interview data, participants in the Care Co-ordination and Integration Survey in both locales provided feedback on Shared Care Records and IT issues. For many of these participants, IT issues remain central to integration issues. In MidCentral, where the Shared Care Records were rolled out, participants observed the following:

Some participants raised concerns over the ethics of access to patient information and access issues for patients with limited resources. Many were positive about the role that Shared Care Records can play in co-ordinating care and achieving greater integration. The following quotes are illustrative:

> *A bit worrying really - will make me think carefully about what I enter.*
>
> *A shared electronic health record is vital for better patient care.*
>
> *Being rolled out now but I think it will make care better for patients.*
>
> *The most important integrative effect for coordinated care where a more complete picture of the patient's current health difficulties gives all health professionals a chance to properly plan and follow an appropriate and timely plan of care.*
>
> *Have not used it so do don't know. Probably not useful for high needs low income population group I work with as they have no access to electronic devices or lack of knowledge on how to use same.*
>
> *I can imagine being able to have quick access to patients records immediately is a huge asset for patient care.*

There have been some problems with the implementation, which were raised by some respondents:

> *Currently I don't think the manage my health system is working. I certainly can't access from after hours.*

It sounds great and would be of benefit in the practice of we could get it going smoothly. I understand that there are issues woth Med32 manage my health not getting sorted

Like all new tools it will have its teething problems. If it is used correctly by the patients that would benefit most from accessing their health records - great - but the worried well could become more anxious and time consuming.

When it is working well it is great.

11.0 OPEN RESPONSES IN CARE CO-ORDINATION AND INTEGRATION QUESTIONNAIRE

These open responses (provided by participants responding to the Care Co-ordination and Integration Questionnaire), that is, staff survey ranged from concerns about primary health care being underfunded to observations that poor coordination between primary and secondary care continued. Some considered that a greater degree of integration had occurred and that the silos had been challenged by the BSMC.

BSMC began a convention between sectors which is going and may take 10 years to achieve significant changes.

Primary care is underfunded for the coordination task of providing care and will increase in price to patients to cover all of the talk!

Co-ordination between services particularly between primary to secondary care services remains a problem. Appears from primary level care providers that there is, maybe a delay in consult triage that results in poor management or delayed service resulting

Not convinced the BSMC will turn out to be value for money (as with most health initiatives!)

Not sure patients with LTC get sooner? Than later or better or not or any more convenient at all - care! Primary health care/ practice nurse have a huge work load for their GP to manage paper referrals, communication much greater and time consuming.

Service is improving with integrating allied health into general practice

How soon is sooner?

12.0 THE FRAIL ELDERLY

In both MidCentral and the West Coast, progress was made with the elder care workstreams. In both locales nurses reported a greater degree of integration and a shift toward a greater role for care in the community and caring for the elderly in their own homes.

> *"Oh it's hugely community focused and that's .. we've been kind of going on about that, not going on about that, but that's kind of been the talk for 10 years really, it's everything gonna be community, you know, and it definitely is. You look [at] what the services are [being] put into the elderly to stay in their own home rather than get into a rest home, you only have to look at that really. Even look at how much sooner they're discharging people from hospital, too soon sometimes.. you know people coming home from hospital, the depth of care now that district nurses gave from when I was doing district nursing ten years ago, the stuff they do now…the level of care out in the community has stepped up significantly, as in..what can be provided…"* [West Coast, BSMC 056 M]

And another view:

> *"So I think for the business case, what it did was it brought a lot of services together, services started talking, that is what I liked about it..so ED was actually talking to general practice, a lot more you know, about, elder care, …they are vulnerable a lot of elderly people that live on their own, and that was something we were trying to do..was to keep them in their own homes….elder health [care] has come together a lot more. Before they then [BSMC] they were sort of separate services and it was quite hard to pin them together. I think with this, elder health integration, there is a lot more support there for elder health."* [MidCentral, BSMC 002M].

12.1 Process Improvement

The multi-disciplinary team meetings have been a success in both localities and effective cross-disciplinary relationships have been established in both locales resulting in more effective collaboration around patient care. On the West Coast, many spoke very positively of the multi-disciplinary and specialist connections to secondary care in Christchurch both through regular specialist visits and via tele-medicine connection, front line staff on the Coast felt supported by this and more assured of the quality of care they could provide as a consequence. These greater connections with Christchurch post-date the Business Case and are largely an outcome of the change in DHB governance. Nonetheless, these changes accord with BSMC understandings of greater integration.

13.0 CONCLUSION AND RECOMMENDATIONS

Good quality primary health care is critical to population health and the challenge of providing such quality care within constrained resources is one that is being faced globally. Better, Sooner, More Convenient (BSMC) (Ryall, 2007) is a Government initiative to provide personalised primary health care closer to home, with the goals of improving patient experiences, improving health outcomes, reducing pressure on secondary health care services, and delivering more cost-effective care overall. Central to the BSMC initiative is the notion of "integrated care".

Health care reform, improvement of health care service delivery models, integration of services, and maximising the value of information technology in health care are key issues in New Zealand and internationally. Our evaluation research investigated the extent to which the initiatives of the West Coast and MidCentral Business Cases - (1) Long-term Conditions (chronic care management), (2) Comprehensive Health Assessment (Older people) and (3) Shared Care Record, in addition to the implementation of an Integrated Family Health Centre and Multidisciplinary Health Teams - have met key objectives and contributed to greater service integration.

The research enabled the development of an evaluation framework and a measurement toolkit to assess the provision of integrated care from the view of the patient and that of the provider.

The two evaluations explored the impact of initiatives against the stated objectives of the business case and we identified the barriers and facilitators to effective implementation of the initiatives and identification of the critical success factors for effective implementation of the various workstream initiatives.

A number of unintended consequences of initiative implementation were identified. Key to many of these issues were the tight time frames and workload demands associated with a large number of initiatives. Some of the barriers to implementation identified at the time of the business case development were not addressed and ultimately impacted on the effective implementation of the business cases. A key weakness in both locations was poor linkage with the wider community – including service providers, health professionals and patients – and, in particular, the failure to communicate this significant shift in service delivery.

In both locations, those responsible for managing and front line staff agreed that the Business Cases were overly ambitious and that the development of future initiatives would optimally be more focussed. The workplace demands placed on front line staff were such that they impacted on staff morale and staff retention. Where there were successes there was an over reliance on the dedication of key individuals and where these individuals left the organisation the initiatives lost momentum and compromised. The BSMC Business Cases provided a platform for staff to consider the value of integration and changes to the service delivery model and in both cases staff were committed to providing integrated patient care. It was also agreed that the critical component of integration was improved communication and the development of relationships within and between the respective organisations.

The Business Cases envisaged health IT in the form of the shared care record and while this failed to eventuate there were examples of successful IT implementations such as video consultations, the Tararua Integrated Family Health Centre. There was a clear consensus that IT was central to facilitating greater integration. IT interoperability was as significant factor in workload duplication, frustration and did not optimise efficiency.

Health care integration is one of the most pressing policy and system design issues internationally. Yet it needs to be acknowledged, as widely cited in the academic literature on the subject, that successful integration it is extremely challenging to achieve in practice. It also takes considerable time and effort. Indeed, our evaluations might be considered snapshots of only the very earliest period of development. In this context, the BSMC Business Cases in MidCentral and on the West Coast enabled the consolidation of pre-existing initiatives and provided a platform from which a greater focus on integrative service provision was possible. As such, they have been important while providing useful lessons for the alliances now required in every PHO and DHB region in New Zealand. Ultimately, the Business Cases became less of a blueprint for the specifics of what to do and more like aspirational documents for stimulating a focus on integrated health service delivery and steering the health system and service providers in a new direction.

13.1 What Can Be Learned From the Evaluations of These Two BSMC Business Cases?

Integrated care was central to the BSMC business cases and the approach taken draws on Total Quality Management approaches, where multidisciplinary processes are central to improvement in health care. Additionally this typically involves a top down management approach, the reassignment of roles and the appointment of a case manager (or coordinator) who oversees the process. The patient and disease become the focus, rather than the interests of the various care providers. Interestingly, the top down management approach, for both BSMC business cases was problematic and it is a recommendation that a more encompassing theoretical stance be adopted for future reforms of this nature.

The theoretical literature which addresses behavioural change, complex systems behaviour and systems change is of value in research such as this. This body acknowledges that health systems are complex and dynamic and any system change must provide flexibility and the ability for individual actors to adapt and change. Our evaluations revealed that with respect to the chronic care initiatives there was an absence of flexibility which impacted on implementation but also on workplace culture. Thus, any proposed change should also consider theories about organisational culture and in particular competing values and how these can impact on team approaches to quality. Specifically an ideal model would include addressing, forming or working toward:

(1) A group culture which emphasises flexibility and change and is characterised by strong human relations, teamwork, and affiliation;

(2) A culture that emphasises growth, creativity, flexibility and adaptability;

(3) A rational culture which is externally (Patient) focused but emphasises productivity, and achievement;

(4) A hierarchical culture which stresses stability particularly in the internal organisation, uniformity and rule adherence (Scott et al., 2003).

Thus, we recommend that future initiatives consider how an absence of these cultural values and associated behaviours can impede the introduction of system change and the realisation of objectives aiming to improve health care.

Given that the BSMC was an innovation and there were significant implementation issues, we also recommend that closer attention be paid to potential barriers that have been identified by various researchers (see for example a useful review: Scott et al., 2003) and indeed through these two evaluations. Specifically it is important to ask the following questions about any new initiative:

Is it better than existing or alternative working methods ?	(Relative utility)
Is it consistent with existing norms and values?	(Compatibility)
Is it easy to explain, understand and use?	(Complexity)
Is it balanced between costs and benefits?	(Costs)
Is there uncertainty about the results or consequences?	(Risks)
Is it adaptable to needs and situation of target group?	(Flexibility/Adaptability)
Is it inclusive and involving of the target group?	(Involvement)
Can the parts be tried out independently?	(Divisibility)
Is it able to be trialled, stopped or reversed if it doesn't work?	(Triability/Reversability)
Is it able to demonstrate observable results (for all)?	(Visibility/Observability)
Is it going to impact on central or peripheral activities in the daily working routine?	(Centrality)
It is going to impact on total work, how many persons are influenced, how much time will it take, what is the influence on social relationships?	(Pervasiveness, scope, Impact)
How many organisational, structural, financial and personnel measures does the innovation require?	(Magnitude, disruptiveness and Radicalness)
What is the time period within which change must take place?	(Duration)
Is it a material, social, technical or administrative change?	(Form/Physical properties)
To what degree can decisions about the innovation be made by individuals, groups or the whole institution?	(Collective Action)
How attractive, clear and concise is the presentation of the initiative?	(Presentation)

(Source: Grol amd Wensing 2005)

Using this template and asking these questions would assist in the planning stages of new initiatives and health care reform and with respect to these two business cases would arguably have identified barriers and facilitators at a much earlier stage.

13.2 Reflections and Recommendations for Alliance Leadership Teams

The findings of the two evaluations also point to a series of important recommendations for alliances which, since mid-2013, are required between PHOs and DHBs throughout New Zealand. In the spirit of learning from the pilots and building highly-effective alliances, we suggest the following:

- The alliance model is an innovative governance framework built around pre-existing governance arrangements and models of care. For this reason, building an alliance is complex and requires considerable navigation of pre-existing arrangements. Effective navigation, strategy development and service redesign in this context demands trust between the members of the alliance. This takes time, a shared vision, and commitment to working in good faith amongst the members and partners. Our evaluations illustrated that building foundations for an effective alliance had been challenging. Alliances, therefore, need to be cognisant of the time and effort required for this.

- There is a need to set moderate goals and limit the number of initiatives that an alliance agrees to, and ensure that all members of the leadership team and partners in an alliance are fully committed to these.

- Communications are particularly important across the region and, especially, with service providers an alliance is working with. The evaluations showed that concerns, especially from interviewees, were often around information flows and expectations.

- Front-line staff likely to be affected by alliance decisions need to be engaged in the decision making processes from the outset. The evaluations highlighted that health professionals were often concerned about the scope and pace of expected change; some experienced increasing workloads through commitment to governance activities and then did not see anticipated changes transpire. It is important, as spelled out in the national alliance charter that an alliance at all levels of decision making – whether the leadership team or service level alliances – be clinically-led wherever possible.

14.0 REFERENCES

Agency for Healthcare Research and Quality (2007) Consumer Assessment of Healthcare Providers and Systems Survey 4.0. (https://www.cahps.ahrq.gov/default.asp)

Agency for Healthcare Research and Quality (2011) Consumer Assessment of Healthcare Providers and Systems Survey.

Ahgren, B & Axelsson, R (2005) Evaluating integrated health care: a model for measurement. *International Journal of Integrated Care,* 5**,** 1-8.

Ajwani, S, Blakely, T, Robson B, Tobias, M & Bonne, MW(2003) Decades of Disparity: Ethnic mortality trends in New Zealand 1980-1999. Wellington: Ministry of Health and University of Otago.

Barlow Julie, Wright Chris, Sheasby, Janice, Turner, Andy. Hainsworth, Jenny. (2002) Self-management approaches for people with chronic conditions: a review. *Patient Education and Counseling* 48:177-187.

Barlow Julie, Wright Chris, Sheasby Janice, Turner Andy, Hainsworth Jenny. (2002) Self-management approaches for people with chronic conditions: a review. *Patient Education and Counseling* 48:177-187.

Bentley Margaret, E, Pelto Gretal, Straus Walter, Schumann DA, Adegbola C, De La Pena E, Oni GA, Brown K, Huffman SL. (1988) Rapid Ethnographic Assessment: Applications in A diarrhoea Management Program. *Social Science and Medicine* 27(1):107-116.

Bodenheimer T. (2008) Coordinating care – A perilous journey through the health care system. *New England Journal of Medicine*, 358, 1064-1071.

Bodenheimer T, Wagner, E & Grumback, K (2002) Improving primary care for patients with chronic illness. *JAMA,* 288**,** 1775-1779.

Bonomi A, Wagner E, Glasgow R, Vonkorff M (2002) Assessment of Chronic Illness Care (ACIC): Apractical tool to measure quality improvement. *Health Services Research,* 37**,** 791-820.

Boult C, Boult L, Morishita L, Dowd, Dowd B, Kane R, Urdangarin C. (2001) A randomised clinical trial of outpatient geriatric evaluation and management. *Journal of the American Geriatrics Society,* 49**,** 351-359.

Bundkrichen A, Schwinger R. (2004) Epidemiology and economic burden of heart failure. *European Heart Journal,* 6 (Suppl D)**,** D57-D60.

Carryer J, Doolan-Noble F, Gauld R, Budge C (2014) New Zealand patients' perceptions of chronic care delivery. *Journal of Integrated Care*, 22:2, 71-80.

Carryer J, Budge C, Hansen C, Gibbs K. (2010a) Modifying the PACIC to assess provision of chronic illness care. *Journal of Primary Health Care,* 2**,** 118-123.

Carryer J, Budge C, Hansen C, Gibbs K. (2010b) Providing and receiving self-management support for chronic illness: Patients' and health practitioners' assessments. *Journal of Primary Health Care,* 2**,** 124-129.

Clandinin D, Connelly F. (1991) *Narrative and Story in practice and research*. New York: Teachers College Press.

Coleman K, Austin BT, Brach C, & Wagner EH. (2009) Evidence on the chronic care model in the new millennium. *Health Affairs*, 28, 75—85.

Coiera E. (2011) Do we need a national electronic summary care record? *Medical Journal of Australia,* 194**,** 90-92.

Crampton P, and B Starfield. (2004) A Case for Government Ownership of Primary Care Services in New Zealand: Weighing the Arguments. *International Journal of Health Services* 34:709-727.

Crampton P, Davis P, Lay-Yee R, Raymont A, Forrest C and B Starfield. (2005) Does Community-Governed Nonprofit Primary Care Improve Access to Services? Cross-sectional Survey of Practice Characteristics. *International Journal of Health Services* 35:465-478.

Cresswell J. (2009) *Research Design: Qualitative, Quantitative and Mixed Methods Approaches,* Thousand Oaks, California, Sage Publications.

Cumming J, and N Mays. (2002) How Sustainable Is New Zealand's Latest Health System Restructuring? *Journal of Health Services Research and Policy* 7 (suppl. 1):46-55.

Cumming J, Raymont A, Gribben B, Horsburgh M, Kent B, McDonald J, Mays N, and J Smith (2005) *Evaluation of the Implementation and Intermediate Outcomes of the Primary Care Strategy.* Wellington: Health Services Research Centre, Victoria University of Wellington.

Cumming Jacqueline. (2011) Integrated care in New Zealand. *International Journal of Integrated Care*, 11, 18 November.

Deneckere Svin, Euwema, Martin, Van Herck, Peiter, Lodewijckx, Cathy, Panella, Massimiliano, Sermeus Walter, Vanhaecht Kris. (2012) Care Pathways lead to better teamwork: Results of a systematic review.

Derrett S. and Gunter K. (2012) Care Coordination in Rural Communities: Preliminary Findings on Strategies Used at 3 Safety Net Medical Home Initiative Sites (webinar), 24 July 2012 Qualis Health and MacColl, Center for Health Care Innovation.

Derrett S. & Gunter K. (personal communication). The Diabetes Care and Coordination Survey – 'who' is doing 'what' in the care of patients with diabetes?

Department of Health (2012) *RE: English National GP Patient Survey.*

Durie M. (1985) A Maori perspective of health. *Social Science and Medicine,* 20**,** 483-486.

Eklund Kajsa & Wilhelmson Katarina. (2009) Outcomes of coordinated and integrated interventions targeting frail elderly people: a systematic review of randomised controlled trials. *Health and Social Care in the Community*, 17(5):447-458.

Epstein AJ. (2001) The role of public clinics in preventable hospitalizations among vulnerable populations. *Health Services Research*, 36(2):405-420.

Fortney J, Chumbler N, Cody M, & Beck C. (2002) Geographic access and service use in a community based sample of cognitively impaired elders. *Journal of Applied Gerontology*, 21(3), 352-367.

Gauld Robin. (2003) One step forward, one step back? Restructuring, evolving policy, and information management and technology in the New Zealand health sector. *Government Information Quarterly*, 21:124-142.

Gauld Robin. (2008) The Unintended Consequences of New Zealand's Primary Health Care Reforms. *Journal of Health Politics, Policy and Law*: 33(1): 93-115.

Gauld Robin. (2009) Improving New Zealand's health system performance: Challenges for the way forward. *Eurohealth*, 15(3):32-35.

Gauld Robin. (2011)The WHO and primary healthcare reform: mind the implementation gap. *The International Journal of Clinical Practice*, 65(4):386-390.

Gauld R. (2004) One step forward, one step back? Restructuring, evolving policy, and information management and technology in the New Zealand health sector. *Government Information Quarterly,* 21**,** 125-142.

Gauld R.(2009)*Revolving Doors: New Zealand's Health Reforms - The Continuing Saga,* Wellington, Institute of :Policy Studies and Health Services Research Centre.

Gordon M. (1994) *Nursing Diagnosis: Process and application, Third Edition,* St Louis, Mosby.

Giddens A. (1984) The constitution of society: Outline of the theory of structure. Berkeley, CA: University of California Press.

GreenhalghTrisha and Stones Rob. (2010) Theorizing bit IT programmes in healthcare: Strong structuration theory meets actor-network theory. *Social Science and Medicine* 70:1285-1294.

Grol R and Wensing N. (2005) Characteristics of successful innovations. In: *Improving Patient Care; the implementation of change in clinical practice.* Edited by R Grol, M Wensing and M Eccles, 60-70. Oxford:Elsevier.

Gustafsson Susanne, Edberg Anna-Karin. (2009) Multi-component health promotion and disease prevention for community-dwelling frail elderly persons: a systematic review. *Eur J Ageing* 6:315-329.

Hale B, Barrett P, Gauld R. (2010) The Age of Supported Independence: voices in in-Home Care. Dortrecht, Springer.

Harris Interactive Inc. (2008) Commonwealth Fund International Health Policy Survey

Hefford M, Crampton P and J Foley. (2005) Reducing Health Disparities through Primary Care Reform: The New Zealand Experiment. *Health Policy* 72:9-23.

Hill M, Hupe P. (2002) *Implementing Public Policy: Governance in Theory and Practice*. London: Sage Publications.

Homer CJ, Klatka K, Romm D, Kuhlthau K, Bloom S, Newacheck P, Perrin JM. (2008) A review of the evidence for the medical home for children with special health care needs. *Pediatrics* 122, e922-e937.

Katz Jeanne, Holland Caroline, Peace Sheila, and Emily Taylor. (2011) A Better Life – what older people with high support needs value. The Open University. Joseph Rowntree Foundation

Lewis Sarah, Nocon RS, Tang Hui, Park SY, Vable AM, Casalino LP, Huang ES, Quinn MT, Burnet,DL, Summerfelt T, Birnberg JM, Chin MH, (2012) “Patient-Centred Medical Home Characteristics

and Staff Morale in Safety Net Clinics" *Archives of Internal Medicine*, 172:23-31. (Scoring Algorithm for Provider Experience Survey available on http://www.commonwealthfund.org).

Lewis Sarah, Nocon RS, Tang Hui, Park S Y, Vable AM, Casalino LP, Huang ES, Quinn MT, Burnet DL, Summerfelt T, Birnberg JM, Chin, MH, (2012) "Patient-Centred Medical Home Characteristics and Staff Morale in Safety Net Clinics" *Archives of Internal Medicine*, 172:23-31. (Scoring Algorithm for Staff Experience Survey available on http://www.commonwealthfund.org.

MacAdam M (2008) Frameworks of Integrated Care for the Elderly – a systematic review. www.cprn.com/documents/49813_FR.pdf

MacColl Institute for Healthcare Innovation Group health Cooperative, (2003) Patient Assessment of Chronic Illness Care Group Health Version 8/13/03.

McAvoy B, and G Coster. (2005) General Practice and the New Zealand Health Reforms – Lessons for Australia? *Australia and New Zealand Health Policy* 2 (26). www.anzhealthpolicy.com/content/2/1/26.

Merriam, Sharam, B. (2009) Qualitative Research: A guide to Design and Implementation, John Wiley and Sons: San Francisco.

MidCentral Business Case September 2010, Version 2. Transforming Primary Health Care Services. MidCentral District Health Board. Palmerston North, New Zealand.

Ministry of Health (2001) Aged Care Literature Review on the Coordination and Integration of Services. www.hoh.govt.nz/moh.nsf/pagesmh/6127/$File/aged-care-literature-review.pdf

Mobley LR, Root E, Anselin L, Lozano-Gracia N, & Koschinsky J. (2006) Spatial analysis of elderly access to primary care services. *International Journal of Health Geographics*, 5:19.

National Health Committee People with Long Term Conditions: A Discussion Paper National Health Committee, Wellington, May 2005.

National Health Committee People with Long Term Conditions: A Discussion Paper. National Health Commitee, May 2005, Wellington.

New Zealand Ministry of Health's Health of Older People Strategy and integrated continuum of care concept (2002). www.moh.govt.nz/publications/hops.

Nolte E, & McKee M (Eds.). (2008) *Caring for people with chronic conditions. A health system perspective.* Berkshire, England: Open University Press.

O'Neil SS, Lake T, Merrill A, Wilson A, Mann DA & Bartnyska LM. (2010) Racial disparities in hospitalizations for ambulatory care-sensitive conditions. *American Journal of Preventive Medicine*, 38 (4):381-388.

Patton MQ (1997) *Utlization-focussed evaluation: the new century*. 3rd ed. Sage.

Pawson R, Tiley N. (1997) *Realistic Evaluation*. London: Sage Publications.

Ritchie J & Spencer L. (1994) Qualitative data analysis for applied policy research. In A. Bryman and R.G. Burgess (eds.) *Analyzing qualitative data.* 173-194.

Rozenblum Ronen, Jang Yeona, Zimlichman Eyal, Salsberg, Claudia., Tamblyn Melissa, Buckeridge David, Forster Alan, Bates David, W, Tamblyn Robyn. (2011) A qualitative study of Canada's experience with the implementation of electronic health information technology. *Canadian Medical Association Journal* 183(5):E281-288.

Ryvicker Miriam, Gallo William, T, Fahs Marianne C. (2012) Environmental factors associated with primary case access among urban older adults. *Social Science and Medicine,* 75:914-921.

Safran DG. (1994-1998) Primary Care Assessment Survey. The Health Institute, New England Medical Centre.

Safran DG, Karp KCM, (2002) Ambulatory Care Experiences Survey. Massachusetts Health Quality Partners Inc.

Schoen C, Osborn R, Doty, MM, Bishop M, Peugh J, Murukutla N. (2007) Toward higher-performer health systems: Adults' health care experiences in seven countries, 2007. *Health Affairs*, 26:w717-w734.

Schoen Cathy, Osborn Robin, Doty Michelle M, Squires David, Peugh Jordon, and Applebaum Sandra (2009) A Survey of Primary Care Physicians In Eleven Countries, 2009: Perspectives on Care, Costs, and Experiences. *Health Affairs*, 28(6) w1171-w1171.

Scott TR, Mannion M, Marshall M et al (2003) Does organisational culture influence health care performance? A review of the evidence. *Journal of Health Services Research and Policy* 8:105-117.

Singer Sarah J, Burgers Jako, Friedberg Mark, Rosnethal Meridith B, Leape, Lucian and Eric Schneider. (2011) Defining and Measuring Integrated Patient Care: Promoting the Next Frontier in Health Care Delivery. *Medical Care Research and Review* 68(1) 112-127.

Starfield B. (1998). Primary Care Assessment Tool (http://www.jhsph.edu/hao/pcpc/pca_tools.htm).

Starfield B, Shi I, Macinko J. (2005) Contribution of primary care to health care systems and health. *Milbank Q* 83:457-502.

Stones R. (2001) Refusing the realism-structuration divide. *European Journal of Social Theory* 4(2):177-197.

Tihei Wairarapa: Business Case for Primary-Health Care in the Wairarapa – March 2010. Wairarapa DHB.

Tjora A H. (2006) Writing small discoveries: an exploration of fresh observers' observations. *Qualitative Research* 6(4): 429-451

Wagner E, Austin B, Davis C, Bonomi A, Provost L, McCuloch D, Carver P, Sixta C. (2001) Quality Improvement in Chronic Illness Care: a Collaborative Approach. *J.Q. Improvement,* 27 (2):63-80.

Wagner EH. (1998) Chronic disease management: What will it take to improve care for chronic illness? *Effective Clinical Practice*, 1:2-4.

West Coast Primary Health Organisation and West Coast District Health Board (2010) Business Case: Better, Sooner, More Convenient Primary Care.

Wolcott H. (1994) *Transforming Qualitative Data: Description, Analysis and Interpretation.* Thousand Oaks: Sage Publications.

World Health Organisation Innovative Care for Chronic Conditions: Building Blocks for Action: Global Report 2002 WHO document no. WHO/NMC/CCH/02.01.

15.0 APPENDICES

Patient Experience Questionnaire

SECTION 1: CARE OF CHRONIC CONDITIONS

Staying healthy can be difficult when you have a long term condition or conditions. In this section we would like to learn about the type of help you get from your health care team. This might include your regular doctor, practice nurse, or other members of the general practice team. Your answers will be kept **confidential** and will not be shared with anyone from your general practice team.

Over the past 6 months when I received care for my chronic condition(s) I was:	**None of the time**	**A Little of the Time**	**Some of the Time**	**Most of the Time**	**Always**
1. Asked for my ideas when we made a treatment plan (care plan)	☐1	☐2	☐3	☐4	☐5
2. Given choices about my treatment to think about.	☐1	☐2	☐3	☐4	☐5
3. Asked to talk about any problems with my medicines or their effects.	☐1	☐2	☐3	☐4	☐5
4. Asked if I had problems learning about my medical condition(s) because of difficulty understanding written information	☐1	☐2	☐3	☐4	☐5
5. Given a written list of things I could do to improve my health.	☐1	☐2	☐3	☐4	☐5
6. Satisfied that my care was well organised.	☐1	☐2	☐3	☐4	☐5
7. Shown how what I did to take care of myself influenced my condition(s).	☐1	☐2	☐3	☐4	☐5
8. Asked to talk about my goals and priorities in managing my condition(s).	☐1	☐2	☐3	☐4	☐5
9. Helped to set specific goals to improve my eating or exercise.	☐1	☐2	☐3	☐4	☐5
10. Given a copy of my treatment plan (care plan).	☐1	☐2	☐3	☐4	☐5
11. Encouraged to go to a specific group or class to help me manage my chronic condition(s).	☐1	☐2	☐3	☐4	☐5
12. Asked questions, either directly or on a survey, about my health habits.	☐1	☐2	☐3	☐4	☐5
13. Believed that health professionals within my general practice team thought about my values, beliefs, and traditions when they recommended treatments to me.	☐1	☐2	☐3	☐4	☐5
14. Helped to make a treatment plan (care plan) that I could carry out in my daily life.	☐1	☐2	☐3	☐4	☐5
15. Helped me to plan ahead so I could take care of my condition even in hard times, or when I was unwell.	☐1	☐2	☐3	☐4	☐5
16. Asked how my chronic condition affects my life.	☐1	☐2	☐3	☐4	☐5
17. Contacted after a visit (or had a second appointment made at the last visit) to see how things were going.	☐1	☐2	☐3	☐4	☐5

18. Encouraged to attend programmes in the community that could help me, like a course on on managing my Long Term Condition(s)	☐1	☐2	☐3	☐4	☐5
Over the past 6 months when I received care for my chronic condition(s) I was:	**None of the time**	**A Little of the Time**	**Some of the Time**	**Most of the Time**	**Always**
19. Referred to a dietician, Physical Activity trainer, smoking cessation provider, social worker, counsellor, health educator, or mental health services provider.	☐1	☐2	☐3	☐4	☐5
20. Told how my visits with other types of doctors, (like an eye doctor or other specialist), helped my overall treatment (plan of care).	☐1	☐2	☐3	☐4	☐5
21. Asked how my visits were going with other members of the health care team.	☐1	☐2	☐3	☐4	☐5
22. Asked if I wanted my whānau/family involved in the care and management of my condition(s).	☐1	☐2	☐3	☐4	☐5
23. Asked for information on my whānau/family members	☐1	☐2	☐3	☐4	☐5
24. Given information for my whānau/family on the prevention of the chronic condition/s (where appropriate).	☐1	☐2	☐3	☐4	☐5
25. Given the opportunity to have my family/ whānau screened (where appropriate) - including for health risk factors.	☐1	☐2	☐3	☐4	☐5
26. Asked if I wanted my care modified due to my culture, values and beliefs.	☐1	☐2	☐3	☐4	☐5
27. Offered another culturally appropriate service if there was one available	☐1	☐2	☐3	☐4	☐5
28. Ask if there were any cultural or ethnic issues that my doctor or nurse needed to be aware of when working together to plan my care.	☐1	☐2	☐3	☐4	☐5

29. Please feel free to add any comments that you wish.

SECTION 2: THE GENERAL PRACTICE

We would like to ask you some questions about the general practice where you receive the majority of your health care.

30. Can you look at your own medical records electronically at home?

☐1 Yes ☐2 No

31. Are you enrolled in Enhanced Care Plus (EC+) or Long Term Conditions Care?

☐1 Yes ☐2 No ☐3 Don't know

32. Please rate the following regarding your general practice (check one box for each item):

	Poor	Fair	Good	Very Good	Excellent
a. Overall quality of clinical care received	☐1	☐2	☐3	☐4	☐5
b. My satisfaction with the practice as a whole	☐1	☐2	☐3	☐4	☐5

SECTION 3: OVERALL CARE AT YOUR GENERAL PRACTICE

In this section we would like you to think generally about the general practice where you are a patient and the care that you receive as a patient.

Can you please rate your agreement with each of the three statements below.

Check one box per statement ☑

CARE COORDINATION

At my general practice	Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree
33. The staff at my general practice seem to work well as a team	☐1	☐2	☐3	☐4	☐5
34. Good communication seems to exist between health professionals and other staff within the general practice.	☐1	☐2	☐3	☐4	☐5

COORDINATION WITH EXTERNAL PROVIDERS

At my general practice	Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree
35. My care at the general practice is well-coordinated with external health	☐1	☐2	☐3	☐4	☐5

care providers (e.g., specialists, hospitals)					

COORDINATION WITH COMMUNITY RESOURCES

At my general practice	Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree
36. My care at the general practice is well-coordinated with community resources, programmes, services and support groups that help me manage my condition(s) better, or help me to manage in my own home (i.e. Coordinate Home Help assistance, have referred me to attend local education programmes or support groups)	☐1	☐2	☐3	☐4	☐5
37. Health professionals and practice staff are well-informed about community resources available for patients	☐1	☐2	☐3	☐4	☐5

FAMILIARITY WITH ME AS A PATIENT

At my general practice	Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree
38. Health professionals and practice staff are well-informed each time I visit them about my medical history and current treatment (care plans)	☐1	☐2	☐3	☐4	☐5
39. Health professionals and practice staff are well-informed about my current social needs (e.g., housing, transportation)	☐1	☐2	☐3	☐4	☐5
40. I see the same care team or health professional for routine general practice visits	☐1	☐2	☐3	☐4	☐5

CONTACT BETWEEN MEDICAL VISITS

Between my visits to the general practice	Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree
41. I am regularly contacted about my chronic condition(s) to help me manage my condition	☐1	☐2	☐3	☐4	☐5
42. I am contacted to remind me of my regular preventive or follow-up visits (e.g., flu vaccine or routine lab tests)	☐1	☐2	☐3	☐4	☐5
43. I am regularly contacted about any abnormal laboratory results	☐1	☐2	☐3	☐4	☐5

PATIENT CARE

At my general practice	Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree
44. Care is designed to meet my preferences and those of my family/whānau	☐1	☐2	☐3	☐4	☐5
45. Health professionals and staff communicate with me in a way that I understand (e.g., appropriate language and literacy)	☐1	☐2	☐3	☐4	☐5

PATIENTS, HEALTH PROFESSIONALS AND PRACTICE STAFF

At my general practice	Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree
46. Health professionals and practice staff view me as an equal partner in my care	☐1	☐2	☐3	☐4	☐5
47. When developing a treatment plan (care plan), health professionals and practice staff routinely encourage me to actively participate in setting goals and setting priorities	☐1	☐2	☐3	☐4	☐5
48. Health professionals and practice staff routinely work with me to develop self-management skills for managing my long term conditions	☐1	☐2	☐3	☐4	☐5

49. Approximately how many times have you visited your general practice (to see a GP, Practice Nurse, or other health professional) in the last 12 months?

_____

SECTION 4: ABOUT YOU We would now like to ask you some questions about you

50. What is your gender? □1 Male □2 Female □3 Other

51. How old are you? ___ **years**

52. Which ethnic group do you belong to? ***Mark the space or spaces which apply to you.***

- ☐ New Zealand European
- ☐ Māori
- ☐ Samoan
- ☐ Cook Island Maori

☐ Tongan

☐ Niuean

☐ Chinese

☐ Indian

☐ Other such as DUTCH, JAPANESE, TOKELAUAN. Please state:

_____

53. How well does your total household income meet your everyday needs for such things as accommodation, food, clothing and other necessities? Would you say you have: not enough money, just enough money, enough money or more than enough money?

☐ Not enough

☐ Just enough

☐ Enough

☐ More than enough

54. Thank you for participating in this survey. Please feel free to add any additional comments below. We value your opinion and would be most grateful for your comments you may have on any aspect of the healthcare you receive and any suggestions you may have for possible improvements.

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

If you wish to receive an emailed summary of the results of this survey please check the box below and write your email address (this will be stored confidentially):

☐ Yes, please email or mail me a summary of the results. ☐ No thanks.

If Yes: My email address is: _____ and/or

If Yes: My postal address is: _____

Please return your completed survey in the included postage-paid envelope to the address below.

If you have questions about this survey, please contact:

Participants in the North Island:

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Health Services Research Centre

Victoria University of Wellington

P O Box 600, Wellington

greg.j.martin@vuw.ac.nz

(04) 463 6574

Participants in the South Island:

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(03) 479 8298

Thank you for your time and assistance.

Electronic Shared Care Record (SCR)

Questionnaire

Thank you for your participation in this questionnaire. **We anticipate it will take no more than 2-3 minutes to complete**.

1. Are you aware of the electronic Shared Care Record? ☐$_1$ Yes ☐$_2$ No

2. Have you used the Shared Care Record? ☐$_1$ Yes ☐$_2$ No

If not, why not? _____

_____

3. How often have you used the Shared Care Record?

☐$_1$ Never ☐$_2$ Occasionally ☐$_3$ Some shifts ☐$_4$ Most shifts ☐$_5$ All/nearly all shifts

4. How many times per shift, if any, would you typically use the Shared Care Record?

_____ times

5. On a typical shift, for what proportion of patients would you check the Shared Care Record? (please mark on the scale below)

0% 25% 50% 75% 100%

_____

6. What do you see as the benefits of access to the Shared Care Record?

_____

_____

_____

7. Does access to the Shared Care Record save you time in assessing and treating patients?

If yes, how much time is saved, on average, per patient?

☐$_1$ Yes ☐$_2$ No _____ Minutes per patient

8. Have you experienced any adverse events that occurred as a result of using SCR data? If yes, how often?

☐$_1$ Yes ☐$_2$ No _____ times

9. Have you prevented any potential adverse event as a result of use of the SCR? If yes, how often?

☐$_1$ Yes ☐$_2$ No _____ times

10. On occasions when you have chosen not to access the SCR, why not?

_____

_____

11. In your opinion, has patient care and service delivery been improved by implementation of the SCR? If so, how?

_____

_____

12. Is there a way in which the SCR could be improved?

_____

_____

13. What risks, if any, do you see in use of the SCR?

_____

_____

14. Please make any other comments you have on the SCR and its implementation

_____

_____

_____

Finally, about you

15. What is your principle clinical role?

☐ ED doctor ☐ ED nurse ☐ Mental health staff ☐ Other (please specify)

_____

16. How long have you been in this role? _____years _____months

17. Gender; are you ☐ Female ☐ Male

Thanks for your help

If you have questions or comments, please contact:

Dr Greg Martin

Health Services Research Centre

Victoria University of Wellington

greg.j.martin@vuw,ac,nz or (04) 463-6574

Care Co-ordination and Integration Questionnaire

Thank you for your participation in this questionnaire. We anticipate it will take no more than 10 minutes to complete.

If you work at more than one general practice please respond for the practice you spend the most time at.

SECTION 1: BETTER SOONER MORE CONVENIENT

1. Are you familiar with the Better Sooner More Convenient business case in your area?

☐1 Yes ☐2 No **(if no please go to Section 2)**

Better, Sooner More Convenient development	Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree
2. The BSMC business case is a developing well	☐1	☐2	☐3	☐4	☐5
3. The BSMC business case is providing a whole of system approach to health care delivery	☐1	☐2	☐3	☐4	☐5
4. The BSMC business case is improving care co-ordination	☐1	☐2	☐3	☐4	☐5
5. The BSMC business case is providing greater certainty for our health professionals	☐1	☐2	☐3	☐4	☐5
6. The BSMC business case is improving management of patients in primary care settings	☐1	☐2	☐3	☐4	☐5

SECTION 2: HEALTH CARE DELIVERY FOR PATIENTS WITH CHRONIC ILLNESSES.

When caring for a person with a chronic illness, how often do you ...	None of the time	A little of the time	Some of the time	Most of the time	Always
7. ...ask for their ideas when making a treatment plan (care plan)?	☐1	☐2	☐3	☐4	☐5
8. ... give them choices to think about regarding their care or treatment options?	☐1	☐2	☐3	☐4	☐5
9. ... ask them to talk about any problems with medicines and their effects?	☐1	☐2	☐3	☐4	☐5
10. …ask them if they ever have difficulty understanding information provided to them related to their medical condition/s?	☐1	☐2	☐3	☐4	☐5
11. ... ask them to talk about their own goals in caring for themselves?	☐1	☐2	☐3	☐4	☐5
12. ... help them to set specific goals and priorities in caring for themselves?	☐1	☐2	☐3	☐4	☐5
13. ... give them a copy of their treatment plan (care plan)?	☐1	☐2	☐3	☐4	☐5
14. ... encourage them to attend a specific group or class to help them manage their chronic condition(s)?	☐1	☐2	☐3	☐4	☐5

15. ... ask questions, either directly or in a survey, about their health habits?	☐1	☐2	☐3	☐4	☐5
16. ... consider their values and their traditions when recommending treatments?	☐1	☐2	☐3	☐4	☐5
When caring for a person with a chronic illness, how often do you ...	**None of the time**	**A little of the time**	**Some of the time**	**Most of the time**	**Always**
17. help them to make a treatment plan (care plan) that they can carry out in their daily life?	☐1	☐2	☐3	☐4	☐5
18. .. help them to plan ahead so they can take care of themselves even in hard times or when they are unwell?	☐1	☐2	☐3	☐4	☐5
19. ask them how their chronic illness affects their life?	☐1	☐2	☐3	☐4	☐5
20. ... contact them after a visit or make a follow-up appointment at the time of the visit to see how things are going?	☐1	☐2	☐3	☐4	☐5
21. ... encourage them to attend programmes in the community that could be helpful?	☐1	☐2	☐3	☐4	☐5
22. ... provide referrals to other health professionals?	☐1	☐2	☐3	☐4	☐5
23. ... tell them about how visits with other health professionals (other than GP) help with their overall treatment (plan of care)?	☐1	☐2	☐3	☐4	☐5
24. ... ask about how appointments with other health professionals are going?	☐1	☐2	☐3	☐4	☐5
25. ..appropriately involve whānau/family in the care and management of their condition(s)	☐1	☐2	☐3	☐4	☐5

SECTION 3: THE GENERAL PRACTICE

26.Please rate staff morale at your general practice (check one box for each item):

	Poor	**Fair**	**Good**	**Very Good**	**Excellent**
Staff morale	☐1	☐2	☐3	☐4	☐5

27. Do you currently use a shared electronic health record system (e.g. Manage My Health) to share patient medical information with ED or other healthcare providers?

☐1 Yes ☐2 No ☐3 Don't know

28. Do your patients have electronic access to their own medical records?

☐1 Yes ☐2 No ☐3 Don't know

29. Can you please comment on how useful the shared electronic health record system has been to you or how important you anticipate it will be?

SECTION 4: OVERALL CARE OF PATIENTS AT YOUR GENERAL

PRACTICE/HOSPITAL

In this section we would like you to think generally about the general practice and care of ALL patients.

At our general practice	Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree
30. Patient care is well-coordinated among doctors nurses, and clinic staff	☐1	☐2	☐3	☐4	☐5
31. Health professionals and staff meet frequently (e.g., group meetings) to plan for patient visits	☐1	☐2	☐3	☐4	☐5
32. Good communication exists between health professionals and other staff	☐1	☐2	☐3	☐4	☐5
33. Patient care is well-coordinated with external health care professionals (e.g., specialists, hospitals on the West Coast)	☐1	☐2	☐3	☐4	☐5
34. We have good systems in place to track referrals to external health professionals	☐1	☐2	☐3	☐4	☐5
35. We routinely receive discharge summaries after our patients are hospitalised	☐1	☐2	☐3	☐4	☐5
36. Patient care is well-coordinated with community resources (e.g., support groups, meals on wheels)	☐1	☐2	☐3	☐4	☐5
37. Health professionals and staff are well-informed about available community resources for patients	☐1	☐2	☐3	☐4	☐5
38. We have established relationships with community agencies to facilitate our referrals to them	☐1	☐2	☐3	☐4	☐5
39. Health professionals and staff are well-informed at the time of each patient visit about patients' medical history and current treatments	☐1	☐2	☐3	☐4	☐5
40. Health professionals and staff are well-informed about patients' current social needs (e.g., housing, transportation)	☐1	☐2	☐3	☐4	☐5
41. Patients see the same care team or doctor for routine clinic visits	☐1	☐2	☐3	☐4	☐5
42. We routinely contact patients with chronic conditions to help them manage their conditions	☐1	☐2	☐3	☐4	☐5

Between patient visits	Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree
43. We routinely contact patients with chronic conditions to help them manage their conditions	☐1	☐2	☐3	☐4	☐5
44. We routinely contact patients to remind them of regular preventive or follow-up visits (e.g., flu vaccine or routine lab tests)	☐1	☐2	☐3	☐4	☐5

45. We routinely contact patients to inform them of abnormal laboratory results	☐1	☐2	☐3	☐4	☐5

At our general practice	Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree
46. Care is designed to meet the preferences of patients and their families/whānau	☐1	☐2	☐3	☐4	☐5
47. Health professionals and staff view patients as equal partners in their care	☐1	☐2	☐3	☐4	☐5
48. When developing a treatment plan, health professionals and staff routinely encourage patients to actively participate in setting goals	☐1	☐2	☐3	☐4	☐5
49. Health professionals and staff routinely work with patients to develop self-management skills for managing their health conditions	☐1	☐2	☐3	☐4	☐5

SECTION 5: ABOUT YOU

In this section we would like to ask you some questions about you.

50. What is your current primary profession? E.g. GP, Nurse?
_____

51. How long have you worked in your primary profession? _____

52. How many years have you worked at this general practice? _____ years

53. How many hours per week do you work at this general practice? ____ hours per week

54. What is your gender? □1 Male □2 Female

55. Which ethnic group do you belong to? ***Mark the space or spaces which apply to you.***

- ☐ New Zealand European
- ☐ Māori
- ☐ Samoan
- ☐ Cook Island Maori
- ☐ Tongan
- ☐ Niuean
- ☐ Chinese
- ☐ Indian
- ☐ Other such as DUTCH, JAPANESE, TOKELAUAN. Please state:

_____

56. Thank you for participating in this survey. Please feel free to add any additional comments below:

_____

_____

_____

_____

_____

If you wish to receive an emailed summary of the results of this survey please check the box below and write your email address (this will be stored confidentially):

☐ Yes, please email me a summary of the results

If Yes: My email address is: _____

Please return your completed survey in the included postage-paid envelope

If you have questions about this survey, please contact:

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Thank you for your time and assistance.

July 2013

Better, Sooner, More Convenient

(BSMC)

Evaluation

Clinician/Stakeholder Interview

The following guide provides an outline of the topics that will be covered. As a semi-structured interview the questions presented here are indicative of the subject matter and are not verbatim descriptors of what the interviewer will ask during the interview.

Introduction	Comments
Explanations of the use of the evaluation data	**Reports to MoH and HRC**
Appreciation of contribution	
Confidentiality and procedure of the interview [including the use of audio equipment]	Establish parameters
Confirmation of the duration of the session	**0.5 to 1 hour**

Thank you for agreeing to be interviewed as part of the BSMC Evaluation. The purpose of the interview is to examine how individual practitioners and other stakeholders feel about the BSMC projects, how it is affecting your practice, and how future BSMC projects could be improved.

1. Are you familiar with the BSMC business case and its associated initiatives?

What do you understand to be the background to the BSMC business case?

What were your expectations of the BSMC initiatives?

2. Your role?

Can you describe your role?

Is there a specific initiative that you are involved with?

What is the role of others involved in this initiative? (and how does this relate to what you do?)

3. Co-ordination and integration

What do you think integrated care involves?

4. Implementation of BSMC initiatives

How satisfied were you with the BSMC initiative process?

What were the good and less good things about the BSMC roll-out process?

What barriers, if any, were there to the BSMC initiative implementation?

What do you think are the facilitators to integrated care?

And the barriers?

What are the characteristics of the BSMC initiative that have been most useful and those that have been least useful?

4.Sustainability

How sustainable is the BSMC initiative? Has it become entrenched in routine practice?

What were the implications of the BSMC initiative for service delivery and for your practice?

In what way and to what extent have patient outcomes been improved by the BSMC initiative? How would we know? Or how is this evidenced?

5. Process improvement

What should future BSMC projects do differently?

How could the implementation of the BSMC initiatives been improved?

*What processes might be included to promote ongoing quality improvement?

5. Quantitative evaluation (on a scale of 0 to 10)

On a scale of 0 to 10, where 0= not at all satisfied, and 10 = extremely satisfied:

How satisfied are you with the BSMC development and implementation process overall?

How useful is the BSMC that has been developed?

How successful has the BSMC been in smoothing out patient pathways and information flow between clinicians and health services providers at all levels of the system?

How successful has the BSMC been in improving patient experience of treatment?

How successful has the BSMC been in improving patient outcomes? (or will be if implemented)

Summary of key findings

Invitation to raise any other issues/comments

Thank and Close