Quality Accounts
2012 - 2013

Counties Manukau District Health Board
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FOREWORD FROM CEO

Healthcare systems worldwide are recognising the need to change in order to meet the growing demand for healthcare services. At Counties Manukau Health (CM Health) we are on that journey of change and are striving to be the best healthcare system in Australasia by 2015. As you’d expect, there’s a great deal of work happening to make this a reality and to ensure that we provide the very highest quality care to the Counties Manukau community that we serve.

With that in mind, it’s my great pleasure to present CM Health’s first-ever Quality Accounts for 2012/2013 highlighting our progress to date. This document showcases our ongoing commitment to quality and safety, particularly with regards to performance against national health targets, quality standards, patient safety priorities, service improvements and integration initiatives.

The improvement outlined in this document does not happen without the absolute dedication and commitment of passionate staff, who play a pivotal role in delivering high quality care on a daily basis. Their efforts, some of which are captured in this document, remain deeply appreciated by me and the wider community.

I’d also like to acknowledge those who have contributed to this document. The activity described here is a real credit to them and the magnificent work that they do.

As we edge closer to realising our 2015 ambition, CM Health’s journey of change continues.

We are very much looking forward to the progress that is yet to come, and I’m confident that in next year’s Quality Accounts we will showcase further improvements that are in their initial stages at present.

For now, I invite you to read and enjoy this celebration of our progress to date. It’s a fabulous overview of the world-class work that is happening in Counties Manukau each and every day.

Geraint Martin
CEO
Counties Manukau Health
DISTRICT HEALTH BOARD
Our Quality Accounts

Executive Summary

It is with great pleasure that we provide this inaugural set of Quality Accounts for Counties Manukau Health (CM Health). These cover the period from 1 July 2012–30 June 2013.

Over this period we have continued and accelerated quality improvement in a number of areas as the document outlines.

Particularly important achievements have included:

- Development of a new strategy, called Achieving a Balance, incorporating six programmes of work aimed at making CM Health the best healthcare service in Australasia by December 2015.
- High performance on all Ministry of Health National Health Targets, including exceptional delivery of elective surgery and adherence to emergency care targets, despite being one of the busiest and largest hospitals on Australasia.
- Confirmed progress of Patient Safety initiatives and action to support patient and whaanau centred care.
- Delivery of training programmes in patient safety and improvement science to enhance the capacity of our staff to support quality and safety.
- Leadership of CLAB Zero - a national programme to reduce central-line associated bacteremia, including the quality improvement programme previously developed at CM Health being introduced in all 20 New Zealand DHBs.
- Development of a set of System Level Measures to provide an overview of the performance of our services across the whole health sector.
- Implementation of the 20,000 Days campaign, which has enabled us to avoid projected growth in hospital bed days by improving services aimed at reducing the need for hospital admission in people with chronic conditions.
- Inauguration of a Leadership Academy to enhance leadership skills of our staff and provide ongoing education and training in-house.
- Delivery of the highly successful APAC Conference in September 2012, in conjunction with the NZ Health Quality and Safety Commission (HQSC) and Institute for Healthcare Improvement (IHI).

These accounts have been endorsed by our Executive Leadership Team and Board, and represent an accurate picture of our high performance.

Questions and Suggestions

The Quality Accounts are aligned with many other CM Health accountability documents, including our Annual Report covering the 2012/13 financial and service performance, and the 2012/13 Annual Plan. We will be publishing the Quality Accounts on our internet site: www.countiesmanukau.health.nz

We welcome feedback on the Quality Accounts which are published for a wide readership. Like all new initiatives we will evaluate this document and anticipate that improvements will occur in developing the 2013/14 Quality Accounts. You can provide any comments on the Quality Accounts to us via the Communication Team. Communications@middlemore.co.nz
Strategic Framework - Achieving a Balance

Our aim is to be the best for our Counties Manukau people

CM Health strives to be “as good as or better than comparable health systems anywhere in the world” and the best healthcare system in Australasia by 2015. Being the best in our context means balancing excellence and sustainability to meet the health needs and keep the people of Counties Manukau healthy within our available resources.

Counties Manukau - a diverse population

The Counties Manukau regions population of 500,800 is approximately 11% of New Zealand’s population and is growing rapidly. The 2006 Census estimates growth of 170,000 from 2011 to 2030.

Our population is diverse (high proportion Māori, Pacific and Asian), and is both youthful and aging fast. Although life expectancy is improving for all groups, there are persistent gaps between life expectancy for Māori and Pacific populations when compared to the non-Māori and non-Pacific population (gap of -10.8 for Māori and Pacific -8.3 when compared to non-Māori and non-Pacific).

CM Health has a high proportion of populations living in socio-economically deprived communities. We need to move on multiple fronts if we are to have an overall system impact on our populations’ health.

CM Health has adopted the Triple Aim as the framework to organise our strategic initiatives. The Triple Aim is intended to provide:

- improved health and equity for all populations
- improved quality, safety and experience of care
- best value for public health system resources

2012/13 is the first of a four year implementation of this strategic framework, and Achieving a Balance is our implementation approach. This consists of six executable strategies as identified below.

While all of the strategies address quality and improvement of our healthcare system, the ‘Delivering Patient and Whaanau Centred Care’ and ‘First, Do No Harm’ strategies are specifically working to improve the quality and safety experience of patients in our healthcare system.
The following diagram shows how “First, Do No Harm” and “Delivering Patient and Whaanau Centred Care” fit as part of the six executable strategies, and link to the Triple Aim.

**First, Do No Harm**

To have the best overall performance, by comparison with Australasian peers, on an agreed suite of measures of patient safety, by December 2015

Our “First, Do No Harm” strategy is responsible for implementing quality improvement and safety initiatives across our healthcare system. This includes our participation in national initiatives, and regional campaigns. We also need to ensure quality and safety is incorporated into all local activities. This includes activities spanning the entire sector from hospital, to primary care and residential care.

In the last 12 months the DHB has committed to:

- The national “Open for Better Care” campaigns.
- The regional Patient Safety Programme “First Do No Harm – safer care together.”
- Hospital services “Aiming for Zero Patient Harm” initiatives to address patient safety during admissions. These are outlined in the Quality Accounts, and include:
  - Medication Safety,
  - Reducing harm from Falls, and Pressure Injury,
  - Central Line Bacteraemia (CLAB) and Venous Thrombo-Embolism (VTE) prevention,
  - Infection Control and Prevention and Hand Hygiene.
- Primary Care and Aged Residential Care Patient Safety Programmes.

We also want to be able to measure and monitor our progress, both to celebrate achievements and respond to challenges.
Harm minimisation not only improves the patient experience, by reducing suffering associated with unintended harmful effects of treatment, but also improves value for money, by reducing waste associated with provision of ineffective services and interventions to reverse harm.

In addition to providing high quality clinical care to our current patients, our health system also needs to ensure that we meet a number of other priorities, including the achievement of health targets, effective and efficient use of resources, and building of capability and improved health outcomes for the population that we serve.

**Future Focus:**

In the 2013/14 year we will:

- build on our progress made, by **sharing learning and evidence** with all staff
- **embed the patient safety measures** in all health services provided by CM Health
- **ensure routine reporting of performance** - so that ongoing progress can be gauged
- **extend the patient safety programmes** — taking a patient safety leadership role in Australasian health services
- **develop new measures and interventions** — for use both inside and outside of hospital settings, including with Primary Care.

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**Future Focus:**

**Developing Patient Safety with Primary Care and Community Providers**

Over the next 12 months, we particularly want to leverage from the successes of CM Health’s hospital-based patient safety programme “Aiming for Zero Patient Harm”, in order to continue to expand quality and safety focussed initiatives into the Primary Care and Aged Related Residential Care (ARRC) sectors.

- The strategy is intended to motivate providers and practices to manage their own improvement, by creating awareness around the advantages of improving quality and safety. This will highlight the need for measuring performance, the benefits of the ability to compare yourself with your peers and creating incentives where appropriate.

- Providers, facilities and practices will be supported by the extensive hospital and Ko Awatea knowledgebase in quality and safety improvement. This could include information packs, quality and safety improvement packages, training and mentoring in improvement techniques and strategies and data capturing tools.

- In the Primary Care sector, we will work with a Primary Care Leadership Group to provide governance and guidance regarding strategy and components of a Primary Care Patient Safety programme. This will ensure action is aligned with clinical quality improvement activity.

- We have identified the successful Scottish Patient Safety in Primary Care campaign as a possible model, and have engaged the clinical lead of that campaign to workshop with our key clinicians and managers as a prelude to adapting their approach to suit our needs.
Delivering Patient and Whaanau Centred Care

Patients, family and whaanau who are inspired, enabled, resourced and in control of their own health.

There are five work streams which will help realise this vision:

Family/whaanau as partners in care - Partnership is a key to achieving the best possible health outcomes.

Improved face to face engagement - Every staff interaction needs to make a positive contribution towards patient and whaanau centred care.

Improved patient and whaanau feedback - A broad range of opportunities to provide feedback about their experiences of using Counties Manukau Health services.

Keeping patients and whaanau informed - Timely, accurate and useful information to participate effectively in decision-making about their care and achieve the best possible clinical outcomes.

Patients and whaanau are members of key decision-making groups - Roles on key decision making committees.

During 2012/13, some of the initiatives delivered were:

- Governance groups established with consumer and community representative participation
- The inaugural “Patient and Whaanau Centred Care” Awareness Week, with a particular emphasis on compassion in healthcare. Patient and whaanau experiences were used to strengthen these messages.
- Ensuring change processes support the importance of family and whaanau as partners in care.
- Introducing the Health and Disability Commissioner’s Health Passport - to ensure our patient’s needs are met in a timely and effective way.
- Development of a patient centred care planning document; incorporating identification of the patient’s partner(s) in care and their Health Passport expressed health needs.
- Embedding the Liverpool Care Pathway into core business activities.

Future focus:

The 2013/14 year will see CM Health build on the foundation work from the 2012/13 year.

We will:

- develop a Patient and Whaanau Centred Care Strategy and operational plans
- build internal capability to enable further development
- experience based co-design of services - to engage patients and their families and whaanau under the leadership of Dr Lynne Maher
- introduce an electronic survey and portal for patient feedback and use the feedback to inform improvements in the care and services we provide
- ensure Advance Care Planning is delivered from localities in a sustainable way
- leadership by our Clinical Nurse Educators will focus on embedding principles of patient and whaanau centred care in daily practice, to strengthen the daily care and compassion we provide for our patients, their families and whaanau.
Performance Review

National Health Targets

CM Health’s strong performance against the National Health Target expectations in 2012/13 reflects a whole-of-system approach, active leadership and staff commitment. Central to our success in achieving the targets are our partnerships with Primary Health Care and PHOs, and their commitment and leadership to focus resources towards improving health system outcomes for the Counties Manukau population.

For more detailed information on our Health Target results – refer to the 2012/13 Annual Report or Ministry of Health

CM Health 2012/13 Performance against National Health Targets

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<th>Q2</th>
<th>Q3</th>
<th>Q4</th>
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<tr>
<td><strong>Shorter stays in Emergency Departments</strong></td>
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<tr>
<td>95 percent of patients will be admitted, discharged, or transferred from an</td>
<td>97%</td>
<td>96%</td>
<td>97%</td>
<td>96%</td>
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<tr>
<td>Emergency Department (ED) within six hours.</td>
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<tr>
<td><strong>Improved access to Elective Surgery</strong></td>
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<tr>
<td>The volume of elective surgery will be increased by at least 4,000 discharges</td>
<td>110%</td>
<td>108%</td>
<td>110%</td>
<td>111%</td>
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<tr>
<td>per year.</td>
<td></td>
<td></td>
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<td><strong>Shorter waits for Cancer Treatment</strong></td>
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<tr>
<td>All patients, ready-for-treatment, will wait less than four weeks for radiotherapy or chemotherapy.</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
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<tr>
<td><strong>Increased Immunisation</strong></td>
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<td>85 percent of eight-month-olds will have their primary course of immunisation (six weeks, three months and five months immunisation events) on time by July 2013.</td>
<td>82%</td>
<td>85%</td>
<td>86%</td>
<td>90%</td>
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<td><strong>More Heart and Diabetes Clinics</strong></td>
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<td>75 percent of the eligible population will have had their cardiovascular risk assessed in the last five years by July 2013.</td>
<td>53%</td>
<td>55%</td>
<td>61%</td>
<td>76%</td>
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<tr>
<td><strong>Secondary Care</strong></td>
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<tr>
<td>95 percent of patients who smoke and are seen by a health practitioner in public hospitals, are offered brief advice and support to quit smoking.</td>
<td>95%</td>
<td>95%</td>
<td>96%</td>
<td>95%</td>
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<tr>
<td><strong>Primary Care</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>90 percent of patients who smoke and are seen by a health practitioner in primary care are offered advice and support to quit smoking.</td>
<td>40%</td>
<td>43%</td>
<td>45%</td>
<td>56%</td>
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We remain committed to working with Primary Care to increase support for our community to quit smoking. To address the target, we will continue to support PHOs and Practices through the establishment of call centres, smokefree coordination and support by clinical champions for primary care clinicians. We will continue to focus on implementing processes that result in sustainable results.
Certification 2013

All providers of healthcare services in New Zealand are required to be certified by the Ministry of Health under the Health and Disability Services (Safety) Act 2001 to meet the NZS8134:2008 Health and Disability Services Standard. CM Health undertook the regular national Certification audit of our inpatient care services in May 2013.

Certification can be likened to a warrant of fitness that aims to ensure the hospital is providing safe, effective and appropriate care to the people of Counties Manukau. This is a check of our systems - to make sure we have the basics right. But we also focus on the experience of patients, as they journey through our hospital services.

CM Health achieved the maximum, (3 years) Certification of services, which acknowledges the significant improvements the organisation has made and innovative planning for the future. There are a number of moderate and low level actions from the report and the organisation will be proactively addressing and resolving these over the coming months. Maintaining certification is an integral part of measuring and monitoring quality improvement and our goal to be “the best healthcare system in Australasia by 2015”.

Serious And Sentinel Events

Every year, DHBs investigate and report all Serious and Sentinel Events occurring to people in hospital service care. Because of the complex nature of health care, adverse events causing serious unintended harm to patients do occur and are truly regrettable. In reviewing each of these events, the focus is always on what we can learn and how we can improve care to prevent the likelihood of a similar event recurring.

CM Health reported 45 serious harm/adverse events, contributing to the deaths of five people, to the Health Quality and Safety Commission in the 2012-2013 year.

There were 33 incidents involving harm following falls in hospital, with 3 of these falls leading to the death of a patient. CM Health has reported more falls this year than in 2011-2012 year; however we have this year included 6 falls that resulted in lacerations requiring sutures.

Of these patients, we know that
- Twelve patients sustained fractures; 5 involving the upper limb, 5 involved fractures to the spine, pelvis or ribs; and two involved the lower thigh or leg
- Two patients suffered a cerebral haemorrhage causing death
- One of the ten patients with a fractured hip died following surgery to repair the fracture.

Preventing patient falls and harm is a key focus area for all CM Health services. CM Health is actively participating in the Falls Prevention Programme led by the HQSC. Evidence-based strategies are used to mitigate the risk of harm from falls, including assessment, nursing care, equipment, and environmental changes. A multidisciplinary group, led by the Professional Leader – Physiotherapy, reviews all falls reports and identifies common themes.

There were 12 other serious harm/ adverse events reported, with two resulting in a person’s death.

In response to these serious adverse events, CM Health has already made significant changes to our processes of care, to support clinicians in providing high quality care. One example involved changing the way in which critical laboratory results are displayed so that clinicians are alerted to extreme results. Another change involved a change of colour for the alert label of high risk medications and formalising a process for anaesthetists to check that high risk medications prior to administration.

The full Serious and Sentinel Events Report for CM Health 2012-13 will be available on our Counties Manukau website following the national release in November 2013.
System Level Measures - Development

System Level Measures (SLMs) evaluate the overall quality of a health system and reflect the performance of services provided across the continuum of care. These system measures are macro level indicators or ‘big dots’ of a health system, with cascaded measures (‘little dots’) at the management and clinical leadership levels that reflect the performance of discrete aspects of the system.

Reporting against these measures provides robust information to support progress toward, and achievement of, the CM Health ‘Triple Aim’ of improving population health, patient experience, and cost and productivity.

If our system is performing at the highest level, then it is likely to also be performing at the lower levels whose measures flow into the SLMs. These system level measures complement many more specific measures being reported at different levels within CM Health.

Furthermore, if results are not being achieved on SLMs, it is an indication of how and where processes need to be improved within our system.

Development process
The CM Health SLMs have been developed by Ko Awatea, based on four principles:

- Demonstrate and track performance of CM Health over time
- Provide comparisons of CM Health’s performance to other health systems
- Determine CM Health’s performance relative to CM Health’s strategic plans for improvement
- Identify further inputs to strategic and quality improvement planning.
Ko Awatea reviewed local and international frameworks to identify and select SLMs that align with the six dimensions of quality and reflect a continuum of care. For the development of the CM Health SLMs, Ko Awatea also built on quality and safety measurement occurring within CM Health, locally, and internationally.

**Future Focus:**

A monthly report will be produced from October 2013:
- This will outline CM Health performance on the SLMs and compare performance with benchmarks.
- A specific SLM will also be analysed or ‘drilled down’ on a monthly basis to determine the factors impacting performance, and for strategic and quality improvement planning.

**Selection of Measures**

The CM Health measures are categorised according to the CM Health Triple Aim, dimensions of quality and the setting in which each measure applies (Table 1).

<table>
<thead>
<tr>
<th>System Level Measures</th>
<th>CM Health Triple Aim</th>
<th>Dimension of Quality</th>
<th>Community Care</th>
<th>Hospital Care</th>
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</thead>
<tbody>
<tr>
<td>Life Expectancy at Birth</td>
<td>Population Health</td>
<td>Equity</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Childhood Immunisation Status</td>
<td>Population Health</td>
<td>Effective Equity</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Ambulatory Sensitive Hospitalisations</td>
<td>Population Health</td>
<td>Effective Equity</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Stratification of SLMs**</td>
<td>Population Health</td>
<td>Equity</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Emergency Department Length of Stay (6 hour pass %)</td>
<td>Patient Experience</td>
<td>Effective Efficiency</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Rate of Adverse Events</td>
<td>Patient Experience</td>
<td>Safety Effective</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Hospital Days During the Last 6 Months of Life</td>
<td>Patient Experience</td>
<td>Effective Efficiency</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Waitlist to Elective Surgery</td>
<td>Patient Experience</td>
<td>Effective Timely</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Acute Hospital Readmission Percentage</td>
<td>Patient Experience</td>
<td>Effective</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Hospital Standardised Mortality Ratio</td>
<td>Population Health</td>
<td>Effective</td>
<td>X</td>
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<tr>
<td>Un-enrolled Health Service Utilisation</td>
<td>Cost &amp; Productivity</td>
<td>Effective</td>
<td>X</td>
<td>X</td>
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<tr>
<td>Healthcare Cost per Capita</td>
<td>Cost &amp; Productivity</td>
<td>Efficiency</td>
<td>X</td>
<td>X</td>
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<tr>
<td>Staff Retention Rate</td>
<td>Cost &amp; Productivity</td>
<td>Efficiency</td>
<td>X</td>
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</tbody>
</table>

**CM Health System Level Measures, Dimensions of Quality, and Care locations**

Over the page is an example of how these System Level Measures may be presented as a Dashboard, and further work is underway to present the comparative data in a similar dashboard layout.
Quality, Safety & Experience of Care

Medication Safety Initiatives

The SMOOTH (Safer Medicines Outcomes on Transfer Home) Project

Winner of the Allied Health category and Overall Winner - CM Health Science Fest 2013

This was a 20,000 Days Campaign collaborative to reduce medication errors that can occur during transitions of care. Evidence suggests the incidence of adverse drug events following hospital discharge is as high as 11%.

The Safer Medicines Outcomes on Transfer Home (SMOOTH) service is a systematic approach to patient care at discharge. A pharmacist-led systematic discharge process has been shown to be highly beneficial to patient safety and integration of care at the secondary to primary care interface. An interventions package was developed to ensure efficient, reliable, accurate and standardised quality of care for patients at discharge and provided to each patient seen by SMOOTH to reduce variability and improve patient safety. The SMOOTH service is becoming an integral part of the discharge process - improving patient care and safety, and increasing collaboration between health professionals at CM Health.

Key Actions for the Project

- Identify general medical patients at highest risk of medicines related harm
- Develop a notification process to inform medical staff which patients required our service
- Develop a ‘discharge checklist’ of interventions to standardise pharmacist discharge service
- Ensure accuracy of medicines information at discharge
- Provide tailored patient education
- Communicate any issues to primary care colleagues

Results

- 764 patients experienced the new service (November 2012 – June 2013)
- 41% having at least one preventable error at discharge
- 174 of the errors found had the potential to negatively impact on length of stay.

Number of medication related errors per patient found by the SMOOTH team at discharge

- 6 errors, 4, 1%
- 5 errors, 14, 2%
- 4 errors, 9, 1%
- 3 errors, 29, 4%
- 2 errors, 68, 9%
- 1 error, 180, 24%
- 0 errors, 457, 59%
Electronic Medication Reconciliation

The Electronic Medication Reconciliation (eMR) process includes obtaining the “most accurate” medicine history and allergy/adverse drug reactions (ADR), that has been validated with the patient/caregiver on admission and documenting this in the electronic Medication History Form (eMHF). This is because at least one third of medication errors have the potential to cause patient harm.

Medication reconciliation has been shown to halve these errors. (Rozich JD, Resar RK. Medication Safety: One organization’s approach to the challenge. Journal of Clinical Outcomes Management (10):27-34).

Patient Medication Card communicating medication changes given to patients

Medication chart/clinical record are electronically reconciled and the medications used prior to hospital admission, together with medication changes which have occurred during the hospital admission, now pre-populate the Electronic Discharge Summary (EDS).

Medication reconciliation is prioritised to patients at highest risk using the Assessment of Risk tool (ART). Electronic medication reconciliation is now used across CM Health, on 20 wards, (550 adult inpatient beds) and the results are positive.

The Medication Reconciliation Table in the Electronic Discharge Summary showing information sent to GPs via the colour coded table in the Electronic Discharge Summary (EDS)

In General Surgery over 70% of high risk General Surgery patients now have eMR on admission. A software enhancement to enable automatic transfer electronic medication histories from outpatient clinics to the inpatient areas has been requested. In General Medicine, over 60% of high risk medicine patients have eMR on admission. The roll out of eMR will continue, to all CM Health adult inpatients.

Future Focus:
The learning from e-MR will be shared within the hospital environment, and further spread into the community through the My List of Medicines project collaborative with Canterbury DHB.
Other Patient Safety Initiatives

Harm from Falls – Prevention

There is an active focus on staff education, information and displays to highlight falls prevention. CM Health wards use MORSE, a risk assessment tool to determine which patients are at more risk of falls. This information is factored into developing the patients care plan. This year the Middlemore Hospital annual award for falls prevention was awarded to Ward 33, where a focus on hourly rounds by nurses ‘intentional rounding’, has achieved good progress in reducing falls.

CM Health’s average rate of falls with harm per 1,000 bed days is stable at 0.14.

The Northern region’s average for the 12 months to March 2013 was 0.94. Since March, the new average is 0.58.

There are a number of ways used to try and reduce falls, and the resulting harm for patients in hospital.

These include use of equipment such as lower beds to stop falls out of bed, electronic monitoring devices such as invisibeam, better lighting and reduction of clutter on wards. Providing patients with ‘sticky socks’ which grip the floor can reduce falls from slipping. We also have special hip padding for our elderly patients which can reduce the impact from falls. We are also actively supporting more patient-focussed care as a way to help prevent falls. Having family and relatives near at hand, particularly for very ill or confused patients can help keep loved ones safe.

Pressure Injuries – Prevention

A pressure injury is an area of damaged skin and flesh, sometimes known as a bed sore or ulcers, caused by staying in one position for too long, for example by prolonged sitting or lying. This can happen in the home, in the community and in hospital. They can develop quickly, and if not prevented or treated early, can create an open wound needing surgery or extended periods of hospital care.

CM Health’s average rate of hospital acquired pressure injuries per 100 patients is stable at 0.034 (or 3.37%).

There were no grade 3, 4 or ungradable pressure injuries for the period January – June 2013.

The Northern region’s average for the 12 months prior to March 2013 was 5.3%. Since March the new average is 4.45%.

Medical staff can help people at risk, and a prevention plan can include regular changes of position, and close checking of skins during nursing care. Wound Care coaches on the wards are helping educate patients and staff on prevention methods. An annual Pressure Injury Audit helps to identify services that are doing well and areas needing more attention in the hospital setting.
Central Line Associated Bacteraemia (CLAB) - Prevention

Central lines are used to support treatment and monitoring of extremely ill patients by inserting a catheter/intravenous tube into major blood vessels. They are often left inserted for some time, and have had a high risk of infection. A bacteraemia is a bloodstream infection that can create harm for the patient and require extended periods of hospitalisation.

The CLAB programme developed a standard process (“bundles”) for the insertion and maintenance of central lines to prevent the occurrence of CLAB.

Following successful implementation in our Intensive Care Unit (ICU), the bundle is now used in all parts of the hospital with either high volume or high risk in relation to central lines.

This programme has resulted in a step change in the number of CLABs outside of Middlemore ICU, from an average of almost 4 per month to 1.3 per month from March 2012 to August 2013.

In September 2012, a national programme involving 18 DHBs and 23 Intensive Care Units started, and the results have been very positive with a reduction in both the number and cost of CLAB infections and treatment reducing. Between April 2012 and March 2013 there 15 CLAB reported, without corrective action this could have been as high as 105 CLAB.

Venous Thrombo-Embolism (VTE) - Prevention

Every year over 100 patients at CM Health develop significant health-care associated VTE in the form of deep vein thrombosis (DVT), or pulmonary embolism (PE). DVT occurs when a blood clot forms in a vein, commonly in the leg, thigh or pelvis. If the clot travels to the lungs it can result in a blockage of the arteries of the lung (PE), which can cause serious harm, even death.

Medications which prevent clotting of the blood, including heparin and warfarin are used to treat and prevent VTE. Other measures to reduce the risk of VTE include early mobilisation of patients after surgery or severe illness and use of devices such as stockings to improve blood flow in the legs. In order to ensure that appropriate preventive measures are used, every hospital patient should undergo a VTE risk assessment.
In the last year, CM Health has introduced a new VTE Prevention clinical policy, and developed a VTE Prevention e-Module for clinical staff education. A quality improvement initiative to improve rates of VTE risk assessment was undertaken this year on a surgical ward.

This has achieved significant improvements in documented assessment for VTE risk, as demonstrated on chart audit. This initiative will continue and be extended to other wards over the coming year.

Work has also commenced to improve the accuracy of recording of the incidents of healthcare associated VTE so that we have accurate data to track the impact of ongoing quality improvement initiatives on the incidence of VTE.

CM Health staff also contributed to the development of the new National Clinical Guidelines released earlier this year. In May 2013, CM Health hosted the National VTE Prevention Meeting with attendees from around NZ. Activities included teaching sessions, case studies and presentations by Prof. Alexander Gallus, an overseas expert on prevention, diagnosis and management of VTE.

**Infection Prevention and Control - Preventing Healthcare Associated Infections**

The Counties Manukau community has a high incidence of Multidrug Resistant Organisms (MROs) from ESBL, Enterobacteriaceae and MRSA organisms. On any given day, around 15% of hospital patients will need to be treated for MROs. The high rates of MRO cases create a greater risk of cross-transmission between patients, increased need and demand for isolation care, and increased use of staff and consumable resources and associated costs.

The Infection Prevention and Control service works closely with all areas to manage this risk and follow Infection Control best practice. The team are also systematically checking that the daily care given ensures prevention of transmission. Infection Control staff provide regular feedback to staff about outbreaks and improvements.

The graph shows the progress on this challenge since January 2012.

The incidence of MRO cross-transmission in CMDHB by 1000 inpatient days

Our mean rate of MRO has dropped from 2.3 to 1.4 per 1,000 inpatient days since April 2012. There are 6 data points below the current mean, indicating a potential ‘statistically significant’ change is occurring.
Infection Prevention and Control - Hand Hygiene

Clean hands save lives and cleansing hands before and after contact with patients, procedures, and contact with patients environments is essential for preventing infections. CM Health is proud to be one of the District Health Boards in New Zealand to exceed the national target of 70% for hand hygiene practice determined by what is known as the Hand Hygiene Gold Audit.

CM Health has achieved the 70% target in both the March and June 2013 Gold Audits. CM Health is the only DHB in NZ to include Emergency Care services in the Gold Audit. In the last audit, three of the seven clinical areas audited achieved over 80%, and the Kidz First Medical service has achieved over 80% for the last 3 audits. CM Health aims to achieve 80% for its hand hygiene practice by June 2014.

It’s also important that patients, visitors and family/whaanau practice good hand hygiene, especially during time of illness and hospital admissions. There are hand hygiene stalls and gel dispensers at key points through the hospital sites, wards, toilets and lifts. Cleansing hands when entering the hospital to protect vulnerable patients and on the way out will help prevent the spread of infection.
Working with our Residential Care facilities

Falls and Pressure Injuries Prevention Collaborative

Over the past year, the Regional ‘Falls and Pressure Injuries Collaborative’ has focused on improving safety for older people. Regular coaching and learning sessions held with residential aged care facilities are generating positive results. The collaborative approach has enabled clinical staff from residential care and district health boards to be part of improvement teams focussed on reducing falls and pressure injuries in the residential care sector. Collaborative sessions have highlighted the improvements made in hospitals, aged residential care and community settings. This has enabled sharing of improvement successes and learning from what had worked, or not worked.

The Northern Regional ‘Falls and Pressure Injuries Collaborative’ was re-launched on 28 June 2013 with 60 people attending – including 44 attendees from 21 regional residential aged care facilities and staff from a private surgical hospital. The recently completed falls and pressure injuries change packages were presented as a resource at the learning session on 28 June, and will be hosted on the First, Do No Harm website.

Transfer Of Care – Yellow Envelope

Ensuring patients clinical information accompanies them when transferring between residential care and hospital can improve care and minimise delays for treatment. The ‘yellow envelope’ is being used by residential care, St John’s Ambulance and hospital staff to improve the transfer of key clinical information by providing a consistent process - with a check list of key information required, to ensure continuity of care. The checklist is completed on every resident who is transferred to hospital and again on discharge.

The system was rolled out across the Northern Region in March 2013, and is a very good example of acute hospitals and the residential care sector working together to spread effective interventions to that improve safety. The ‘yellow envelope’ will be evaluated in 2013/14 to see if any additional information is required on the envelope check list.
Continuous Quality Improvement activity – Service Highlights

Emergency Care: Better After-Hours Treatment of Heart Attacks

The best treatment for a heart attack is an urgent Percutaneous Cardiac Intervention (PCI) to remove the clot causing the heart attack. This procedure is undertaken in the Catheterisation Laboratory (Cath Lab) at Middlemore Hospital, however patients presenting after-hours (4.00pm to 8.00am) must be transferred to Auckland City Hospital for the procedure.

An audit at Middlemore Hospital’s Emergency Care department established that 82% of heart attack patients present after-hours. The transfer of patients to Auckland creates an additional delay of 60 minutes with only 17% of patients receiving treatment, after hours, within the 90 minute target.

To reduce delays, Middlemore Hospital Emergency Care is now leading a regional approach to the ‘PCI after-hours problem’, working in collaboration with St John Ambulance Service and with the support of the Health Quality Safety Commission (HQSC). Our challenge is to ensure that 95% of Counties Manukau patients, who present with an acute heart attack, receive primary PCI within 90 minutes, regardless of geographical location or the time of day.

A phased approach focused first on reducing the ambulance transfer time after-hours. Then, via HQSC funds, CM Health acquired ECG machines, and transmission capabilities for the St John’s Ambulances local fleet. This allowed the paramedic’s to use ECG, and transmit data via an iPhone to medical consultants at the Emergency Care department.

Results: The graph shows the graduated changes of improvement. The middle step shows the improvement made by holding the ambulance, and using the same ambulance for the inter-hospital transfer.

Having demonstrated that the process of reducing the “door-to-clot aspiration” times has worked at Middlemore Hospital, a plan to apply this at other DHBs has been proposed. An unexpected benefit of the transmission of ECGs results is that communication between the teams has significantly improved, even within normal working hours.

Positive feedback has been received from patients who have experienced the new process. One 41 year old patient stated they were “sorted in 30 minutes, and felt as good as gold ever since!”
**Radiology: Improving on Excellence 2012-2022**

The CM Health Radiology department was facing significant growth in referral numbers, from community, outpatient and hospital services, and challenges with capacity and work flow for the teams. As a consequence, referral wait lists and appointment wait times had grown to a clinically unacceptable level, particularly for community and outpatient MRI, CT and ultrasound scans. More recently, the Government has introduced mandatory wait time indicators for Diagnostic services, including Radiology.

In response to all these challenges, in 2012 the service established a comprehensive improvement plan. The Radiology service team agreed three priority aims:

- 95% of all outpatient and community patient referrals are completed in 6 weeks of the referral
- No patient is wrongly identified
- No clinical consumables will remain unused prior to their expiry date.

Following an intensive initial phase of improvement training, a culture of continuous quality improvement has successfully been embedded into the Radiology service. This was achieved through mentoring and experiential learning and by re-configuring the operational structure, so that each service now takes ownership of meeting the aims above.

This has resulted in:

- Reducing referral to scan waiting times, and referral waitlists.
- Achieving the national indicators for community / outpatient referred scans to:
  - CT scans – 85% now completed within 6 weeks.
  - MRI scans – 75% now completed within 6 weeks.
- Reduced waiting times for in-patients and improved patient experience.
- Longer routine operating hours – including evening scanning sessions.
- Accurate identification of patients - ensuring patients receive the right procedures.
- Improved access to Radiology scans for General Practitioners and their patients, including direct access to community Ultrasound services.
- Saving money and improved processes for using consumable stock.

![Target: 95% of accepted referrals for scans receive their scan within 6 weeks (42 days)](image-url)
Mental Health Services: Supporting Recovery

Relapse Prevention Plans are developed by patients in collaboration with their treating team, and can be reviewed every three months with their treating clinician. These plans take a patient and whaanau partnership approach, encompassing the Whaanau Ora concept. The relapse prevention plan also fits well with our Maaori and Pacific service models, in particular taking a more holistic approach to clinical documentation and collaborative care planning.

The Mental Health services teams have embraced Relapse Prevention planning - as part of good clinical practice which engages service users in their own recovery and resilience. We have a target of 95% of patients having an up to date relapse prevention plan, and achieved this target across all services for the first time during 2013.

In order to maintain this, team champions and quality audit processes have been implemented. Orienting new clinicians is also essential to maintaining the quality and enthusiastic approach to relapse prevention planning. An e-learning module is also available for new and existing clinicians. Monthly progress data reports of the up-to-date status and quality of plans is provided to all teams with a focus on quantitative information and feedback to highlight areas where improvements can be made.

Adult and Older Adult Community Mental Health patients and their whaanau who have been engaged with our services for over two years can expect to have a relapse prevention plan. For Child and Youth services, the expectation is for those engaged with services for one year or more.

Health of Older People: Support In The Community

The Community Geriatric Service (CGS) works with the community, Primary Care and Residential Aged Care settings to provide specialist geriatric services as close to the patient’s home as possible. The aim is to ensure patients’ identified needs are being met, while they remain living in their place of choice, and preventing avoidable hospital admissions.

- The Community Geriatric Service provides both Medical and Nursing support to Aged Related Residential Care (ARRC) Facilities, the Primary Health Organisations [PHOs] and also to clients in their own homes.
- This service also provides educational support to the Age Related Residential Care (ARRC) nursing staff.
- Clinical support by Geriatricians for General Practitioners (GPs), and Medication Reviews are also a major aspect for this service.

In 2012/13, the service was extended across the entire district including additional Nursing and Medical staff (Geriatricians from hospital services rotating to cover more community areas).

- The Nursing staff now total 5.8 FTE [6 Nurses], including a Clinical Nurse Specialist and 2 Specialty Nurses.
- The service can now provide Gerontology Nurse-led clinics in residential villages, with a focus on identifying Emergency Care admission risk factors and better linking the older person with the village Registered Nurses and their own Primary Healthcare Teams.

The enhanced Community Geriatric Service now reaches more ARRC facilities across Counties Manukau, and provides recommendations and education on interventions that help avoid hospitalisation of frail older people. Furthermore, the service has provided additional nursing assessments in clients’ homes, linking older people back with their Primary Medical Care team and assisting with education for General Practitioners and Primary Care Nurses in the specific health needs of older people.
School Dental Clinics

“Any child should be able to enter adulthood with pain and disease-free aesthetic, functional dentition and positive dental self-esteem”

The national strategy “Good Oral Health, for all, for life”, with its focus on community-based services, aims to ensure children have access to world-class dental care for years to come.

The strategy also promotes better access; extended opening hours; greater involvement of parents in their children’s dental care; a strengthened oral health workforce; and improved service provision for preschoolers and adolescents.

The services are more comfortable for children and their parents, are far quieter and better for staff to work in, and are clinically safer. Dental services are available in a model of flexible delivery – dental clinic or mobile dental van or transportable dental unit. Using mobile dental vans or units means that we can offer out-reach to communities where there is not the population size or available space for a dental clinic.

In Counties Manukau we have:
- closed 55 older part time school dental clinics
- built 19 new and modern dental clinics
- introduced a fleet of 18 mobile dental facilities to take Oral Health to the schools, community and Marae throughout our district
- now use over 131 school sites for mobile dental fleet, and a number of other preschool, Marae or community mobile dental sites.

We encourage and welcome parents to attend their children’s dental appointment - which is very different to the old model of care. Parents who have concerns about their children’s teeth can phone 0800 TALK TEETH (0800 825 583) to book an appointment at the most convenient dental facility. The Dental Clinics are open Monday to Friday 8.00am to the last appointment at 4.30pm. In future, there will be evening clinics and Saturday clinics subject to seasonal demand. We have 76 contracted dentists in Counties Manukau who can offer a mix of Dental Clinics across the region or Mobile Dentist services on-site at schools.
Working in our community

20,000 Days Campaign

The increasing demand on health system resources across Counties Manukau is driving the need for continuing improvements in the way that we keep our community healthy.

To meet the predicted forecast of a 5.5% increase in bed days, we needed to save 20,000 days by 9am on 1 July 2013.

In October 2011, the “20,000 Days Campaign” was launched. In May 2012, thirteen Collaborative teams from across the Counties Manukau health sector came together to contribute to the campaign’s aim of returning 20,000 well and healthy days to our community.

The methodology used is the Institute for Healthcare’s (IHI) Breakthrough Series Collaborative. Through the campaign journey, we have achieved many key successes and learnt a lot about essential collaborative components required to contribute to successful outcomes by supporting teams to test a range of new interventions.

Execution/ Results

Reached the target on 1 July 2013 at 9.00 am, saving 23,060 Days

- Each collaborative achieved their aims and measured the number of days saved
- Seven teams are implementing new services or changes permanently, to sustain progress made
- Four teams return to business as usual, with improvement established
- CM Health expertise in improvement methodology enhanced
- Projects have evidence and data to show their value and improvement, and the process created a measurement system that connects testing to tracking progress
- Costs have been saved through the days saved and improved efficiencies
- Oversight provided by the CEO, Campaign team, and the leadership, operational and measurement groups
- Learning cycles have provided greater understanding of systems of care
- Dashboard of campaign measures was reported monthly to wider Counties health sector.

Outcomes achieved by campaign collaborative teams

Reduced hospital admissions/ Length of Stay (LOS)

- Enhanced Recovery after Surgery (ERAS) - hips and knees
- Hip Fracture Care for older people
- Transitions of Care – setting a Goal Discharge Date (GDD)/ increased weekend discharge
- Cellulitis and Skin infections – care pathway for patients with simple abscess.

Increased Access to community support

- Better Breathing – community based pulmonary rehabilitation
- Very High Intensity Users (VHIU) – integrated multidisciplinary team care to reduce admissions
- Healthy Hearts – community based cardiac rehabilitation and education programmes.

Reduced Emergency Care Presentations

- St John Ambulance - low acuity patients transported and managed in primary care
Reduced harm to patients
  o Safer Medicines Outcomes on Transfer home (SMOOTH) - Prevented 447 medication errors at discharge
  o Reduced falls/complications from early Delirium with better identification and clinical management.

A comprehensive wrap-up booklet has been developed and can be downloaded at: http://koawatea.co.nz/campaigns/20000-days-campaign/

**Beyond 20,000 Days (Phase 2)**

To build on the improvement work already achieved, sixteen collaborative teams have been established across the sector in the next phase - known as “Beyond, 20,000 Days”. These teams will contribute to the campaign’s aim “to continue to give back healthy and well days to our community by 1 July 2014”.

The focus of the next phase for the campaign continues to achieve the aim by:
  o **building the will** - motivating health care providers to think beyond the status quo, and imagine a better system
  o **harvesting the ideas** - finding, cultivating or inventing new approaches for better patient care
  o **getting the results** - providing the support, methods and tools for teams to take action.

“What 20,000 Days Campaign has built is a reusable network of skilled, passionate and committed health professionals who have the knowledge, skills and methodology to bring about sustainable change across the health sector.”

Jonathon Gray, Director Ko Awatea

For further information/resources/videos about the 20,000 Days Campaign go to www.koawatea.co.nz
Campaign Dashboard

Actual vs Predicted Bed Days

Cumulative Bed Days Saved Since June 2011

Days between Dot Days

Dashboard Summary: The estimated cumulative bed day saving of 23,060 is a reflection of the difference between actual bed day usage and the predicted growth. This is a reflection of the system as a whole.

All charts have the baseline set by freezing the centreline and limits at June 2011 EC presentations and occupancy are showing special causes in February with lower than expected values. The Average Length Of Stay is also showing special cause with 18 of the last 19 months being lower than expected (below the historic centreline).

20,000 Days Campaign Dashboard

June 2013

(as at 9am 1st July 2013)

Comments: Admissions are stable and only normal variation exists

Comments: Cumulative bed day saving as at 9am 1st July 2013 is 23,060

Comments: The graph shows the difference between the Predicted and actual cumulative bed days.

Comments: There were no Dot Days in June. The last data point showed a special cause (238 days between Dot Days, currently 40 days since last Dot day)

Comments: Unplanned readmissions was stable and only normal variation exists.

Comments: EC Presentations are showing a special cause variation, with the last 8 months being below the expected centreline (lower than expected growth) – and February being outside the lower control limit

Comments: The Occupancy data shows a single special cause in February, since then the data has continued to show normal variation

Comments: ALOS is exhibiting special cause variation (as shown by the change in limits and centreline) 18 of the last 19 months I have had a lower ALOS than historically seen.

Version: 1.1
Date: 9am 4th July 2013
Health System Integration

Locality Development

 Counties Manukau is embarking on Health System Integration, a transformation programme to strengthening the Counties Manukau healthcare system through a more local and integrated patient experience.

CM Health is implementing a localities approach. To advance primary-secondary integration and improve patient outcomes, we’re transitioning services to enable care to be organised and delivered through four Locality Clinical Partnerships (LCPs).

The four LCPs are being established in Franklin, Manukau, Otara Mangere and Eastern. This is a five year programme. Year two of the programme began on 1 July 2013. Primary Care’s role is expanding, with CM Health services either shifting to localities or aligning with LCPs, or providing more support to primary care. Some home-based healthcare services have already transitioned to LCPs and changes for other CM Health services are under discussion.

Through a new results-based contract arrangement and a global budget, LCPs will have shared accountability for their locality. If LCPs manage to reduce acute hospital demand, the savings from this budget can be used for new innovative primary care services. The global budgets will be introduced within the next 12 months.

CM Health System Integration has a significant focus on patients with chronic illness, high risk and long term conditions - if we keep people healthy and managing their condition well, we will keep them out of hospital.

Pulling services, programmes and funding schemes focused on people who live with long-term conditions into one new, integrated programme will reduce overlap and inefficiencies, as well as improve the services we provide to these people.

Significant work and clinical engagement has already taken place to establish the new ‘At Risk Individuals’ programme to achieve this purpose.

A critical part of CM Health System Integration is to improve our processes, and the redesign of some services and service models is necessary. This service redesign work will include the introduction of shared patient records, changing workforce configurations (including using non-medical staff more effectively), tele-health and virtual clinic initiatives.

This programme will lead to a range of benefits including:

- Improved patient experience
- Improved patient health outcomes
- Flattened demand for acute or unplanned care
- Improved capacity and design of primary and community care services
- Improved management and health outcomes of people who live with chronic illnesses
- Better alignment of service, staff and financial resources to population health outcome priorities.
Ensuring Quality Care in Age Related Residential Care

CM Health is responsible for contracting with providers of rest home, dementia hospital and psycho-geriatric level care delivered in a residential-care setting to provide services. Health of Older People Programme Managers from CM Health are responsible for ensuring that all facilities meet and sustain the mandatory Certification requirements, and for managing any reported incidents and complaints received about residential care providers. They ensure that complaints are investigated, any issues identified and an appropriate action plan is developed.

Residential care certification

Like the CM Health hospital services, all Age Related Residential Care (ARRC) facility providers are required to hold Certification to the NZS8134:2008 Health and Disability Services Standard, and they must have this to be able to hold an ARRC Agreement. The integrated certification and contract audit is jointly managed by DHBs and the Ministry of Health HealthCert services.

In the Counties Manukau district, we currently have:

- 42 contracted facilities, providing approximately 2,200 beds at rest home, dementia, hospital and psycho-geriatric levels of care.
- All 42 providers have current Certification, 4 for two years, 34 for three years, and 4 attained four year certification.

Improving assessment and care planning in residential care

During 2013, the Health of Older People team has been working closely with Age Related Residential Care (ARRC) facility providers to support implementation of the InterRAI LTCF tool. This is a comprehensive, internationally validated electronic clinical assessment tool; selected by the Ministry of Health and has been rolled out on a voluntary basis by providers since mid-2011. From July 2015, use of the InterRai LTCF assessment tool will be mandatory for all providers of Aged Residential Care. InterRAI feedback sessions, the ARRC Strategic Forum and support to facilities completing staff training have highlighted and addressed issues.
Developing Facilities for the Future

Clinical Services Building (CSB): new Operating Theatres and Sterile Supply

Operating theatres

The opening of the Clinical Services Building (CSB) from 2014 will see new Operating Theatres opening in February 2014. The commissioning of new Operating Theatres to support the projected increases in activity was one of the key drivers for building the CSB. Careful design has enabled the grouping of specialties resources and staff and ensures theatres are “fit for purpose” over the next generation.

The new Operating Theatres are located on CSB level 2, and have been divided into two pods of 6 operating theatres and a third pod of 2 theatres. Each of these pods has a shared centrally located sterile store room and equipment store rooms / spaces. Pairs of theatres share scrub bays and set up rooms which are designed to improve efficiencies in theatre throughput.

The new theatres are larger (range from 55-60m²) enabling space for complex cases. The Operating Theatres are supported by the latest technologies in procedure lights, service pendants (that keep all leads off the ground) and an audiovisual system that can send images / data / information to various monitors within the theatre.

Also located on this level are the new Post Anaesthetic Care Unit (PACU) and the Theatre Admission and Discharge Unit (TADU). This allows ease of access from the wards and for patients and family members. Family/whaanau and visitor space has been incorporated in design, to support our commitment to delivering Patient and Whaanau Centred Care.

Sterile Supply (CSSD)

The new CSSD (Sterile Supply) in the Clinical Services Building (CSB) will open also in February 2014, and is located on level 3 of the CSB. Dedicated lifts will supply surgical instruments to / from the Operating Theatres, and a dedicated lift from the CSSD Sterile Store will send sterile packs directly to Operating Theatres.

The new CSSD is significantly larger than the current Middlemore Hospital site facility and has a range of new equipment, including automated equipment which will process items from decontamination right through to the Sterile Store. Automation and monitoring systems means that repetitive handling including lifting and bending is minimised for staff.
Pukekohe Hospital: Services Close to Home

CM Health has been working to ensure that services can be provided as close to an older person’s community as possible, and to ensure that older people are supported to remain independent for as long as possible. Providing Assessment, Treatment and Rehabilitation facilities at Pukekohe is helping to achieve that goal.

The Pukekohe Hospital Aged Care unit ceased admitting long stay patients in January 2012, and has completed a 12 month pilot of 10 Assessment, Treatment and Rehabilitation beds in the unit. The pilot commenced in April 2012, with the Aged Care Unit renamed the Pukekohe Rehabilitation and Care Unit.

The aim was to support patients requiring sub acute in-patient rehabilitation to receive this within the Franklin community, and to avoid unnecessary admissions to Middlemore Hospital.

The pilot successfully introduced a rehabilitation model of care, supported by staff education modules and changes to units systems and procedures.

A new staffing model supports the model of service delivery. The Unit is General Practice led, with regular visits by a Specialist Medical Officer and a multidisciplinary allied health team on site. Clinical leadership and coordination was enhanced with the appointment of an Associate Charge Nurse and an Allied Health Section Head.

There has been a reduction in the number of admissions to the Middlemore AT&R Unit from Franklin locality, and increasing use of the Pukekohe facilities.

Percentage of patients admitted to AT&R MMH from the Pukekohe/Franklin/Papakura domicile

Percentage Occupancy of 10 AT&R Beds at Pukekohe Hospital
Priorities for Improvement in 2013/14

Overall, our priorities for improvement for the coming year will need to support our strategic programme and/or to be focussed on increasing our capacity to meet major current or imminent challenges.

Those challenges include the combination of rising costs, increasing financial constraints and escalating targets and demand, threatening the affordability and sustainability of services. Improving the quality and safety of healthcare becomes even more important in those circumstances, as it is critical to ensure that every health dollar spent is as effective as possible and that waste is minimised.

Some priorities for improvement are extensions of existing work, such as programmes to reduce acute demand, to further improve elective surgery performance and to continue increasing community access to diagnostic imaging services. Others are still being scoped, such as work to improve access to colonoscopy and enhance specialist services delivered in hospital and community outpatient settings. Others, such as the Patient Safety in Primary Care and Community services programme have been outlined earlier sections as ‘future focus section.’

The priorities we have outlined below are four of the major ones where work is already underway. More will emerge over coming months.

The “First 2,000 Days of Life” strategy

The ‘First 2,000 Days’ strategy will be one of our priority population health initiatives. The strategy aims to join up all the people, projects and services that work in the first 2,000 days of life - from preconception, pregnancy and postnatal, to early infant and child health and up to 5 years of age. Many of the risk factors for long term conditions and poor health later in life can be reduced through joined up and organised interventions in Maternity Care, Primary Healthcare, Well Child and Child Health Services.

We aim to reduce the risks of pregnant women and their babies/children being exposed to tobacco, becoming obese and suffering the poor health impact of obesity, suffering preventable conditions or poor health due to late/not accessing services and care during those first 2,000 days and having low health literacy because our messages and health education were inconsistent or not evidence based.

Our First 2,000 Days Strategy aims to achieve the following vision:

\textit{That children living in Counties Manukau are valued and nurtured from before conception through early childhood to when they start school}

The three work-streams that aim to realise this vision will address:

- Planned and healthy pregnancy (including Maternity Care Review project)
- Improved Infant and Maternal Nutrition
- Improved Parental Support and Attachment

2012/13 has been focused on planning and reviewing the clinical evidence to underpin our priority areas.

2013/14 will be the year of increased and focused investment in vulnerable mothers and their babies. To achieve this, we will engage our wider child, maternity, primary healthcare sectors to identify opportunities to join up our existing activity and collaborate on improvement initiatives.
Child Health: Reducing the Incidence of Rheumatic Fever

Rates of Acute Rheumatic Fever (ARF) are high in New Zealand compared to other developed countries with the highest rates of the disease seen in Maori; Pacific aged 5-14 years. Reducing the rate of ARF has been identified as a Better Public Sector (BPS) target to reduce the incidence of ARF by two thirds to 1.4/100,000 by 2017 (all ages). The Ministry of Health developed a Rheumatic Fever Work Programme which will be funded in DHBs with high rates of ARF. Counties Manukau has the highest number of cases of ARF annually in New Zealand. For the national target to be achieved, success in Counties will be critical.

Mana Kidz

During 2012/13, sore throat swabbing services have been established in 52 schools as part of Mana Kidz. A further school, Mountain View will start in February 2013 at request of the school. Mana Kidz delivers Primary Care services in primary/intermediate schools to improve access for children. For these schools, it is integrated with the traditional Public Health Nurse Service from Kidz First. The service is provided to schools assessed as having students at highest risk of getting acute Rheumatic Fever.

The Ministry of Health has recently confirmed funding for throat swabbing services in another 8 schools in Papakura. The National Hauora Coalition (NHC) is the lead organization for the Mana Kidz programme on behalf of a wider child health alliance forum (CHAF-CM). This includes representatives from GAIHN, National Hauora Coalition, Alliance Health+, East Health, East Tamaki Health Care, ProCare, a number of NGOs, Papakura Mare, Mangere Community Health Trust, Health Star Pacifica, CM Health, and the University of Auckland.

Primary Care

We are working with Primary Care to promote and make easily accessible the National Heart Foundation Sore Throat Guidelines. The guidelines are now available electronically on Healthpoint, and a number of education sessions for clinicians will be held during 2013/14. The Northern Regional Network is working with the Ministry of Health to develop e-learning and audit tools. The Ministry of Health is providing funding for free access to sore throat assessment and treatment for children aged 4-19 years presenting in primary care. An implementation model for this is now under development.

Auckland-wide Healthy Home Initiative (AWHHI)

The Ministry of Health has contracted National Hauora Coalition and Alliance Health Plus to provide a housing referral and advocacy service for children and young people at risk of developing ARF who will be referred from the school based programme and Kidz First services. This programme will offer insulation, minor repairs, curtains and possibly heating sources to those who qualify for support.

Future Focus

One of the requirements of the Rheumatic Fever plan is to identify and follow-up known risk factors and system failure points in cases of rheumatic fever.

- The Ministry of Health is expecting that at least 20 cases are reviewed annually. This will trace the back through the patient journey and identify any points where the health system could have intervened to prevent the case of ARF. This will require the review of entire systems of support, including the school-based services as well as involved primary care and hospital services.

- How such a review will be undertaken will require careful consideration as well as specific resource to complete. Planning for this is underway.
**Surgical and Ambulatory Care: Improving Elective Services**

In the 2012/13, CM Health, along with all other DHBs, faced a significant challenge to meet the Ministry of Health’s elective health targets and indicators.

The current targets are:

- By 30 June 2013, a waiting time no longer than 5 months (150 days) from acceptance of referral to a First Specialist Appointment (FSA), and no longer than 5 months (150 days) waiting time from offer and acceptance of treatment to delivery of treatment.

- By 31 December 2014, a waiting time no longer than 4 months (120 days) from acceptance of referral to a First Specialist Appointment (FSA), and no longer than 4 month (120 days) waiting time from offer and acceptance of treatment to delivery of treatment.

By the 30 June 2013 at CM Health, the “no more than 150 days” target was achieved for both elective FSA and Treatment. Services are now focusing on achieving the “no more than 120 days” by December 2014. Just doing more of the same is not going to achieve the step increase required to meet these next timelines. Innovation in the way we work and the way we manage our elective workload is required. To achieve these changes, whole of system approach is needed.

Our Surgical and Ambulatory Care services have commenced two programmes of work in elective services. These are a Delivery Redesign of Elective Services (DRES) programme and a plan to Reduce Outpatient Follow-up Visits by 20,000. These will enhance the patient journey, deliver services in a clinically appropriate timeframe, and develop a financially sustainable service.

**Delivery Redesign of Elective Services (DRES) programme**

The DRES programme consists of five projects:

1. Enhance the effectiveness and efficiency of Primary to Secondary Care interface across elective services, particularly in Otorhinolaryngology (ORL), Orthopaedics, and Hands.
2. Develop and implement elective service delivery redesign in General Surgery – focusing on patient pathways for varicose vein, bariatric and PR bleed intervention.
3. Develop and implement elective service delivery redesign for Plastics elective services, focusing on patient pathways for breast reconstruction.
4. Develop and implement a regional Urology elective service.
5. Expand the philosophy and practices of Enhanced Recovery after Surgery (ERAS) to other appropriate pathways and surgical specialties, including supporting implementation in other DHBs.

Good progress has already been made in commencing each of these projects.

**Reduce Outpatient Follow-Up Visits by 20,000**

CM Health wants to provide more convenient patient care, while maximising the opportunities for services in Localities, and free up existing hospital capacity to accommodate volume growth. We have launched a programme for 2013/14 with the aim of reducing follow-up outpatient appointments, and changing the way that people receive this care.

The programme will involve working with Clinicians to:

- review the existing processes for managing appointments
- review the current follow-up clinic criteria
- develop an alternative workforce for some clinics (e.g. nurse, allied health or technician led clinics)
- develop the use of Virtual Clinics (using tele-health or videoconference options with primary care)
- extend the use of GPs with Special Interest (GPwSI), to undertake some surgical procedures in GP facilities and outpatients settings
- designing new models of care for community and outpatient services
moving some clinics into alternative locations (e.g. at GP or community sites, or via Locality services).

**Maternity Care Services Review**

In 2011, the national *Peri-natal and Maternal Mortality Review Committee* Annual Report identified that women in CM Health experienced greater rates of peri-natal death than other Districts.

In response, in 2012 the Counties Manukau District Health Board commissioned an independent review of our maternity care system to address those concerns and identify improvements. The independent panel found that CM Health’s peri-natal death rates, when adjusted for deprivation and socioeconomic risk factors, were not significantly greater than other Districts.

The panel proposed actions for improving the way Maternity Care is provided. To action those recommendations, a project was established in December 2012.

To date, we have:

- Established Consumer Panels and workshops. These comprise Maaori, Pacific, young mothers and women from vulnerable circumstances, and will help us to gather feedback on how we can overcome issues regarding early maternity services engagement, health literacy and improve pregnant women’s experiences of care.

- Established the Maternity Quality and Safety Governance group, as part of the Ministry’s of Health’s national maternity quality improvement programme. This includes both CM Health employed and self employed maternity care providers.

- Committed to be an early adopter of the new national Maternity Information Clinical System which will enable information sharing between secondary and primary maternity service providers. CM Health continues to be involved in the design of the new system.

- Identified a number of Workforce Development initiatives to support new Graduates into self employed midwifery practice.

A strategy and action plan will be consulted and agreed with stakeholders and put into action during 2013/14. We will also be consulting with the community on a draft vision and strategy.

Our draft vision for maternity care is that:

Every pregnant woman will have the best opportunity possible to birth a healthy baby by:

- Engaging before 10 weeks with a Lead Maternity Carer,
- Being well informed,
- Experiencing quality, connected, well coordinated care, as part of the mother and baby wider healthcare continuum.

These actions and updates on progress will be published in the Maternity Review Action Plan [Maternity Care Services](#)
Ko Awatea: New Beginnings

Ko Awatea facilities opened on 21 June 2011, and established a joint venture education partnership between Ko Awatea and the University of Auckland, Manukau Institute of Technology, and Auckland University of Technology. Students from Auckland University of Technology (AUT), Manukau Institute of Technology (MIT) and The University of Auckland began using the centre from August 2011.

Ko Awatea has hosted a large number of local, national and international visitors, and has also built a strategic and close working relationship and partnership with the Institute for Healthcare Improvement (IHI).

Ko Awatea partnership with IHI means that healthcare professionals in New Zealand can receive training on the IHI’s Model for Improvement and develop new skills to drive healthcare initiatives. In addition, Ko Awatea has international partnerships with:
- Oxford Centre for Healthcare Transformation. Its programmes and supporting resources are the brainchild of Sir Muir Gray and his organisation, Better Value Healthcare.
- Public Health Wales, NHS Wales. The publically funded National Health Service of Wales providing healthcare to some 3 million people in Wales.
- There is a national partnership in place with the Health Quality Safety Commission (HSQC).

Capability Building

Ko Awatea has developed a capability framework, aligned to the Kaiser Permanente model, to help develop health professionals to deliver quality services to our community.

Programmes

The following programmes are examples of the training that has been delivered over the last two years, in partnership with the International Health Institute (IHI).
Improvement Advisor Programme: The programme enhances learning already gained around methodology such as LEAN.

Improvement Science in Action: This programme was designed to enhance perspectives on improvement science and advance capabilities as leaders in this critical discipline.

Innovation College: The programme was focussed on building and extending the capacity of participants’ organisations to incubate innovative ideas and test these concepts quickly and efficiently.

Patient Safety Programme: Developing and maintaining a comprehensive safety programme is essential to the long-term health of our organisation and healthcare system.

Breakthrough Series Programme: The programme helps organisations adapt and apply proven methods of system improvement. This is the model that was used for the successful 20,000 Days Campaign.

Leadership Academy

The Ko Awatea Leadership Academy is designed for emerging multi-disciplinary leaders in health care (clinical, managerial and support staff). The programme is aimed at building leadership capability throughout our organisation and creating a pipeline of highly capable, innovative and engaging leaders who have the skills and passion to lead health system transformation into the future.

The Academy was launched in May 2013 with the Fundamentals of Leadership Course. The response was fantastic, and what really stood out was the broad range of professions, cultures and levels of experience that applicants had. The course consisted of 12 sessions held over six days with topics ranging from finance and human resources to strategy and systems theory, diversity and reflective practice.

The sessions were delivered by respected external experts including Nigel Latta (writer and forensic psychologist), Robin Gould (Author and Associate Professor of Health Policy at Otago University) and Pat Sneddon (Chair of the Joint Venture Partnership) paired with some of our own experts from CM Health.

The Fundamentals of Leadership Course was a pre-requisite to the more intensive part of the Academy, the Core Leadership Development Programme. This will be run over the next 8 to 10 months and provide participants with an intensive leadership development programme. Participants from the Fundamentals of Leadership Course and the Aspiring Leaders programmes have been invited to apply for the Core Leadership Development Programme in September 2013.

Research Office

The Research Office at Ko Awatea is responsible for ensuring that all the clinical research happening within Counties Manukau health sector complies with local, national and international research requirements. The Research Office team provides a wide range of support services to researchers. This includes advice on obtaining local and ethical approvals, protocol development including design and analysis, statistical support writing, and identification of funding opportunities.

**Between 1 July 2012 and 30 June 2013**

187 research projects were approved to proceed, compared to 125 approved to proceed in 2011/2012 - a 50% increase.

During 2013, the Research Office has provided presentations to support the development of research skills and capability in Counties Manukau, including: Planning, Undertaking and Writing Up Research; An Introduction to Conducting Audit; and An Introduction to Research Office Support.

The Research Office has also worked with the Auckland University of Technology and the Faculty of Medical and Health Sciences at the University of Auckland to identify additional ways of supporting research Counties Manukau Health services and to build research collaborations.
The Research Office launched the Tupu Research Fund at the end of 2012, with the first awards being announced in 2013. The Tupu Research Fund is a CM Health funded grant aimed at supporting new and emerging researchers to gain research experience, support experienced researchers in making applications to large external funding bodies, and facilitating dissemination of research findings.

**Health Innovation Hub**

The Health Innovation Hub is focussed on the commercialisation of health ideas either generated within its partner district health boards in Auckland and Canterbury (WDHB, ADHB, CMDHB and CDHB), or supporting clinical validation of products generated by industry in our DHBs.

On average, at CM Health, the Hub reviews 5-10 new ideas per month. Those ideas that require more intensive review due to commercial viability (Stage 1) roughly equate to 2-3 good ideas per month. In support of innovation at CM Health, the Hub funded the Innovation Poster award of $1,000 at the Annual Science Fest. CM Health clinical staff members have been involved in testing new approaches to improve quality and safety. For example, to aid better identification of patients having blood tests; exploring the use of cellphones to scan/read wristband barcodes.

There will be a continued focus on building capability for innovation through a formal series of innovation modules which will be available to CM Health and staff across New Zealand and Australia. This year, over 130 staff participated in innovation capability building sessions through the Innovation College run by IHI.

The Health Innovation Hub will continue to build on its good start on the commercialisation of new ideas and will continue to build new relationships with industry. Projects with merit will continue to be developed through the Hub’s 4 staged commercialisation pathway. Presently, CMDHB has 14 projects at Stage 1 and 2 projects at Stage 2.

The Hub is delighted with the recent selection by CM Health of Dr. Matt Taylor, Anaesthetist, as the clinical secondee from September 2013. Dr Taylor has a strong interest in supporting industry involvement with CM Health for new product development.

**Asia Pacific Forum on Quality Improvement in Healthcare**

In September 2012 we partnered with the Institute of Healthcare (IHI) and the Health Quality and Safety Commission and held our first annual conference at Sky City Convention Centre. There were over 900 delegates from 16 countries. The programme was varied and comprehensive with speakers from the US, UK, Alaska, Singapore, Australia and New Zealand.

Ko Awatea is again partnering with the IHI to present the APAC Forum at Sky City from the 25 – 27th September 2013. [www.APAC-Forum.com](http://www.APAC-Forum.com)