

AUCKLAND DISTRICT HEALTH BOARD

# Quality Account

2013 / 2014



**AUCKLAND**  
DISTRICT HEALTH BOARD  
*Te Toka Tumai*









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# Foreword

We are pleased to introduce the second Quality Account for Auckland District Health Board. This document profiles some of the quality initiatives undertaken during the financial year 1 July 2013 to 30 June 2014. Before we make comment on the year in review it's important to define what quality means for our organisation.

We define quality as the provision of care that is safe, effective, efficient and equitable, and which also provides a positive patient experience. As we pointed out last year in our inaugural Quality Account, safe and effective care is what's expected of healthcare providers. However, equally important is the latter point, the patient experience, and this has been a key focus for us during the year.

During the year in review, we can report a number of quality healthcare highlights including:

- achieving all six national health targets (one of only two DHBs in the country to do so)
- achieving two of these in the community with the support of primary health organisations:
  - the heart and diabetes checks result of 92% was the highest in the country
  - the better help to support smokers to quit result was 100% in the community and 97% in the hospitals - both results exceeding target
- developing the joint Pacific Health Action Plan, 'Our Health in Our Hands' with Waitemata DHB.

- achieving 76% hand hygiene compliance
- saving 10,000 bed days in our General Medicine division of Auckland City Hospital
- reducing elective procedure cancellations due to 'no bed available' by 90%
- vaccinating 75% of all staff against seasonal influenza – the highest rate of clinical vaccinations in the country.

During the latter half of the 2013/2014 year we launched a refresh of our organisation's values, which we called 'At our best'.

Our current values (innovation, effectiveness, respect and integrity) were set by the executive team more than ten years ago and we were keen to update them by incorporating the views of not only our staff, but also those of patients, families, whānau and our wider community. Moreover, rather than focusing just on behaviours, we wanted to identify a set of behaviours that describe how we do things.

Consistent with a focus on patient experience, the objective throughout the 'At our best' process was considering *how* we deliver care rather than *what* we deliver.





So what do values have to do with clinical performance and quality? There is plenty of evidence to show that hospitals with staff who are more engaged in their work have higher patient experience scores, and hospitals with better patient experience scores have better clinical outcomes.

When we are at our best we know we provide a great experience for our patients and their whānau. We also know from feedback that our patients' experience is not consistently as we would like it to be. Some patients tell us they don't always feel listened to, we leave them waiting and we don't involve them as much as they would like.

To help us be at our best consistently, we set out to listen as hundreds of staff, patients, whānau and provider partners told us what a good experience looked and felt like to them.

We set up a three-prong programme comprising *In Your Shoes* (to collect patient stories and ambitions), *In Our Shoes* (to collect staff stories) and *In Providers Shoes* (to hear what our partners think of us). We ran interactive sessions with staff to talk about what makes a good day and a bad day at work and sessions with patients so our staff and management could listen to our patients' and families' experience of the care we give.

The outcomes of this process will help us to develop a shared set of values that resonate with everyone and describe the quality of care we all aspire to. We look forward to sharing the results in next year's Quality Account.

**Dr Lester Levy, CNZM**

Chair  
Auckland District Health Board



We invite you to read and enjoy learning about the initiatives taking place within Auckland District Health Board. Our quality journey is a continuous one and we hope you are as excited as we are about the changes that have taken place already and those in the planning.

**Ailsa Claire, OBE**

Chief Executive  
Auckland District Health Board





# A snapshot of our performance

*For the year 1 July 2013 to 30 June 2014.*

We are proud that we fully achieved all six national health targets for the period April to June 2014, one of only two district health boards in the country to do so.

## Healthier communities



Achieved two key national health targets with the support of the public health organisations (PHOs) at the end of June 2014: *heart and diabetes checks* (92%, the highest in the country) and *better help to support smokers to quit*.



Developed the joint Pacific Health Action Plan with Waitemata and Counties Manukau district health boards (DHBs).

## Keeping our patients safe

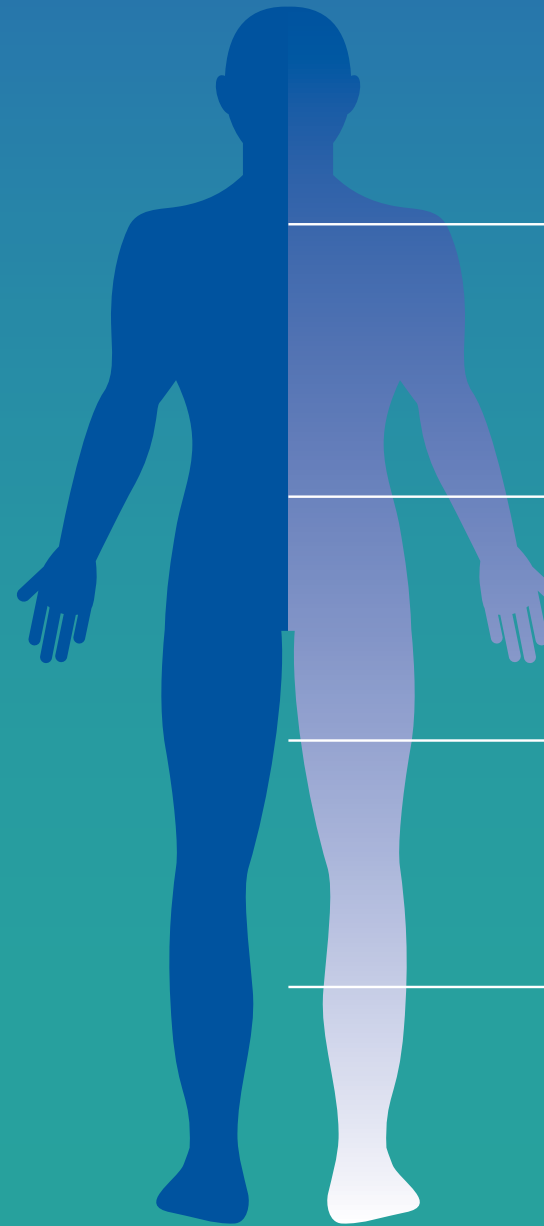
A 50% reduction in hospital-acquired pressure injuries.

Rate of ventilator-associated pneumonia (VAP) infections reduced by 40% in a six-month period – down from 21.3/1000 ventilator days to 12.8/1000.

76% hand hygiene compliance achieved.

New process piloted for managing ESBL-E.coli, resulting in an extra 18 adult single-room beds available each day.

75% of all staff vaccinated against seasonal influenza (includes 75% of all staff with direct patient contact).





## Better quality care and patient experience



86% of outpatients rated their overall care as Very Good or Excellent in the six months to June 2014.



Our clinicians had more than 2500 Advance Care Planning conversations with the public. And the *Conversations that Count* poster won the co-design poster award at the APAC 2014 conference in Melbourne.



Built the new Northern Regional Haematology and Bone Marrow Unit (Motutapu Ward) with the help of feedback and input from patients, their families and staff.



Introduced ERAS (enhanced recovery after surgery) for colorectal and gynaecology patients, reducing their overall length of stay and getting them home faster.



Collaborated with AUT's School of Art and Design to open the Design for Health and Wellbeing Lab, which has seen students designing solutions for healthcare problems in Auckland City Hospital.

## Creating better value for you



Now testing 87% of eligible patients for iron deficiency, up from 10%.



Average number of patients staying overnight in hospital beds at a four-year low.



Saved 10,000 bed days and met the Ministry of Health's *shorter stay in ED* Health Target.



Rolled out Advanced Releasing Time to Care programme to 28 wards, with one ward (cardiology, ward 31) recording 77% direct care time.

## Links to other documents

This Quality Account covers the period 1 July 2013 to 30 June 2014 and is aligned with our Annual Plan, our Statement of Intent and the Northern Regional Plan, copies of which are available on the Publications page of our website [www.adhb.govt.nz](http://www.adhb.govt.nz)

## What is a Quality Account?

A Quality Account is a type of annual report produced by health and disability service providers, like district health boards (DHBs), that focuses on the quality of the services provided. It is designed to provide the public with a clear and concise indication of the health and quality outcomes being delivered.

## The team behind this Quality Account

A project team led by Sue Waters, our Chief Health Professions Officer, was responsible for the development of this document. The team would like to thank the staff who took the time to provide information about their particular project or initiative; we recognise you have important day jobs and your time was appreciated.

The project team included: Dr Andrew Old, Chief of Strategy, Participation and Improvement; Dr Andrew Jull, Nurse Advisor, Quality and Safety; Dr Colin McArthur, Medical Advisor, Quality and Safety; Bruce Levi, General Manager Pacific Health, Waitemata DHB/Auckland DHB; John Paterson, Group Manager He Kamaka Waioara Māori Health, Auckland DHB/Waitemata DHB; Mark Fenwick, Senior Communications Advisor; Rachel Hill, project manager; and Carley Young, writer/editor, Ten Four Communications.

This year we had active representation from our Māori and Pacific health teams and are pleased to include their improvement stories.

## Have your say

We want to know what you think of our Quality Account. Your feedback is important and will help us make improvements for next year. You can let us know what you think by emailing [qualityaccount@adhb.govt.nz](mailto:qualityaccount@adhb.govt.nz) or you can write to the Chief Executive Officer, Auckland District Health Board, Private Bag 92189, Auckland Mail Centre, Auckland 1142.

A copy of our Quality Account is available on the Publications page of our website [www.adhb.govt.nz](http://www.adhb.govt.nz)



# Areas for improvement

We work hard to deliver the best possible healthcare, but we know there is always room for improvement. During the reporting year there were areas where we did not do as well as we would have liked and this section acknowledges these and provides some context. Particular areas of concern were falls, pressure injuries and management of data.

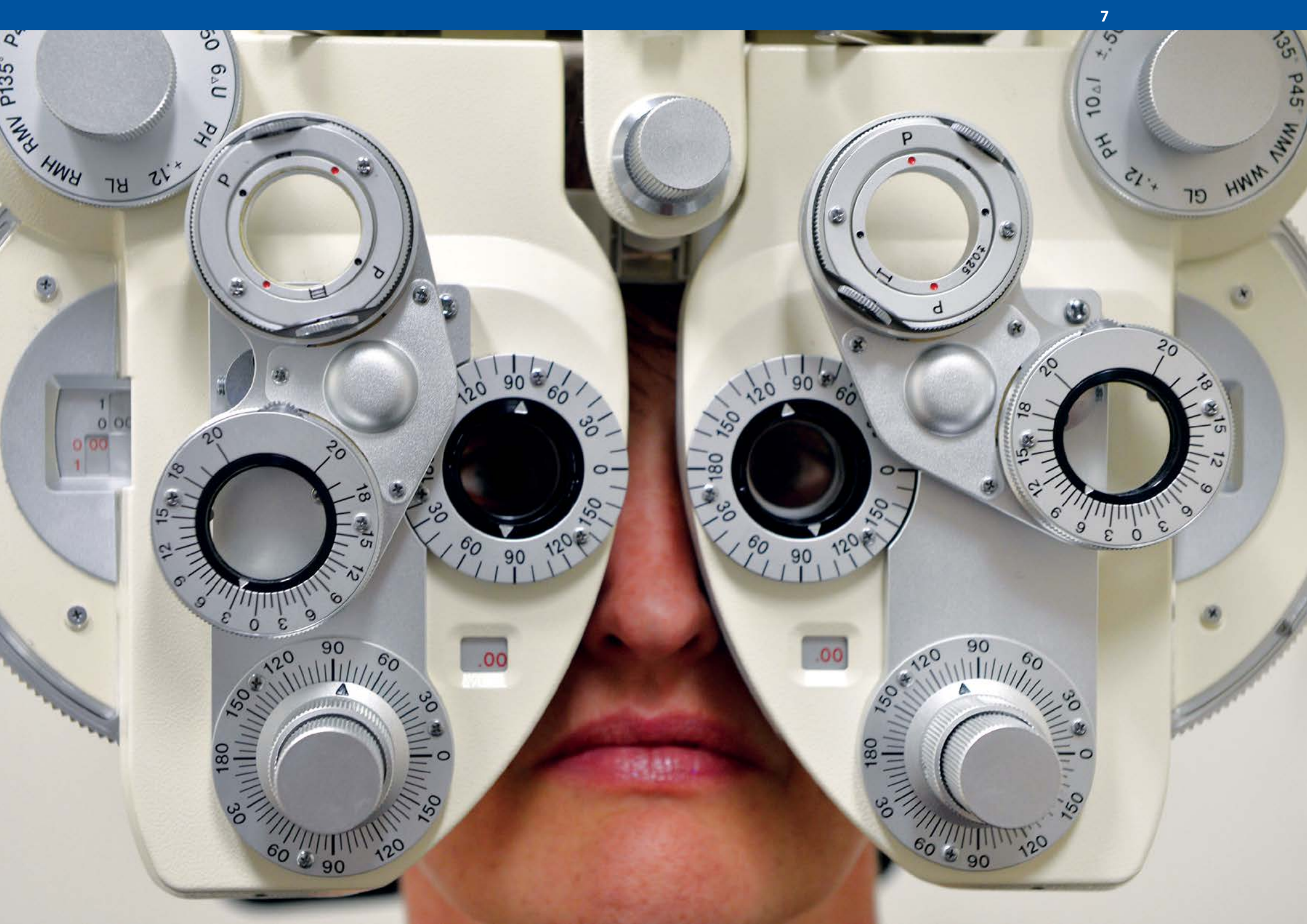
**Falls** remain an area of continued attention at Auckland DHB. In the reporting year we launched a falls concept ward in Older People's Health to test bed falls prevention initiatives. Several of the initiatives are now being rolled out to other Older People's Health wards and will also be considered for implementation in other areas across the organisation. You can read more about the falls prevention initiatives in the Future focus section.

Like falls, **pressure injuries** also remain an area of continued focus. Although we have seen a 50% reduction in hospital-acquired pressure injuries, the vast majority are less severe types (reddened skin). We are increasing the focus of our efforts on case finding (targeting) more severe injuries in order to learn where we can do better. In other words, we are actively looking for, reporting and investigating all hospital-acquired pressure injuries.

We are acutely aware that we need to improve the **management and use of data**. As New Zealand's largest healthcare provider, we produce significant quantities of data related to our patient care, our workforce, our financial performance and many other areas. The current challenge is to translate this data into meaningful information that

enables the organisation to focus effort and action on the right things at the right time. To improve quality and accelerate change, we recognise that improving how we use the data we have is vital.

Information that supports and tests assumptions has been key to engaging and focusing both clinical and non-clinical teams. We have a work programme underway to define the information that our services require and develop the reporting and analysis platforms to be able to provide this in a timely, accurate and meaningful format. We are aiming to standardise measurement, where appropriate, to provide consistency in how we measure and report on how we are doing, but also want to retain some level of flexibility to cater for the individual requirements of the various departments. You can read more about our data initiatives in the Future focus section.





# Our community

More than 470,000 people live in the Auckland District Health Board region and this number is predicted to grow by 19% or 89,000 more people by 2026.

The population is diverse and has varied health needs, with cancer and heart disease remaining the biggest health problems for our district.

Our aim is to see all our community living healthier lives, less burdened by disability. Working together, we will help people self-manage their care and provide better health prevention advice and support.



Cancer and heart disease remain the biggest health problem areas for our district.



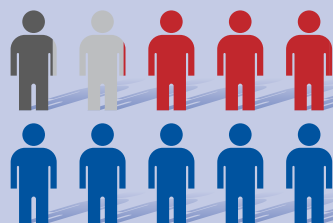
Almost 1 in 5 (19%) of our population live in areas with a New Zealand Deprivation Index of 9 and 10

(10 is the highest level of deprivation).

**Auckland** is one of the highest non-English, non-Māori speaking areas, with more than

**100** different languages spoken.





We have a diverse population:

8% Māori  
11% Pacific  
31% Asian  
50% Others

Our population is relatively young: 17% are aged under 15 years, compared with 19.8% for all of New Zealand

10% of people living in the Auckland DHB district are aged 65 years and over, compared with 14.7% of the New Zealand population.

More than a third of all our children (38% of 0–14 year olds) live in the highest deprivation areas of the city (deprivation index 8, 9 and 10).

Of that 38%, 72% are Pacific, 55% are Māori and 21% are 'others'.



13% of our population need assistance

or interpreting when attending health services.



# Introducing MOS: our management operating system

## So just what is a management operating system?

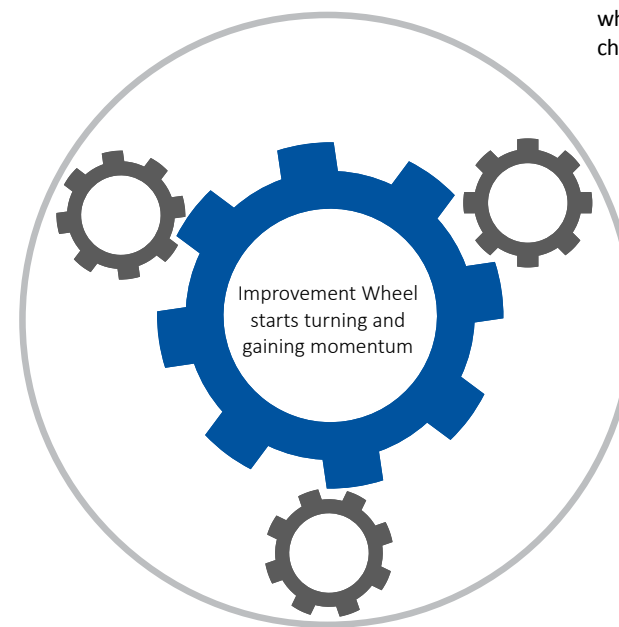
Every organisation has a management operating system. However, in many cases, the system may not be aligned, visible or consistent across the organisation. This means it can be hard for people within an organisation to understand how what they do supports the achievement of its overall operational and strategic goals.

The programme to develop and implement our MOS has been underway since 2011. We looked to other leading organisations (both in healthcare and other industries) to design a framework to suit the needs of our environment. This model was then piloted at service and team level and further refined.

Our MOS is focused around delivering on our Key Result Areas: Patient Safety, Quality Care, Improved Health Status, Economic Sustainability, and Engaged Workforce, which are reflected through the various chapter headings in this document.

## Management Operating System

- Strategies, business plans, performance metrics, and daily work are all aligned
- PDCA approach assures ongoing improvement
- The system runs your service



## Active Leadership

- Clear vision of Best Practice
- Leaders role model behaviours
- Change leadership
- Coaching and mentoring
- Leader standard work

## Work Practices / Improvement

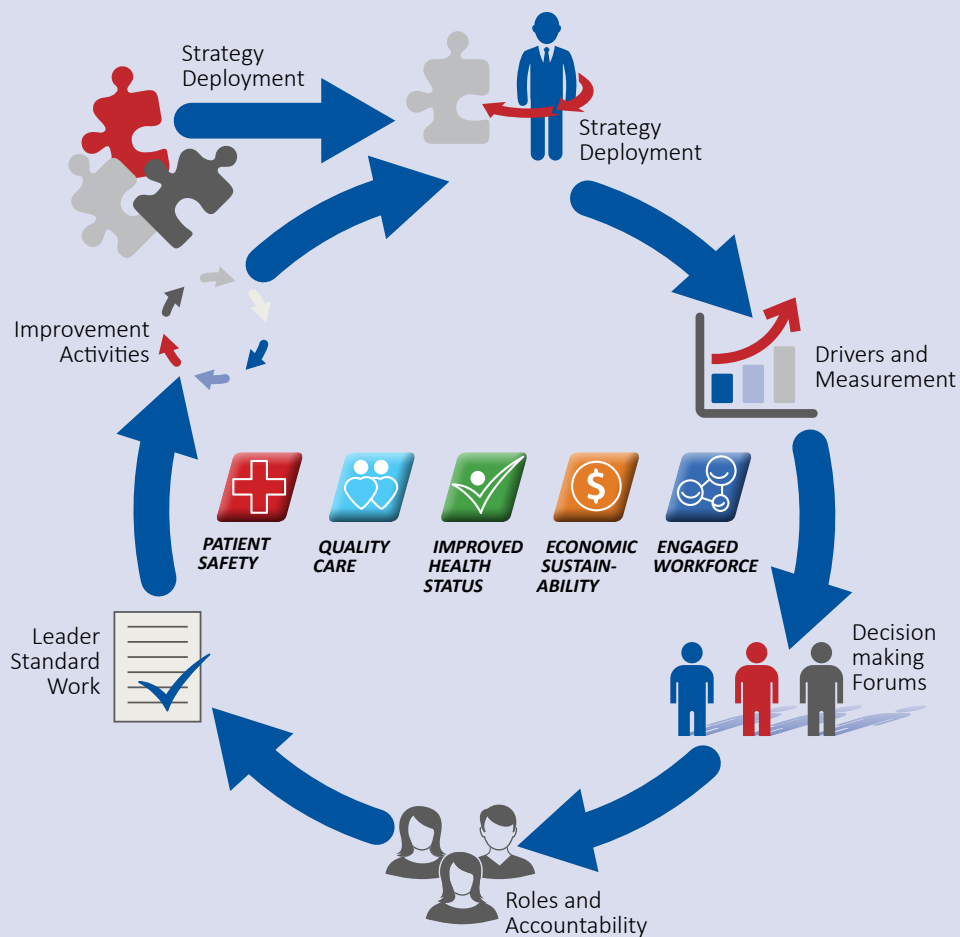
### Best practice for daily activities

- Standard work
- Challenging the status quo
- Learning as we go
- Measurable practice improvement

### Focused improvement

- Team based – Data driven – Structured problem solving
- Value and waste identification
- Measurable results

### The Auckland DHB Management Operating System



### Driving system-wide improvements

There are three essential ingredients to drive system-wide improvements in any organisation: active leadership, the work practices and improvement approach, and a management operating system. The diagram (facing page) shows how these elements work together.

### What have we achieved?

Our MOS has enabled the delivery of a number of benefits across the organisation. Since 2011 our teams have deployed the MOS across more than 30 wards, four theatre suites, four clinics and 15 services, plus each of the 10 directorate groups.

Many of the quality improvements in this document are supported by our MOS. Specific examples of where our MOS has enabled change include:

- accelerating the Releasing Time to Care programme to increase direct patient care time on wards
- improving hospital-wide measures such as smoking cessation and reduction in falls, by raising awareness within and across teams

- sustaining improvement to system-wide improvements (such as acute flow), by having daily focus on the 'local measures' that have an impact on the overall hospital-wide measure
- focusing our efforts at daily bed management meetings to provide a consistent approach to managing daily hospital operations.

### Where to from here?

We are continuing to develop, deploy and refine our MOS and are focused on having every directorate, service and team working with a common approach underpinned by common principles.

The ultimate goal is that wherever you go in the organisation you can understand how the team is performing, what they are focusing on, what activities they are planning in the future and how they fit with the organisation's overall priorities.





2.0

# Keeping our patients safe

Patient safety is one of our key areas of focus, and the responsibility of everyone across the organisation. Our aim is to eliminate avoidable harm, ensuring our patients experience the safest possible care.

This chapter profiles 10 initiatives that have made significant improvements to patient safety in the past year.





PATIENT SAFETY

2.1

# Preventing falls

Some patients fall while in hospital and for the most part do not suffer any harm or suffer only a minor injury. However, for a few patients the harm from falling is much more serious, leading to an injury that requires treatment, delays in leaving hospital and longer rehabilitation.

More than 1000 patient falls are reported each year at our facilities. A small number of these falls result in serious injury, such as a fracture, head injury or serious laceration. These serious harm falls mean patients require further investigations (such as x-rays) and procedures (such as extra operations to repair the fracture or suturing to close the laceration). Falls of this nature can increase the length of time patients must stay in hospital, and delay their rehabilitation and return to normal life. More than half of all the serious adverse events reported by the Auckland DHB to the Health Quality and Safety Commission (HQSC) in 2013/2014 were serious harm falls, which equates to about 0.8 serious harm falls per 1000 bed days. This rate is consistent with other DHBs in the Northern region.

We have a multidisciplinary Falls and Pressure Injury Steering Group, chaired by the Chief Nursing Officer, which oversees improvement work in the hospital and community. The Auckland DHB group has committed to the regional programme, *First Do No Harm*, and the national falls campaign as part of *Open for Better Care*. We have redressed earlier gaps by:

- reporting fall rates to wards every month so wards can track their progress

- searching coding data for patients who have had serious harm falls in order to accurately track the number of events
- developing a falls prevention guideline
- introducing a quick assessment to rapidly screen out patients on admission who are not at risk of falling
- using a standardised risk assessment tool and care plan
- using a standardised falls intervention care plan.

Analysis of falls from 2012/2013 showed some falls were associated with patients wearing socks while getting in and out of bed or walking around the ward, and with patients climbing over or around bedrails. To combat this we have since introduced:

- “Sticky sox” – a universal-sized red sock with inbuilt grip made available to patients who don’t have suitable footwear
- a decision matrix to assist staff to decide when it is appropriate to use bedrails and with what types of patients.



## Levels of assistance

### Assistance

Patient requires physical assistance from health care professional in order to move safely. This includes patient handling.

### Supervision

Patient does not require any physical help to move but requires someone close by (within arms reach). Having supervised mobility includes the person providing verbal prompting, orientation and set up.

### Independent

Patient is able to perform task safely on their own without supervision or assistance.



#### Sit-to-stand



#### Bed mobility



#### Personal care



#### Walking



We are now using an average of almost 600 pairs of sticky sox per month and falls associated with bedrails have reduced by two-thirds.

The HQSC expects 90% of all patients aged 75 or older (and 55 or older if a Māori or Pacific patient) to be risk assessed for falling. For those patients at high risk, HQSC expects 90% will have an individualised care plan. Each month we conduct a random audit of 15% of at risk patients and we are meeting both the HQSC targets. All wards receive an infographic each month of their position with meeting the targets.

Overall, 37 serious harm falls were reported for the 2013/2014 year. This result compares with 33 for the 2012/2013 year. The numbers reinforce that the problem is not easily solved and we are identifying the next steps in reducing the harms our patients suffer from falling.

### Where to from here?

We have revised the case review process to ensure each case is thoroughly investigated and the recommendations for change are implemented in the wards where the falls took place. We are aiming for more reliability in the use of the tools staff have at hand. We have launched a "concept ward" in older people's health to test new interventions to prevent falls. Two inter-related measures to be tested are:

- standardised definitions for assistance, supervision and independence with mobility, agreed between the health disciplines so there is clear communication of levels of need
- use of coloured bracelets to indicate level of assistance, supervision and independence with mobility to provide a clear visual cue to staff about a patient's level of need with mobility.

“ **OVERALL, 37 SERIOUS HARM FALLS WERE REPORTED FOR THE 2013/2014 YEAR. THIS RESULT COMPARES WITH 33 FOR THE PREVIOUS YEAR AND REINFORCES THAT THE PROBLEM IS NOT EASILY SOLVED.** ”

## PATIENT SAFETY

## 2.2

# Preventing pressure injuries

While in hospital, some patients acquire pressure injuries, which are caused by sustained pressure over bony parts of the body. Pressure injuries range in severity from red areas of skin to complete tissue destruction exposing tendon or bone. Common sites for pressure injuries are places with little tissue depth, eg heels.

Pressure injuries are caused when a patient cannot move themselves to change position. This immobility can happen when patients have an operation that makes moving in bed difficult or have a disease that reduces their ability to reposition themselves. In these situations, patients have to rely on healthcare staff to reposition them. If the length of time between repositioning is too long, the pressure over bony parts of the body impairs the circulation to the skin and underlying structures, causing tissue damage. The longer the interval between repositioning, the greater the pain and tissue damage.

The tissue damage is called a pressure injury (or a pressure ulcer) and the severity can range from reddened skin to deep ulcers. Serious pressure injuries cause pain, delay patients from leaving hospital and returning to their normal lives, increase the risk of infection, and may require surgery.

We have a multidisciplinary Falls and Pressure Injury Steering Group, chaired by the Chief Nursing Officer. The Auckland DHB group has committed to the regional programme, *First Do No Harm*, and redressed earlier gaps by:

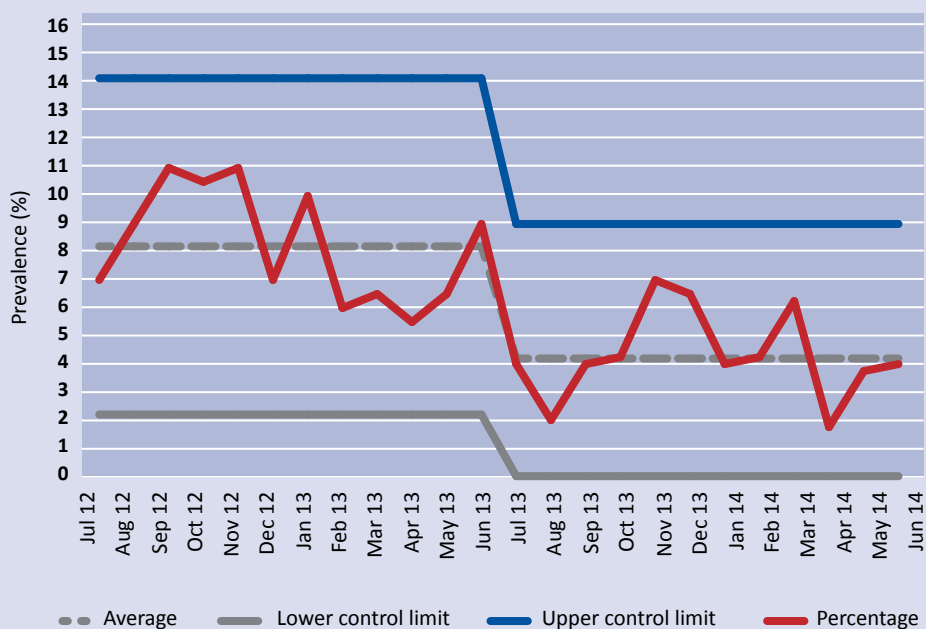
- reporting hospital acquired pressure injury prevalence to the wards
- reviewing all serious pressure injuries reported by Auckland DHB to identify main causes
- using a standardised risk assessment tool across the DHB
- using a standardised pressure injury prevention plan that can be tailored to the individual patient
- updating the pressure injury prevention guideline.

Each month we conduct a random audit of 15% of hospital patients, with results fed back to wards as an infographic.

“ THE PREVALENCE OF PRESSURE INJURIES HAS FALLEN FROM 8.1% OF HOSPITALISED PATIENTS OF ALL AGES IN 2012/2013 TO 4.2% IN 2013/2014. ”



### Prevalence of hospital-acquired pressure injuries



This chart shows a reduction of 50% in the prevalence of hospital-acquired pressure injuries from financial year 2013 to 2014. We have reduced the prevalence of these injuries from eight in every 100 patients to four. These figures exclude those pressure injuries acquired elsewhere.

The prevalence of pressure injuries has fallen from 8.1% of hospitalised patients of all ages in 2012/2013 to 4.2% in 2013/2014. The majority of these are the least severe form of pressure injury (reddened intact skin). No serious pressure injuries were found in the random audit this year. This result does not indicate there are no serious harm pressure injuries, but rather that the rates are so low the random audit is not identifying them.

Auckland DHB has proactively declared that serious harm pressure injuries should be a 'never event' and we are reporting them as a serious and sentinel event (SSE) to HQSC. We have begun actively searching for these pressure injuries using the same approach we use for serious harm falls (monthly coding queries).

### Where to from here?

We have reported three serious pressure injuries in the annual SSE report. From our case review process, we identified that issues with the way we order equipment caused delay in obtaining special mattresses that help reduce pressure on patients' skin. We have subsequently changed the ordering system to speed up the rental of the necessary equipment when we cannot meet requests from our own equipment pool.

## PATIENT SAFETY

## 2.3

# Reducing ventilator-associated pneumonia infections

Ventilator-associated pneumonia (VAP) generally occurs after 48 hours or more of invasive mechanical ventilation. It is the most common infection acquired by adults and children in intensive care units (ICUs), and the second most common infection in a hospital setting. Our rates were higher than those recommended internationally and something that required focused attention to reduce.

International studies have reported that around 10-25% of patients undergoing ventilation for more than 48 hours develop VAP. It is responsible for 50% of all antibiotic use in an ICU, causes significant patient morbidity (diseases) and mortality (death), and increases cost and the use of healthcare resources. In fact, some studies suggest VAP may contribute to more than five percent of hospital deaths.

Increased length of hospital stay is another negative consequence of VAP infections. In some instances it can increase the length of stay by seven to nine days and in terms of an ICU stay, prolong it by five to six days. To put this in monetary terms, the estimated increased cost per VAP episode is \$15,000.

We set out to reduce our VAP rate and in the first instance developed an evidence-based Bundle of Care that was cost neutral and relatively easy to implement, with the aim of re-auditing again in six months.

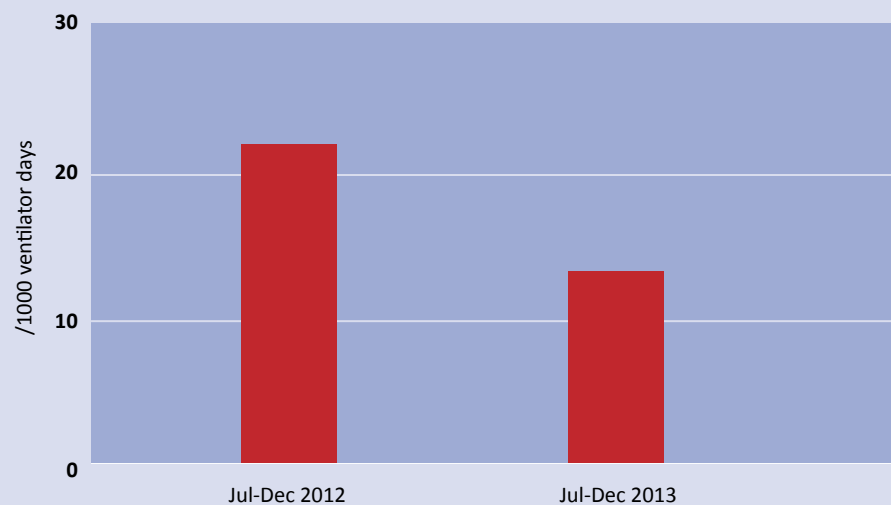
The Bundle of Care included the following relatively simple changes to bedside practice:

- standard precautions – hand hygiene and sterile suctioning
- degree of head elevation
- mouthwashes containing Chlorhexidine every six hours
- regular review of amount of sedation being given
- regular review of medication required to prevent stomach ulcers.

Implementation of the care package was managed across a number of channels, including daytime and night-time group teaching, PowerPoint presentations, standard staff meetings, poster boards and ongoing teaching reminders.

“ **INTERNATIONAL LITERATURE REPORTS ‘ACCEPTABLE’ VAP RATES OF 5-14/1000 VENTILATOR DAYS. DATA COLLECTION AT AUCKLAND CITY HOSPITAL FROM JULY TO DECEMBER 2012 INDICATED OUR VAP RATE WAS AS HIGH AS 21.3 PER 1000 VENTILATOR DAYS (21.3/1000) IN OUR CARDIOVASCULAR ICU.** ”

Reduction in VAP rate in cardiovascular ICU



“ WE ACHIEVED A 40% REDUCTION IN THE FIRST SIX MONTHS OF THE PROJECT BY USING SOME RELATIVELY SIMPLE, COST-NEUTRAL CHANGES TO BEDSIDE PRACTICE KNOWN AS A BUNDLE OF CARE. ”

Once implementation was completed in May 2013, weekly auditing of compliance started and this is continuing. The aim was for a 95% compliance rate. Over time the compliance rate has significantly improved, although we have yet to consistently achieve 95%.

#### Where to from here?

We are delighted the project is continuing and the Bundle of Care is now part of standard practice. Auditing is being conducted yearly and practice changes implemented on an as-needed basis.





## PATIENT SAFETY

## 2.4

# Improving the process for vascular patients with radiology procedures

Keeping our patients safe and improving the patient experience are dual aims for the Auckland DHB. One area identified as requiring improvements during the reporting year was the Auckland Regional Vascular Service.

There are currently 790 patients in the Endoluminal Stent Graft Database and every week approximately 80 radiological investigations are conducted for vascular patients. During the previous reporting year we had two major patient events that demonstrated a lack of regular and timely investigations and patient follow-up plans, which led to emergency operations as opposed to elective surgery. These events identified that our process for safely and efficiently managing each patient could be improved and as a result the role of Clinical Speciality Nurse was introduced.

Many vascular patients are diabetic and have cardiovascular risks. It is well documented that by seeing and assessing these patients promptly, their risks are dramatically reduced and their health improved. Prompt discussion and assessment at radiology meetings improves the patients' access to elective surgery. In addition, carrying out timely investigations and follow-up enables early detection of deterioration of disease, so improving the quality of healthcare.

The Auckland Regional Vascular Service sees patients from Auckland, Waitemata and Northland DHBs, with a significant proportion of these having some form of radiology procedure or investigation. The results of the procedures or investigations are discussed at a radiology meeting involving the radiologist and vascular consultants.

However, before the Clinical Speciality Nurse role was developed:

- no letters were dictated after the radiology meeting
- patients were not contacted by phone about their results
- patients were put into clinics when slots were available
- on occasions, follow-up scans were not ordered
- on occasions, follow-ups were missed and patients or GPs needed to phone to find out the outcome or, at worst, patients were not seen at all.



80 phone conversations  
have freed up 80 clinic  
spots for other patients

The role of the Clinical Speciality Nurse was first introduced part-time in February 2014 and the process has been markedly improved. Firstly, the nurse attends the radiology and endoluminal meetings after preparing for them the day before to ensure all DHB staff involved in the meetings are aware of the patients being discussed.

Letters are dictated immediately after the radiology meeting, outlining the results of the investigation procedure and the decisions made about interventions, plan of action, referrals and follow-up. These letters are sent to the patient and their GP and are available on the system for health providers to access.

Patients are contacted by the speciality nurse and their results are discussed with them, along with the action plan. The nurse also informs the vascular booker when the patient should next be seen in the clinic and if necessary, further investigations or radiology procedures are ordered.

All information is collected on a database to ensure follow-up is done in a timely manner. Some patients were travelling long distances to a vascular outpatient clinic simply to be advised of their investigations and plan. Now, many of these discussions are held over the phone and the feedback from patients has been positive, with some being saved long journeys. A secondary benefit of phone-based meetings is that they free up clinic spaces, which then reduces waiting time for clinic visits for new patients.

In the short time the role of Clinical Speciality Nurse – Vascular Services has been running it has become apparent that it is vital in our pursuit of best practice healthcare. This position ensures these patients are cared for appropriately, efficiently and to a high standard.

### Where to from here?

We are looking to make the roles full time so we can increase the number of virtual clinics.



## PATIENT SAFETY

## 2.5

# Hygienic hands reducing infections, saving lives

A sustained focus on hand hygiene for all of our staff is minimising the risk of infections, getting patients home to their families faster and saving the health system millions of dollars.

International evidence has shown that improved hand hygiene practices can help to reduce infections, including antibiotic-resistant infections given to patients while receiving healthcare in hospitals.

We have acted on that evidence by introducing a hand hygiene programme for all Auckland DHB healthcare staff, which has delivered significant improvements since it began four years ago.

One example is a reduction in the incidence of healthcare-associated *Staphylococcus aureus bacteraemia* (SAB) in our patients. Over the programme's four years, there have been 113 fewer cases of this potentially life-threatening bacterial infection.

Each case we prevent results in a patient getting home sooner, recovering faster and being able to return to their lives.

The changes are also saving patients' lives; in the case of SAB infections it is estimated the reduction in the number of cases in our patients is preventing four or five deaths each year.

Improved patient outcomes are the first priority for the programme, but these improvements are also delivering cost savings. Conservative estimates put the cost of each healthcare-associated SAB

bacterial infection in excess of \$20,000. Over the past four years that potentially equates to an accumulated saving of \$2.2 million – just for SAB – freeing up vital funds to use elsewhere in our hospitals.

To achieve these improvements we have made a series of changes, including making hand hygiene product more accessible at the bedside and increasing its placement in public eating areas and outside each of the hospital wards.

We have increased the number of trained "Gold Auditor" hand hygiene specialists to at least one per clinical area. Training involves a one-day session followed by a rigorous test, which ensures these auditors can then educate wider teams about hand hygiene best practice. This practice includes when to clean their hands for the maximum effect of reducing germs that can cause infection to patients.

“**HAND HYGIENE IS ONE OF THE MOST IMPORTANT MEASURES IN THE FIGHT AGAINST HEALTHCARE-ASSOCIATED INFECTIONS, MAKING IT A KEY PATIENT SAFETY ISSUE IN THE HEALTH SECTOR.**”





The current level of hand hygiene compliance for the year ending 30 June 2014

(The audit tool is tough and measures the exact time a healthcare worker should clean their hands to keep patients as safe as possible from infection. However, in some complex care situations, it's not possible to meet the audit which can explain why this figure is not higher. In addition, the audit does not measure incidental hand hygiene away from patient care).

25%

The level of improvement in hand hygiene since auditing began in 2009.

In our operating rooms the hand hygiene programme has been adopted and expanded with the '4 Opportunities' programme, which focuses on promoting hand hygiene specifically for the operating room environment.

We have also taken the approach of educating our patients using posters and patient-focused pamphlets, which outline the hand hygiene activity they should expect to see from their healthcare workers and the practices they can carry out themselves to keep safe in hospital and in the community.

Our patients, families and caregivers have told us that seeing healthcare workers performing hand hygiene is very important to them. It improves their healthcare experience and their feeling of being safe and in a caring environment.

Our priority is the health and wellbeing of our patients and we are committed to excellence in hand hygiene to protect our patients from unnecessary infection.

### Where to from here?

Auckland DHB takes hand hygiene seriously – audit data is reported monthly 'up and down' the clinical reporting chain and the Director of Nursing chairs the Auckland DHB hand hygiene steering group. We are always looking for continued improvement in hand hygiene performance from all staff and reduction in the incidence of healthcare associated infections. The push to keep healthcare workers' hands clean to provide the best outcome for patient safety will remain a priority for the Auckland DHB.



## PATIENT SAFETY

## 2.6

## Checking the checkers – ticking the box on surgical safety lists

A review in partnership with The University of Auckland has identified an issue with staff overstating their team's level of compliance with the World Health Organisation's Surgical Safety Checklist. Overstating compliance can mask problem areas for the hospital and, ultimately, put patient health at risk.

Research shows that postoperative complications are reduced when surgical teams make use of checklists in the operating room.

To improve patient outcomes Auckland DHB – and every New Zealand DHB – has adopted the World Health Organisation (WHO) Surgical Safety Checklist, but inaccurate self-reporting of compliance has made it hard to assess which teams are meeting the standard.

Compliance with the checklist use throughout New Zealand is currently evaluated by sampling checklist forms from patient notes and counting the number of checklist items ticked on the forms. Our audit used experienced observers to record actual checklist compliance and then compared this to self-reported compliance for the same procedure indicated by items ticked on the forms. This was repeated for about 50 checklist administrations by different teams working in two operating room suites in Auckland City Hospital. The audit identified a “tendency to report compliance (by ticking boxes) when in fact checklist items had not been administered”.

Another finding, with serious implications for DHB audits relying on self-reported data, was that relatively compliant and

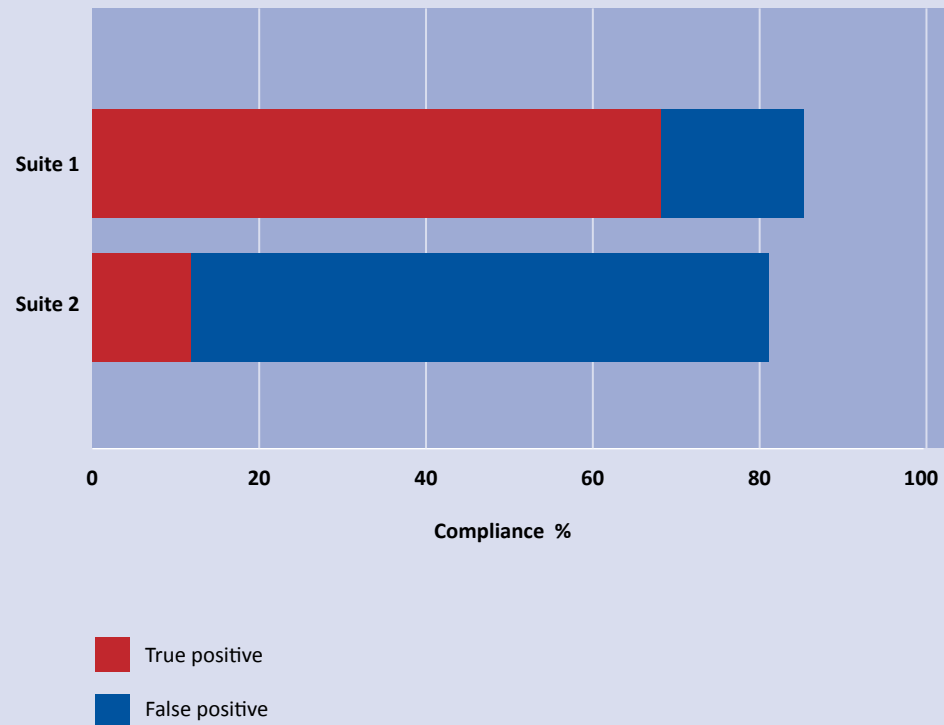
non-compliant operating room teams were almost indistinguishable using the existing reporting mechanisms.

For example, item compliance was reported as 86% of items at Suite 1 (68% true positive + 18% false positive) versus 82% of items at Suite 2 (15% true positive + 67% false positive). So, while the self-reported compliance rates seemed comparable (86% and 82%), the actual compliance with checklist item administration recorded by the observers was 68% at Suite 1 and just 15% at Suite 2.

These results are even more important when you consider that the reduction in postoperative complications achieved by use of the checklist appears dependent on the degree of compliance with its administration.

“ **SELF-REPORTED COMPLIANCE WITH THE WHO SURGICAL SAFETY CHECKLIST BY OPERATING ROOM STAFF SUBSTANTIALLY OVERESTIMATES TRUE COMPLIANCE.** ”

### Blurred lines: checklist compliance



The team behind the review concluded that the use of self-reported data may mask poor checklist compliance and fail to identify locations where interventions are required.

The reviewers said the results suggest a tendency for the operating room teams to ‘tick the box’ regardless and hinted at “a lack of understanding that the WHO Surgical Safety Checklist should be a team exercise”.

Inaccurate reporting of compliance is a serious concern for us, but having access to these findings is a positive step.

### Where to from here?

In the near future the HQSC will change to auditing by periodic direct observation, both at Auckland DHB and in other DHBs throughout New Zealand. In addition, we are shifting to a new system of checklist administration from large wall-mounted charts, which means it will be obvious to all operating room team members which items are supposed to be administered at each point of their use. It will no longer be easy for checklist administrators to ignore an item and tick a box stating that the item was administered.



## PATIENT SAFETY

## 2.7

# Improving the management of ESBL-E.coli

ESBL stands for Extended Spectrum Beta-Lactamase, which can be described as enzymes that have built up a form of resistance to commonly used antibiotics. To protect other patients, our standard practice was to isolate patients with ESBL-E.coli. However, this was placing increasing demands on our healthcare system, not to mention having negative consequences for patients. Now a successful pilot programme for managing ESBL-E.coli is being rolled out across the rest of the DHB.

<sup>1</sup> Many of us are colonised with this bacteria; it lives in our gut and is killed off by our normal flora. This is what is referred to as 'colonised'. However, being colonised does not mean a person is unwell. Those who do become unwell from the bacteria are then referred to as 'infected'. Our previous management policy isolated patients that were both colonised and infected.

Demand for single-room isolation at Auckland DHB is growing and a large proportion of patients requiring this level of isolation are colonised or infected<sup>1</sup> with ESBL-E. coli. Currently all patients infected or colonised with different ESBL-producing bacteria are managed with "contact precautions", which means placement in a single room with dedicated equipment, and gloves and gowns for all patient contact. The rationale for this approach is supported by studies of patients colonised with MRSA (Methicillin-Resistant *Staphylococcus Aureus*). However, evidence for this approach with ESBL-E. coli is limited.

Local and international research has highlighted the differences between ESBL-E. coli and other organisms, meaning that full contact precaution such as single-room isolation may not be required.

Data collection from the past few years indicates that transmission of ESBL-E. coli is not a common event within our hospitals and that, even in the absence of contact precautions, rates of ESBL-E. coli transmission and hospital surface contamination are low. However, on any given day, isolation of these patients can account for up to 15% of the entire single-room capacity at Auckland City Hospital. This places significant stress on patient flow, single-room capacity and waiting

times in the Emergency Department (ED) and affects other patients requiring single-room isolation. What's more, our current policy unnecessarily exposes our patients to the many negative consequences associated with isolation.

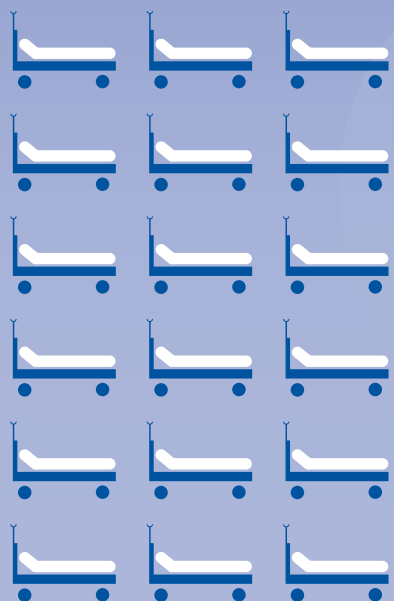
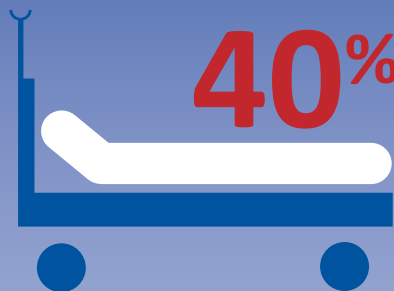
We formed an ESBL-E.coli project team, which concluded that contact precautions should no longer be recommended for patients colonised or infected with ESBL-E. coli. Instead, standard precautions (hand hygiene, shared rooms, and personal protective equipment when in contact with blood, body fluids, secretions, excretions and contaminated items) should be the recommended practice at Auckland DHB for these patients.

## Pilot

We piloted the new process in March 2014 and between March and July more than 160 single-room bed days were made available at our pilot site (ward 71). The mean time for completing a single-room bed request for patients identified with ESBLs going to ward 71 between June 2010 and February 2014 was 354 minutes. During the pilot this mean time was reduced to 284 minutes and the number of patients waiting longer than six hours from the time of bed request to completion on ward 71 decreased by 19%.

40%

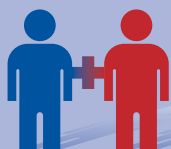
reduction in requirement for single rooms to isolate ESBL-producing species since 14 August 2014.



In real terms this has meant on average **an extra 18 single-room beds** are available each day to adults being cared for at Auckland DHB.

800+

As at September 2014 the running total of single-room bed days freed since organisational roll-out in August 2014 exceeded 800.



No cases of cross-transmission or dissatisfaction from patients have been identified.

Note: QI results for 2014/2015 year since roll out

Daily monitoring did not identify any cases of cross-transmission, and no instances of hospital-acquired ESBL infections or cross-transmission were found on retrospective analysis of clinical records and coding. No patients expressed dissatisfaction with the new ESBL-E. coli management policy, and there was a high degree of staff satisfaction with the new policy and how it was delivered.

#### Organisation-wide roll-out

We engaged directly with more than 1000 staff prior to roll-out, and used other tools such as our internal magazine *Nova*, direct emails to clinicians and the Infection Prevention Control intranet to raise awareness and make the transition to this new way of working as smooth as possible. We reported the results of the pilot to the clinical board in July 2014, gaining approval to adopt this policy across Auckland DHB and implement it in the adult hospital from 14 August 2014.

#### Where to from here?

This policy is now business as usual in the adult hospital and is due for roll-out at Starship Children's Hospital in February 2015. It is anticipated that in 2015 this policy will be adopted by each of the three district health boards in metropolitan Auckland and nationally from there.

#### Did you know?

Where there is a focus on good hand hygiene, there is a low risk of cross-transmission of ESBL-E. coli between patients in a hospital setting. ESBL-E. coli also does not appear to survive in the environment like other ESBL-producing bacteria.

During the pilot we saved more than 160 single-room bed days on one ward alone.

## PATIENT SAFETY

## 2.8

# Keeping patients infection-free after surgery

Simple changes to the way patients are prepared for surgery and fixed doses of perioperative medicine are part of the plan to cut the rate of surgical site infections.

Recommendations developed by a team led by Auckland DHB have evolved into a successful national strategy to reduce the rate of surgical site infections.

The National Surgical Site Infection Improvement Programme (SSII) is now in place at all 20 DHBs around the country, with our DHB maintaining a lead role.

The programme seeks to tackle the rate of surgical site infections in several ways: by improving the data collected on infections, timely analysis and reporting of the results, and most importantly, communicating and engaging with relevant groups in the sector to improve process.

Overall, the national programme aims to deliver a consistent, evidence-based improvement approach to the monitoring of surgical site infections and to reduce the incidence of these infections throughout New Zealand.

Surgical site infections delay patient recovery and cause significant harm – any reduction in these infections will improve patient safety and reduce harm.

One of the first simple changes to be rolled out is giving a fixed dose of an antimicrobial medicine to patients undergoing certain hip and knee surgeries.

A standard dose of cefazolin (2g) is now recommended for all adult patients receiving perioperative surgical antibiotics to prevent infection. One advantage of this set dose is that it is easier to deliver than weight-based dosing and reduces the risk of patients being underdosed.

Our Infection Prevention and Control (IPC) Nurse Specialist, Camilla McGuinness, has been helping to drive the improvements through the SSII programme and says the flow-on effects are already positive.

“Shortly after the SSII programme started we noticed that some improvements could be made to the surgical antimicrobial prophylaxis dosage that Auckland DHB patients received. We provided evidence to the anaesthetists, recommending the use of 2g of cefazolin versus 1g at the time of incision to reduce surgical site infection risk for the patient,” she says.

“After providing this information we have seen a change in practice towards giving 2g and we report this monthly. This is a positive, quality patient improvement measure brought from the SSII programme.”



## A patient's story

Russell McIlroy gained first-hand experience of the impact of surgical site infections (SSIs) when he developed two infections in the space of just two years.

In 2006 Russell experienced shivering, fever and a pain in his right hip – all signs he might have an SSI in a hip joint replaced a decade earlier. Surgeons carried out three operations to wash out the artificial hip joint, replace the components of the joint and remove an infected bursa (fluid-filled sac) in his elbow. The bursa was thought to have been a possible cause of the hip infection.

Two years later Russell developed another SSI after surgery to repair a mitral valve in his heart. He had been home only one day when he discovered his chest wound was weeping.

He had a series of operations to remove the infected tissue, insert four drains near the incision and remove some of the wires that held his sternum together. The wires may have contributed to the infection.

Russell's experience of SSIs showed him the serious impact that infections can have on patients and their families/whānau. For each of the infections he spent about two weeks in hospital and had intravenous antibiotics administered through a catheter in his arm for six weeks after being discharged.

His activities after the second SSI were restricted by the infection, the repeated surgeries, the need for pain relief and the catheter. His wife took over many of his day-to-day responsibilities, while his colleagues shared out his workload over the extra month he took off work.

Having a catheter restricted Russell's mobility, preventing him from travelling outside Auckland. The painkillers reduced his concentration span to the point where it was difficult to even read the newspaper.

Russell was impressed by the caring, professional attitude of hospital staff and, fortunately, had no long-term consequences from either SSI. He played golf and went to the gym before developing the infections and has been able to resume both sports.

Now retired, Russell says his experiences taught him that recovering from an SSI was a mental challenge as well as a physical one. "You need time for your concentration and stamina to return after major surgery, especially when it is complicated by infection."

*Courtesy of the Open for Better Care campaign: [www.open.hqsc.govt.nz](http://www.open.hqsc.govt.nz)*



Education is another of the programme's key factors and includes initiatives such as a regular newsletter highlighting current best practice in surgical preparations.

One example of a change in best practice is clipping hair ahead of surgery rather than shaving it, and even then only if it interferes with the surgical site. There is also an ideal window when hair removal should take place.

Information like this is being highlighted with surgeons and health practitioners – via the newsletter and a webinar series – across DHBs to ensure best practice is being followed.

One of the next areas of focus for the SSII Programme will be preventing surgical site infections in cardiac surgery, where any infection presents a serious threat to the patient.

## Where to from here?

A new National Monitor database that receives and stores DHB data about surgical site infections will provide faster, improved analysis and reporting of these infections at a national and DHB level. It will support accurate, high-quality reports generated with the click of a mouse and also simplify the process in terms of DHBs submitting their data electronically.

“WE'RE STILL ON THE JOURNEY, BUT WE'VE COME A LONG WAY IN A SHORT AMOUNT OF TIME.

CAMILLA MCGUINNESS, IPC NURSE SPECIALIST



## PATIENT SAFETY

## 2.9

# Reducing central line-associated bloodstream infections

Central line<sup>2</sup>-associated bloodstream (CLAB) infections account for about 30% of all healthcare-associated bloodstream infection events within our hospitals. At best they may result in an increased length of stay and at worst, increased patient harm and death. Since 2012 we have been working hard to find ways to reduce the opportunity for these type of infections both within the DHB and nationally.

The Paediatric (PICU) and Cardiovascular (CVICU) intensive care units and the Department of Critical Care Medicine (DCCM) at Auckland District Health Board were part of the 2012 New Zealand Health Safety and Quality Commission National Collaborative to reduce the rate of CLAB. The three units continue to monitor and report CLAB rates and compliance with improvement measures. We achieved the National Collaborate target of a CLAB rate of less than 1 per 1000 central venous line (CVC) days by 31 March 2013 and have sustained this achievement.

A team from the three ICUs and microbiology worked collaboratively to standardise practice while maintaining flexibility to fit with the different local clinical requirements. Initially the team met weekly; it continues to meet monthly and has:

- implemented an Insertion Bundle and Checklist (ie guidance on where to insert the central line) and established a process for monitoring compliance

- established a standard process for capturing central line days and identifying a CLAB
- implemented a Maintenance Bundle and Checklist and established a process for monitoring compliance
- defined high-risk criteria and management for each ICU
- developed a process to review all CLAB events.

We also collaborated with areas outside of the intensive care units to spread the benefits of the practice improvement. The Insertion Bundle and Checklist has been implemented in anaesthesia (adult and paediatric), emergency departments (adult and paediatric), adult radiology and adult renal services. The Maintenance Bundle and Checklist has been implemented across our Adult and Child Health Directorates.

<sup>2</sup> A central line is an intravenous line that is inserted into a large vein, typically in the neck or near the heart, to administer medicines or fluids or withdraw blood.

## By the numbers

The monthly ADHB ICU rate allows us to calculate an 'annual' or average rate per 1000 catheter days for each financial year. The data collected for the third and fourth quarter of 2012 became our baseline.

Date	Rate per 1000 lines	Reduction rate
January – June 2012 (baseline)	2.15/1000 lines	Baseline
July 2012 – June 2013	.84/1000 lines	60%
July 2013 – June 2014	.58/1000 lines	31%

The total reduction in CLAB rate per 1000 CVC days from baseline to June 2014 (2.15 – 0.58) equates to 73%.

## Measures of progress

Each ICU collects and displays the following measurements on a monthly basis:

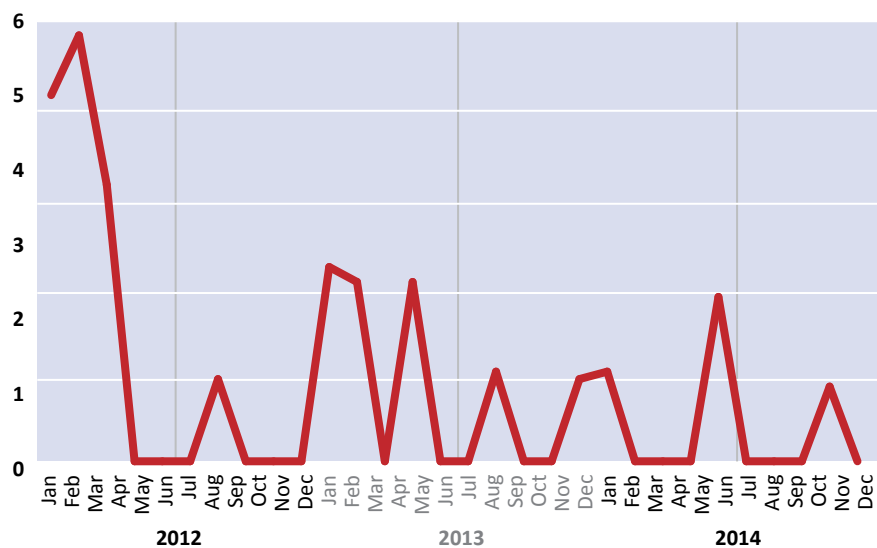
- CLAB rate per 1000 line days
- number of days CLAB-free
- level of compliance with the Insertion Bundle
- level of compliance with the Maintenance Bundle
- level of compliance with obtaining paired blood culture specimens.

An Auckland DHB ICU CLAB rate per 1000 line days is also reported monthly to the Auckland DHB Clinical Board.

## Where to from here?

We are continuing to share learning between the three ICUs and refine improvements in practice as needed. For example, each unit's high-risk criteria gets amended if required following our case review of any CLAB event. We review the evidence for new technology and practice, which may assist in reducing the CLAB rate for our high-risk patients. Our CLAB team members are available and willing to support any other Auckland DHB services that wish to focus on reducing the rate of CLAB.

## ADHB ICU monthly CLAB rate per 1000 central line days





## PATIENT SAFETY

## 2.10

# Protect, don't infect

Encouraging staff to be vaccinated against seasonal influenza paid dividends this year for Auckland DHB when it achieved 75% – the highest rate of clinical staff vaccinations in the country.

For more than 10 years now we have encouraged staff to be vaccinated against seasonal influenza at the start of the flu season. The benefits are threefold; the staff member benefits as does their family and our patients.

This past year the emphasis behind the seasonal flu vaccination campaign was about improving patient safety. It was a mandate from the organisation's senior leaders and resulted in the release of a new flu vaccination guideline.

The guideline was developed in consultation with the various unions. Planning was undertaken in November 2013, with vaccinations delivered April to July 2014.

While it was not compulsory for staff to have a vaccination, the project team took a three-phase approach to improving staff immunity in 2014. The main difference to other years was the programme being 'opt out', with an opportunity for those who chose to opt out to explain why.

## By the numbers

The organisation's aspiration target is having 80% of all staff vaccinated and, as the table shows, we were close to achieving this in 2014.

2013	63% of staff vaccinated	Includes 60% of staff with direct patient contact
2014	74% of staff vaccinated	Includes 75% of staff with direct patient contact

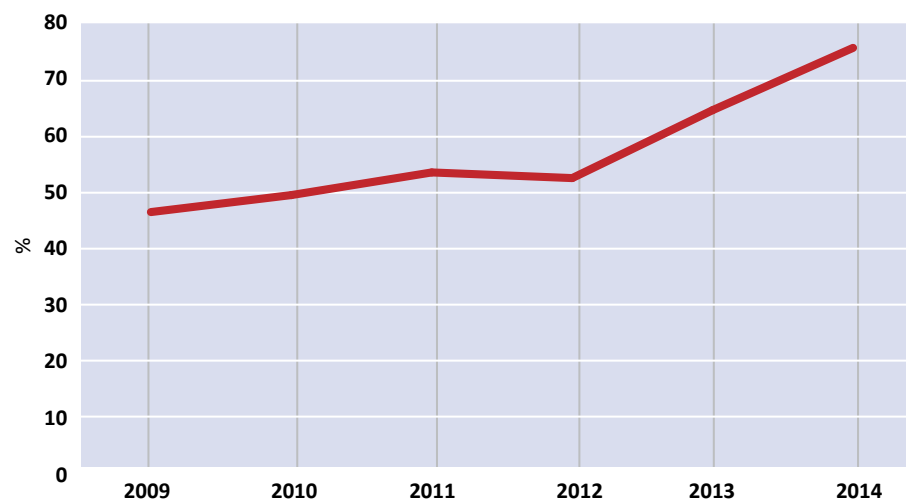
“ THIS YEAR 7230 STAFF MEMBERS WERE VACCINATED, WHICH REPRESENTS AN AMAZING EFFORT BY ALL INVOLVED. ”



## Campaign phases

<b>Phase 1</b>	Regular campaign with fixed venue vaccinations and in-team, ie nurses vaccinating their colleagues. A total of 3000 nurses were vaccinated this way.
<b>Phase 2</b>	A personalised email was sent to all clinical staff who had not yet been vaccinated, letting them know they had another opportunity, with further fixed venue options at both Greenlane and Auckland City Hospital.
<b>Phase 3</b>	A personalised letter was sent to all clinical staff who had not yet been vaccinated, letting them know their remaining options for vaccination and including a survey for those who had opted out, asking them why. It is interesting to note that 23% of those who opted out did so for personal reasons or beliefs.

Percentage vaccinated



The graph shows the percentage of Auckland DHB staff vaccinated in the period 2009 to 2014, with sharp rises over the past two years.

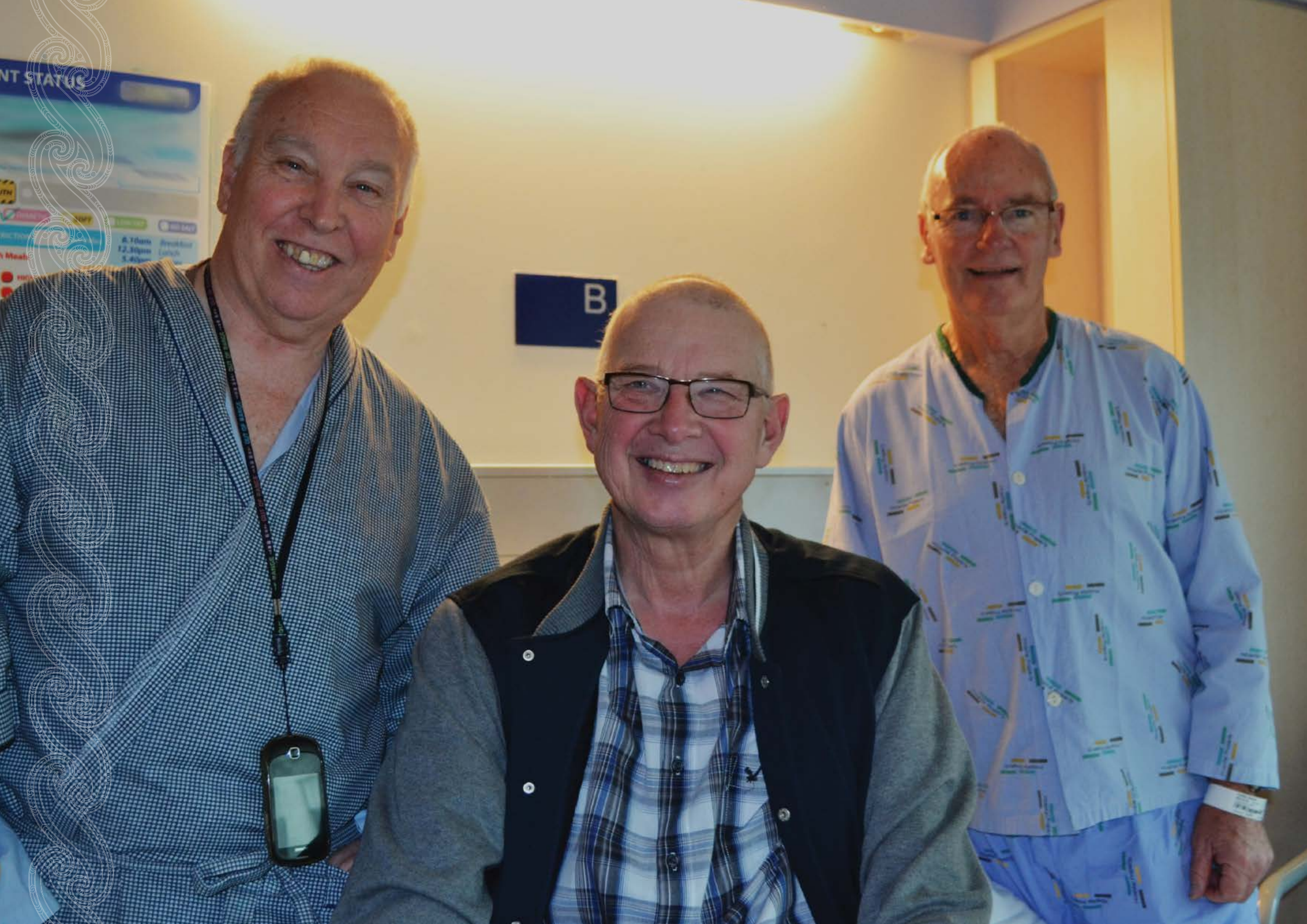
The communications campaign included posters (see left) and myth busting, ie providing the facts around some common misconceptions such as the flu jab makes you sick.

### Where to from here?

The campaign will run again in 2015 and aim to meet the organisation's target of having 80% of all staff vaccinated.

“ WE ARE PARTICULARLY PROUD THAT 89% OF OUR MIDWIVES WERE VACCINATED AGAINST SEASONAL INFLUENZA THIS SEASON. ”





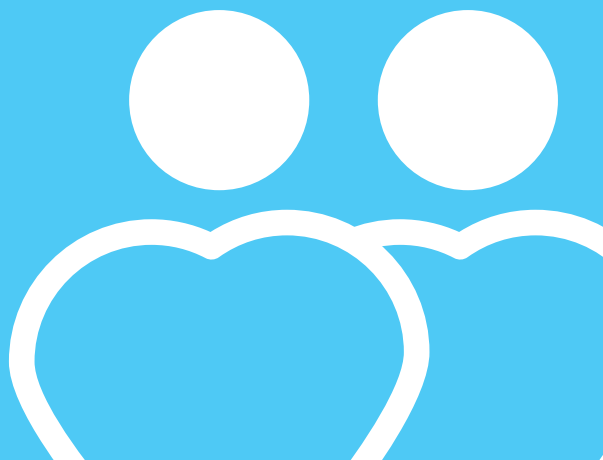


3.0

# Better quality care and patient experience

Every contact with our patients will be as good as it can be, that's our collective aim. We work hard to provide effective, accessible and patient-centred care that is delivered in an integrated way. Integration – all of our departments working together for the benefit of the patient – is central to an excellent experience.

This chapter outlines seven initiatives that have been undertaken with the express aim of improving the patient experience.



## BETTER QUALITY CARE AND PATIENT EXPERIENCE

## 3.1

# Understanding the outpatient experience

In 2014 we extended our online patient survey for inpatients to include patients who had attended outpatient clinics. The survey is designed around the areas of care that each patient feels is most important to their experience.

Since 2011 Auckland DHB has run an online survey of patients discharged from our hospital services. In 2013 we developed and piloted a similar survey for patients attending our outpatient clinics, which was successful and led to a regular weekly survey of outpatients from January 2014.

The outpatient survey covers surgical specialties and the Cancer and Blood Service. All patients for whom we have a valid email address are sent an invitation to take part in our online survey.

We ask patients to choose up to three areas of care that make the most difference to their overall experience. They give us some general ratings about all the areas and we ask for specific ratings and comments about the areas most important to them.

The feedback is made available to teams through monthly reports on themes raised in the survey and via a portal where team leaders can access their own results. Some patients also ask to be contacted directly to discuss their feedback further. The feedback is being used to resolve individual issues and as part of a range of improvement projects.

The three areas outpatients believe make the most difference to the quality of their care and treatment are:

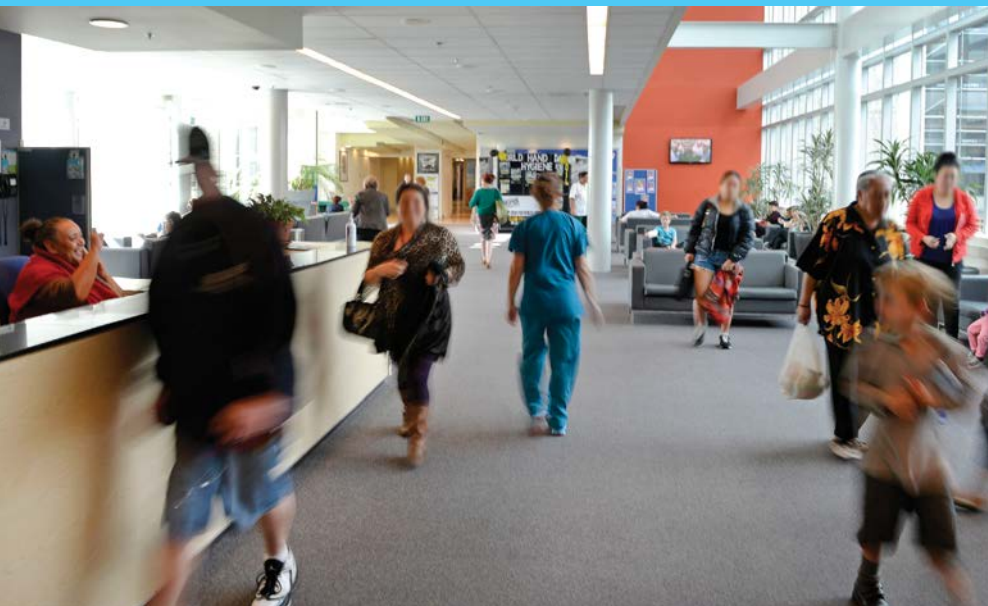
- getting good information about their condition and treatment
- good organisation, including appointments and correspondence
- feeling confident in the quality of their care and treatment.

## Overall care rating

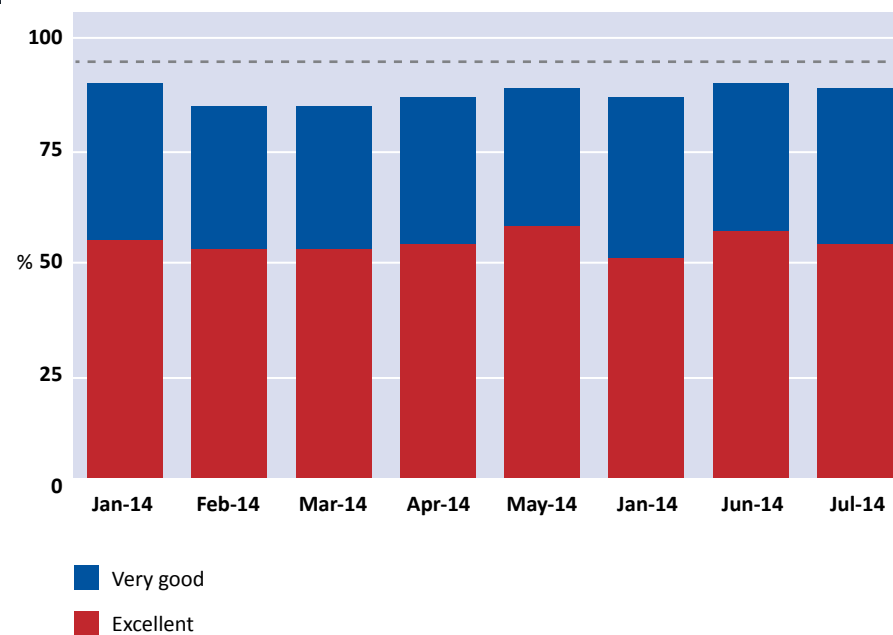
The graph right shows data for the six months to June 2014 for outpatient rating of their care overall. It shows the percentage of outpatients rating their overall care as Very Good or Excellent, and the dotted line shows our target of 90% for this rating (currently 86%).

## Where to from here?

Over coming months the survey will be extended to patients in other services to ensure we hear from and engage with as many patients as possible. We are also reviewing our survey to make it quicker for patients to complete while still gathering the specific feedback we need to make improvements.



Thinking about your experience at the outpatient clinic, how would you rate the care and treatment you received?



“ WE HAVE BEEN RUNNING A REGULAR WEEKLY SURVEY OF OUTPATIENTS SINCE JANUARY 2014. ”



## BETTER QUALITY CARE AND PATIENT EXPERIENCE

## 3.2

# Conversations that count

Many people don't like to talk about death and dying. Often discussions don't happen in families until someone is extremely unwell and unable to communicate. As a result, families and healthcare providers are often left to make difficult decisions without knowing what someone would have chosen for themselves.

Encouraging people to start having 'conversations that count' has been a key focus at Auckland DHB this year. Building on the success of the previous year, the Advance Care Planning (ACP) programme has been promoted across the DHB (both in our hospitals and in primary and secondary care) by a range of clinical groups and leaders.

Advance Care Planning gives members of the community the opportunity to decide their treatment preferences for future and end-of-life care. It is a fundamental shift in how we deliver care, using a more patient-centred approach that helps people participate in directing their future healthcare.

Last year we focused on training staff how to initiate these important conversations with patients. This year we obtained accreditation for our training from the Royal New Zealand College of General Practitioners and we started lectures for final year students at The University of Auckland School of Nursing to complement existing medical undergraduate training.

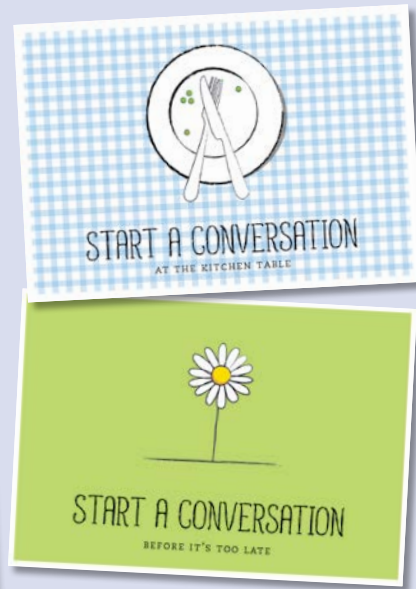
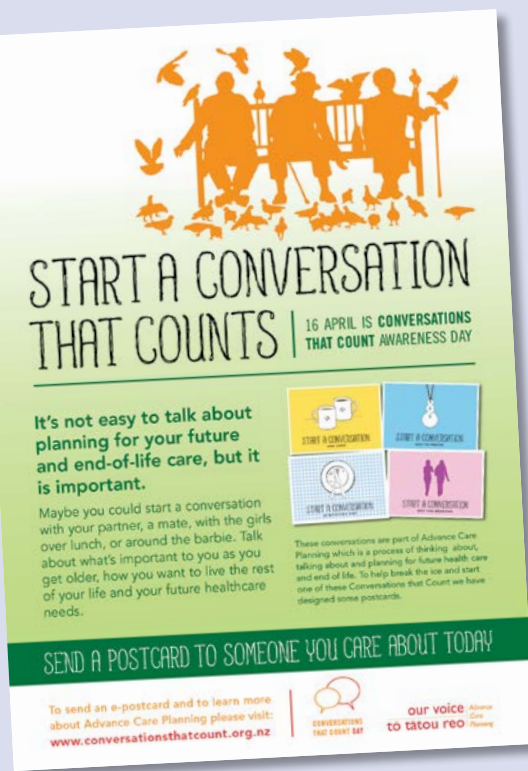
We also launched a national quarterly e-newsletter, which is produced and edited by our staff, and continued introducing the ACP programme to a range of community groups and non-government organisations including Parkinson's Auckland, Age Concern, Mercy Hospice and Probus.

A key achievement in our community engagement and awareness campaign was the inaugural *Conversations that Count Day* on 16 April 2014. Auckland DHB led the national and regional development of the event. We also ran staff engagement initiatives on our sites and provided promotional material to primary care and community groups across the district. We achieved coverage in a range of local and national media.

Another improvement on the previous reporting year was simplifying the ACP documentation. Forms are simpler, there are fewer of them and they can form a continuous record, ie an electronic method of capturing patients' preferences for future care.

“ SINCE JULY 2012 MORE THAN 10,000 ACP CONVERSATIONS HAVE BEEN RECORDED BY CLINICIANS WORKING IN THE FOUR NORTHERN DHBS. ”





This project won the co-design poster award at the APAC 2014 conference in Melbourne in September 2014, showcasing quality and innovation in healthcare across the Asia-Pacific region.

ACP by numbers

**2500+** 

ACP conversations Auckland DHB clinicians have had with the public.

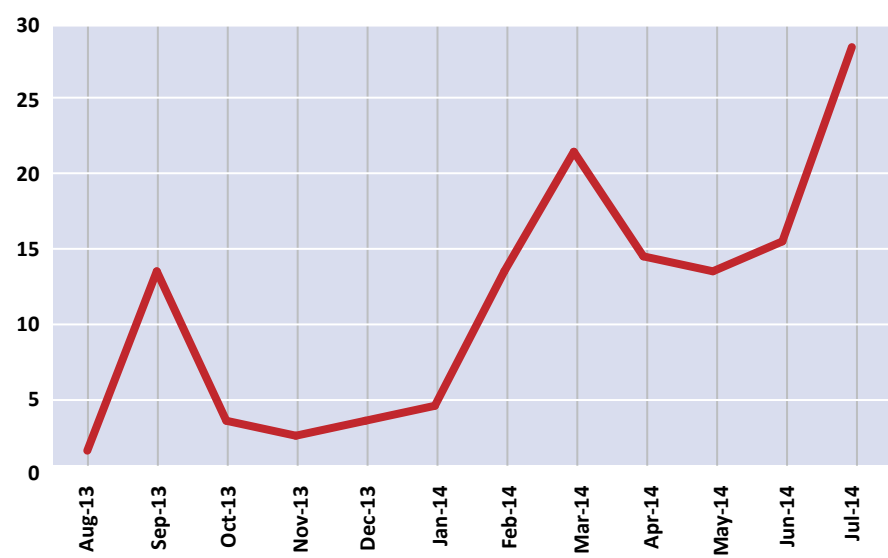
**29,000+** 

unique visitors the ACP website [www.advancecareplanning.org.nz](http://www.advancecareplanning.org.nz) has had.

**18,000+** 

postcards the Auckland DHB distributed to community groups and primary and secondary health service providers to promote *Conversations that Count* Day on 16 April 2014.

Number of ADHB staff completing level one ACP training each month since launch of online modules



A significant milestone was introducing Shared Care, an electronic care plan accessible by all members of the care team and the patient, which went live across our district in June 2014.

During the reporting year we measured staff awareness of ACP. We surveyed more than 1000 clinical staff across the four northern DHBs and the overall increase in awareness was positive.

Where to from here?

We understand that to continue to expand Advance Care Planning across the DHB we need to focus on engaging with staff, community groups and, most importantly, the people we serve. In addition, education and resource development and the development of a sustainable policy framework are also required.



## BETTER QUALITY CARE AND PATIENT EXPERIENCE

## 3.3

# He Kamaka Waiora

He Kamaka Waiora (HKW) is a specifically designated Māori health service available to all Māori inpatients and their whanau (family) at Auckland City Hospital and Starship Children's Hospital. Here HKW explains its approach.

We have adopted a whole-of-system approach and work in partnership with patients and their whanau, clinical and community staff, local health clinics, primary health organisations (PHOs) and community groups. We aim to ensure Māori patients get the best care possible, both clinical and cultural, while in hospital and when they are back home with their whanau. Overall, our focus is on wellness, coordinated care and improved Māori health outcomes.

We offer:

- tikanga (cultural) support to patients and their whanau
- tangihanga (bereavement) support for whanau if one of their loved ones passes away on the ward
- advocacy if Māori patients have a problem or an issue with their treatment
- fluent Te Reo speakers if Māori patients are more comfortable discussing their problems or issues in Māori
- assistance understanding health information – our staff are able to support Māori patients around hospital procedures, protocols and medical information.

## Our team is made up of:

- kaiatawhai (cultural support workers on the ward) who partner with clinical staff and provide hands-on support to patients and their whanau, including outpatient support in Women's Health for people who have difficulty attending outpatient clinics
- kaimanaaki (male tikanga cultural support on the ward) who provide tikanga support consisting of karakia (prayer), tangihanga (bereavement) and whanaungatanga (relationship building) for kaumatua (Māori elders) when they are in our hospitals
- kaiawhina (cultural support workers for resident whanau at whanau accommodation) who provide support for whanau of patients at our whanau accommodation – Te Whare Awhina (building 30) on the Grafton site.

We try to be as accessible as possible. Our pamphlet with contact details is included in the patient folder in the cupboard beside the patient bed, and patients can use any of the ward phones to call us directly, or ask ward staff to contact us on their behalf. On most occasions we will see patients on the day they are admitted.

## Case study

### A day in the life of the HKW team

**This case study highlights the range of activities the HKW team gets involved in and the collaborative nature of its work.**

A whanau of four was involved in a car crash in Whakatane in the Bay of Plenty. The two children – a 24-week-old baby and a four-year-old girl suffered critical injuries and were airlifted to Starship Children’s Hospital. The baby had head and torso injuries and the girl had multiple leg fractures – surgery was needed to reset her thigh. The children’s mother was transported to Whakatane Hospital with multiple fractures to her neck, face, hip and spine, and a small neuro bleed.

Sadly, the baby passed away in Paediatric Intensive Care. The HKW service attended and provided a karakia (prayer) for the grandmother who was supporting the baby. HKW staff worked with the police and the coroner for a quick release of the baby from Te Arai Kapua (the mortuary) and later that day the mother was transported by ambulance from Whakatane to Auckland. HKW was heavily involved in supporting the surviving child and the whanau, and was able to source accommodation for the extended whanau at Ronald McDonald House.

The HKW team, supported by the Emergency Department (ED) Charge Nurse, arranged for the mother to have the side room normally used for isolation patients in the ED. This allowed the mother some privacy with her deceased baby to grieve. HKW also provided support to the mother throughout this distressing process, as well as the staff involved.

In the few days HKW worked with this family, the team collaborated with paediatricians and social workers, liaised with Child, Youth and Family, the probation service, New Zealand Police, an occupational therapist, charge nurses, the trauma team and the whanau. This meant updating all involved on a daily basis through email, usually near the end of the day.

HKW advocated for whanau to be with the four-year-old 24/7 to provide emotional support and facilitated the quick transfer of mother and surviving daughter to travel north with their whanau and tupapaku (deceased person). Before transfer to Whangarei, the Kaiatawhai, Kaimanaaki, social worker, ward staff, physicians and whanau gathered at the ambulance bay and a karakia was performed by the Kaimanaaki to support a safe journey home.

“ **WE ALSO PROVIDE SHORT-TERM ACCOMMODATION FOR WHANAU OF PATIENTS WHO ARE IN AUCKLAND CITY HOSPITAL. WHILE ACCOMMODATION IS SUBJECT TO AVAILABILITY ON A FIRST-COME-FIRST-SERVED BASIS, PRIORITY IS GIVEN TO WHANAU OF PATIENTS FROM OUTSIDE THE AUCKLAND DHB AREA.** ”

### Where to from here?

The service aims to visit and support 65% of all Māori inpatients under 55 years old and 98% of all kaumatua (more than 55 years old) on the Grafton site. The team plans to focus its efforts in the 2014/2015 year on building and maintaining relationships with community providers who work with the cancer and cardiology teams.



## BETTER QUALITY CARE AND PATIENT EXPERIENCE

## 3.4

# Shorter waits for cancer treatment

Cancer is the country's leading cause of death (about one third of all deaths) and a major cause of hospitalisation.<sup>3</sup> The Government's goal has been 'better, sooner, more convenient health care' for cancer.

Shorter waits for cancer treatment was one of the six national health targets for the 2013/2014 year. The target is: all patients, ready-for-treatment, wait less than four weeks for radiotherapy



or chemotherapy. We are delighted to report we have achieved this target 100% across the reporting year. Here we examine three examples of how we made improvements to cancer treatment and, in doing so, met the national target and provided a better experience for our patients.

## Realigning Nurse Specialist role

Care for cancer patients is organised in tumour streams, which are based on the type of cancer the patient has. Patients typically receive care and tests from a range of specialities within and outside the hospital, sometimes making their treatment journey difficult. This project's goal was to improve coordination of patient care, particularly for patients with complex needs.

The key focus was realigning the role of senior nurses or Nurse Specialists to improve care coordination for patients through the regional cancer service. The Nurse Specialist has specialised clinical knowledge about the care required for patients in a specific tumour stream and can provide a single point of contact for cancer patients requiring complex care.

The role is varied depending on the patient's needs, but some of the key areas are:

- help and support with symptom management
- ongoing surveillance post-treatment
- coordination of appointments between multiple services.

Dedicated attention to all of these areas ensures patients receive the care they need in the timeframe in which they need to receive it.

There are now eight Nurse Specialists working across the various streams (medical and radiation oncology in breast, gastrointestinal, lung, genitourinary, gynaecology, head and neck, and melanoma) and patient feedback has been positive.

“ **ONE HOSPITAL VISIT  
INSTEAD OF TWO – A MUCH  
BETTER OUTCOME FOR OUR  
PATIENTS.** ”

<sup>3</sup> Source: Ministry of Health. National Cancer Programme: Work Plan 2013/14.



## Taking a holistic view – psychosocial oncology support

The diagnosis and management of cancer has a significant impact on the lives of many in the Auckland region. An expanding body of international evidence shows that significant numbers of people with cancer experience long-term distress, which can negatively affect health outcomes and their quality of life. In response to this, the *Psychosocial Oncology Support Service Model of Care* was developed and implemented at the Auckland Regional Cancer and Blood Service during the reporting year.

Traditionally, the provision of psychosocial care has been uncoordinated and haphazard. The Psychosocial Oncology Support Service (PSOS) was created to provide best practice clinical care with a coordinated, structured, accessible service to meet our patients' varied psychosocial needs.

The focus areas for 2013/2014 were:

- educating staff to ensure they are all able to identify patients' psychosocial needs and provide support for mild distress
- implementing routine screening for psychosocial needs in the breast tumour stream to ensure we have

the correct administration process before expanding the screening to other streams. We aim to have all the tumour streams up and running in 2014/2015

- providing specialist psychosocial oncology support for patients with complex needs – they can choose to be seen by the Specialist Psychologist either while they are in the service for treatment or as an outpatient.

While we don't yet have evidence of improvement, we do know we have plugged a gap and now have a service we could not offer previously. In addition, patient feedback has been positive, particularly around the reduced variation in the provision of care.

## Reducing hospital visits for patients in gynaecology tumour stream

The gynaecology tumour stream established joint medical oncology and radiation oncology clinics so that women needing both treatments (ie chemotherapy and radiation therapy) could be seen in one clinic visit rather than two.

The combined clinic has resulted in a better patient experience and improved clinical outcomes including:

- reduced number of clinic visits for the patient
- improved coordination of care and communications between clinicians due to treatment planning by both specialities together
- improved teaching opportunities for registrars
- improved access to a Nurse Specialist.

Depending on the patient's needs, she may see two doctors separately (a medical oncologist and a radiation oncologist) or both together during her visit. This is particularly beneficial for women travelling long distances, eg from Waiheke Island, south of Manukau or north of Silverdale.

## Where to from here?

We will continue to develop these initiatives to provide high-quality 'whole person' cancer care. We aim to screen for psychosocial needs across the Auckland Regional Cancer and Blood Service, and continue to provide appropriate services to meet the needs of our patients.



## BETTER QUALITY CARE AND PATIENT EXPERIENCE

## 3.5

## Co-design at its best

During the reporting year the new Northern Region Haematology and Bone Marrow Unit was built, with the grand opening on 6 August. The unit, known as Motutapu Ward, is a powerful example of co-design involving conversations, workshops, panels and questionnaires from patients, families and staff. The result is a radically different environment that takes into account what is important to the people using the space. Patients also got involved in fundraising activities for the new ward, from cupcake sales to a sponsored bike ride in Europe. With the assistance of the A+ Trust more than \$1 million has been raised.

Not only does the new ward look different, it also allows us to deliver more bone marrow transplants in a more timely way. The new regional facility is a huge boost to the haematology and bone marrow transplant services provided by Auckland DHB and provides world-class care in an environment just as welcoming to patients and their families as it is to staff.

The layout of the new ward, its colour and the way the ward is used all reflect the co-design principles applied. Key features include stunning views, more single rooms, a dedicated whanau room with kitchen, a wellness room and a place where young people can hang out and support their friends when they are ill.

Charge Nurse Manager Helen McIlwraith says staff and patients were excited by the move into the new ward.

“They also appreciated the opportunity to contribute to the design. Patients’ lives are often turned upside down and they can face uncertainty and fear every day,” she says. “We felt it was crucial to get their input into the new ward. They gave us

insights into what’s important – a sense of welcoming with a focus on positivity and warmth. I think we have created a ward environment that will make this very difficult journey more tolerable for our patients and their loved ones.”

Here are examples of how co-design helped to improve the design of the Motutapu Ward.

### Better for patients


- Private patient interview room for providing and discussing sensitive medical information
- Splendid views to the Waitemata Harbour to the northeast and towards One Tree Hill on the opposite side. The windows have been enlarged to make the most of the views
- Dialysis capability on the ward – many patients experience kidney failure as a complication of treatment. Rather than a visit to the Dialysis Unit, patients now have dedicated dialysis machines in the ward


**“ THIS NEW WARD IS A STEP UP FOR AUCKLAND DHB AND NOT SOME ONE-OFF EXCEPTION. WE NOW EXPECT THAT OUR FACILITIES SHOULD MATCH OUR HIGH STANDARDS OF CLINICAL OUTCOMES, QUALITY AND PATIENT EXPERIENCE.**

DR LESTER LEVY, AUCKLAND DHB CHAIR


### Motutapu Ward by numbers

**50%**  increase in bed numbers

**16**  single rooms with fold-out bed for a family member to stay

**1**  wellness room

**1**  whanau room

**2**  dialysis-capable rooms



- Reduced risk of infection by increasing the number of single rooms with ensuite
- Pull-down beds mean caregivers can stay the night without fuss
- Each patient has their own TV and Wi-Fi access
- Family kitchen area to prepare favourite dishes
- Hangout area for young people, with desk, Xbox and mini-kitchen
- Positive air pressure is used in patient rooms to help protect against infection
- Two negative pressure rooms to ensure patients with respiratory infections have their own room with no risk of cross-infection.

#### Better design for staff

- Better room layout to reduce set-up time
- Bedpan flush in each room
- Dedicated staff room and bathroom.

#### Where to from here?

As a wider impact of this project, the process of incorporating co-design into facility design is being refined and piloted in other redesign projects. The goal is that with increasing knowledge and capacity, co-design with staff, patients and their families will become common practice in future projects. This will ensure future developments are fit for purpose and for the requirements of the users of those spaces.

“ THE NEW WARD IS INSPIRING. IT IS A JOY TO COME TO WORK AND THE BEST PART IS SEEING ALL THE HAPPY PATIENT FACES – THAT DOES IT FOR ME! ”

## BETTER QUALITY CARE AND PATIENT EXPERIENCE

## 3.6

# ERAS – enhanced recovery after surgery

Enhanced recovery after surgery, or ERAS, is a programme pioneered in Denmark in the early 1990s. The term refers to a multidisciplinary approach to improving patient outcomes and speeding up a patient's recovery after surgery. It focuses on making sure patients are active participants in their own recovery process and aims to ensure they receive evidence-based care at the right time.

This approach, sometimes known as fast track surgery, delivers benefits not only to patients but also to staff. We have implemented the ERAS approach to colorectal surgery and in gynaecology, with a reduction in length of stay and positive enhancements to the patient journey.

## Colorectal ERAS pilot

This pilot programme began in April 2013 with the goal of reducing the length of stay for elective colorectal patients. The six-month pilot focused on patients undergoing bowel resections and in particular two procedures, right hemicolectomy and high anterior resection, which together had a median length of stay of 5.5 days.

Following completion of the pilot, there was no significant difference in length of stay. It was thought this was due to many of the ERAS principles already being practised by the colorectal surgeons. We decided to extend the pilot to include patients having low rectal surgery. On average these patients had a longer length of stay due to more complex surgery, a higher incidence of complications and the need for stoma formation.

ERAS components include preoperative, intraoperative and postoperative standard protocols (ie care before, during and after surgery), as described below.

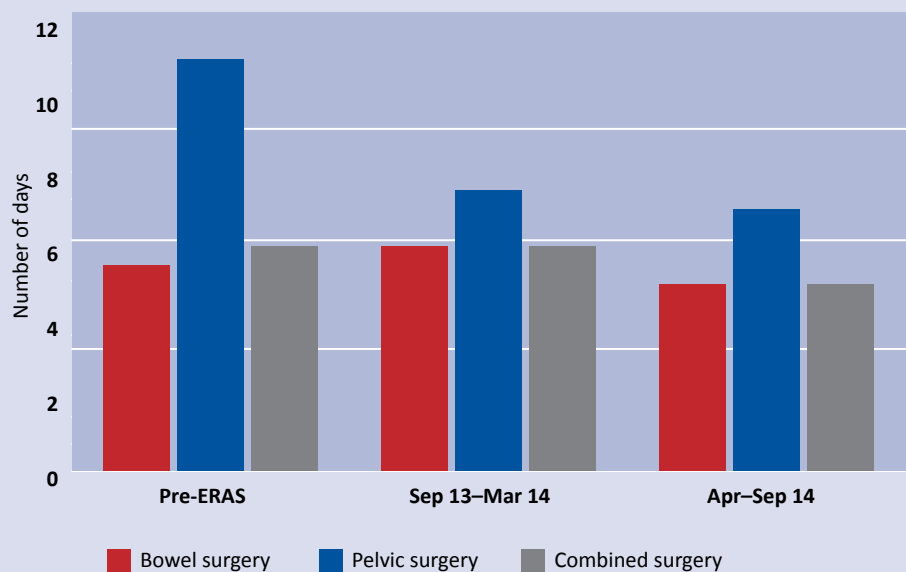
- Patients are seen by the colorectal ERAS nurse preoperatively and given extensive written and verbal information on what to expect throughout their journey. They are given a planned date of discharge and encouraged to plan their continued recovery at home.

- Preoperative health and risk assessments are completed and pre-op health is optimised by encouraging patients to stop smoking, increase activity and take oral diet supplements when necessary. Members of the colorectal medical team are notified of the specific needs of patients being admitted.
- Minimal fasting is standard on the day of surgery, with most patients consuming 400ml of carbohydrate drink two hours before their operation.
- Intraoperative protocols centre on avoidance of intravenous fluid and sodium overload, short-acting opiates, antiemetic therapy, avoidance of nasogastric and abdominal drains, and epidural analgesia for open surgery.

“ **IMPLEMENTING ERAS PRINCIPLES REDUCED THE MEDIAN LENGTH OF STAY FOR COLONIC AND RECTAL RESECTIONS FROM SIX DAYS TO FIVE.** ”



Colorectal ERAS median length of stay



- Postoperatively on the ward, early mobilisation and oral diet, early removal of intravenous fluids and analgesia and early removal of urinary catheter occur. There is a focus on stoma education for those patients with new ostomies. Patients complete a daily diary, which records how often they go for a walk and sit out of bed.
- Between two and three days after discharge, the ERAS nurse phones patients at home to provide reassurance and to check for complications. Patients are given contact phone numbers to call should they have questions or problems, and an audit of compliance and outcomes is completed for each patient.

### The results

Since the pilot began, median length of stay has reduced by one day and while this may appear a small improvement and yet to be of statistical significance, there has been a significant improvement in the patient's journey.

Patients are impressed in particular with the extent of preoperative information they receive and feel empowered to participate in their postoperative recovery by mobilising frequently and eating regularly.

### Where to from here?

Plans are underway for implementing ERAS protocols for urological patients undergoing cystectomy. Further improvements are also being made in postoperative antiemetic therapy and written information for patients on what to expect post-discharge.

## ERAS in gynaecology

In 2011 an audit in Women's Health identified that the average length of stay for an uncomplicated hysterectomy at Auckland City Hospital was 4.3 days compared to the national average of 3.4 days. This finding was also supported by a review of the Health Round Table Australasian data that showed our length of stay was 46% greater than four exemplar hospitals.

We decided we wanted to achieve earlier recovery from surgery for our patients by optimising preoperative preparation and intraoperative and postoperative care, without increasing readmission rates or reducing patient satisfaction.

A multidisciplinary team met over six months from April 2012 to tailor the implementation of ERAS principles to general and oncology gynaecology patients.

The results of the programme were positive, with a significant reduction in mean length of stay from five to 3.5 days (4.2 to 3.1 for general gynaecology surgeries; 6.2 to 4.7 for oncology surgeries) and no increase in readmission rate. In addition, satisfaction with all aspects of care was unchanged.

The ERAS-based changes implemented included the following:

- Pre-admission education with patients
  - Outlining expected length of stay
  - Discharge planning
  - Preparation for surgery (eating and drinking, stopping smoking)
  - Providing a copy of the "Recovering well" booklet, which describes expected progress for patients during and after their hospital stay.
- Perioperative
  - Minimising time spent fasting before operations
  - Optimising pain management
    - 1g Paracetamol preoperatively
    - General anaesthesia plus regional encouraged where possible
  - Postoperative nausea and vomiting prophylaxis
  - Maintaining optimal fluid intravenously perioperatively.
- Postoperative care on the ward
  - Early removal of urinary catheter, return to oral fluid and food, and early mobilisation
  - Prophylactic use of laxatives to prevent postoperative constipation
  - Minimising postoperative use of narcotic analgesia while providing regular non-narcotic pain relief
  - Consistent evidence-based use of DVT prophylaxis
  - Defined discharge criteria.

To understand the impact on our patients we obtained feedback through a patient survey (run before and after implementation of ERAS). Overall, we have found that patients are more involved in their care following implementation of ERAS, particularly through the patient diary. This one-page document lists expected postoperative management that our staff encourage patients to complete as they progress through the postoperative course.

## Where to from here?

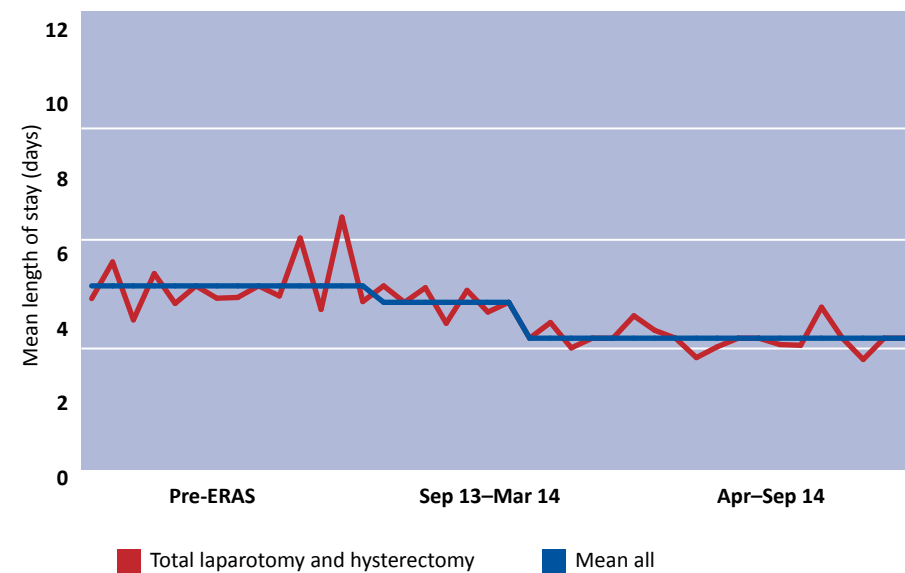
ERAS has now become business as usual in gynaecology. Length of stay and readmission data are produced monthly for review and a further patient questionnaire is planned. Members of the team have presented the project at numerous forums both within and outside Auckland DHB.

“ **THE RESULTS OF THE PROGRAMME WERE POSITIVE, WITH A SIGNIFICANT REDUCTION IN MEAN LENGTH OF STAY FROM FIVE TO 3.5 DAYS.** ”



“OUR GOAL WAS TO REDUCE LENGTH OF STAY FOR GYNAECOLOGIC ELECTIVE HYSTERECTOMY AND LAPAROTOMY WITHOUT INCREASING READMISSIONS OR REDUCING PATIENT SATISFACTION.”

Mean length of stay for hysterectomy and laparotomy cases before and after implementation of ERAS programme (2011-2014)



This graph shows there has been a significant reduction in mean length of stay of more than one day for both oncology and general gynaecology hysterectomy and laparotomy cases.

## BETTER QUALITY CARE AND PATIENT EXPERIENCE

## 3.7

# Looking at health and wellbeing issues through a design lens

The Design for Health and Wellbeing Lab (DHW) is a collaboration between AUT's School of Art and Design and Auckland DHB, which is seeing design students developing solutions for Auckland City Hospital, one of the country's busiest.

The lab was set up with the vision of developing a relationship between the design process and the area of health and wellbeing. The lab is underpinned by interdisciplinary collaboration and a strong focus on user-centred design. Since its inception in early 2014, design students have worked on projects including developing signage for ED to educate patients how the service works, reimagining the staff ID card, designing a more user-friendly crate for operating room staff when unpacking sterilised equipment, and redesigning the ED emergency supplies trolley to make stock levels visible at a glance.

The lab's development stemmed from realising there is potential for meaningful and real improvement in product, graphic and service design across our properties and services, and exciting prospects for AUT students who are exposed to real, hospital-based design problems.

Stephen Reay, Head of Industrial Design and Innovation at AUT and co-director of the DHW Lab, says: "Designing solutions for the health sector is going to be an increasingly important and demanding field for many of our graduates. Having the chance to work on real briefs is an extremely valuable experience for our students."

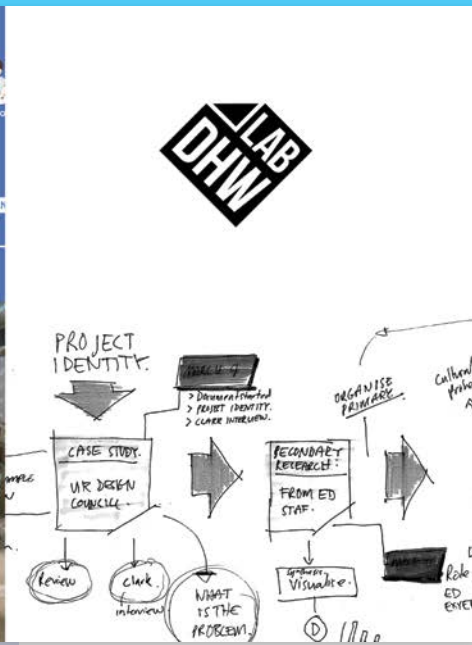
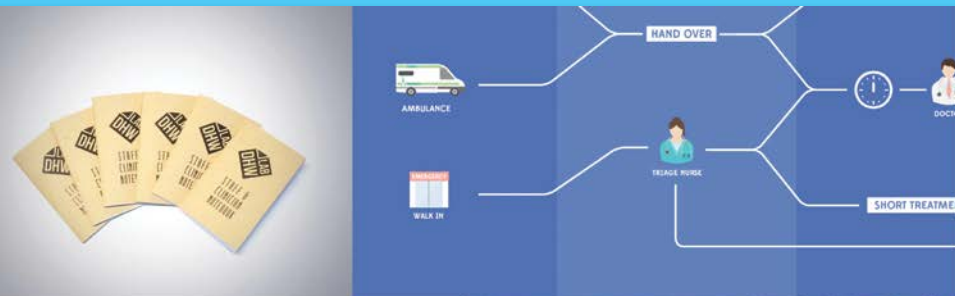
Justin Kennedy-Good is our Programme Director Performance Improvement and co-director of the lab. He says working with the AUT product design school enables the DHB to look at the experience of patients, their families and staff from a new perspective.

The partnership also creates an ability to solve problems in situ in innovative ways. Members of the lab are able to learn quickly by testing solutions with users. It also means members can use the work to reflect back to the organisation what is important in the overall healthcare experience – something that can get lost in a busy atmosphere aiming for the right clinical outcome for patients.

AUT Masters graduate Reid Douglas, a research assistant in the lab and lead on some of the projects to date, says the collaboration with the Auckland DHB is teaching design students about the importance of being responsive to the specific needs of a client and building trust.

"There are a lot of special considerations when you're working in a hospital environment. It's a very busy environment, the staff have lots of demands on their time and you have to be careful about respecting the experience of the patients and their families," says Reid Douglas.





The idea behind the project is that patients and families who have a clearer picture of why they must wait will have reduced levels of anxiety and frustration. The challenge has been to design a simple and understandable representation of the whole service, keeping in mind the possible range of AED experiences.

The final design has been delivered to AED staff and the next stage will see the lab receive formal feedback from users and develop the content for other media. A spin-off project has resulted in new multi-dimensional signage being trialed in the AED to help with patient and family way-finding.

**Where to from here?**

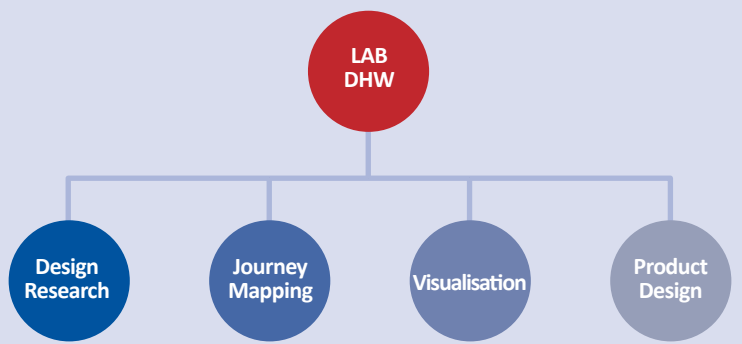
The lab continues to attract new ideas from Auckland DHB staff, ranging from the design of clinical and non-clinical areas to signage-related issues. The lab intends to work with AUT to find opportunities for further third year and postgraduate students. Lab leaders are also looking for projects that can contribute to broader multi-year initiatives in the hospital, responding to the vulnerability and anxiety experienced by patients as well as providing a more welcoming and attractive environment for patients, families and staff.

It is hoped the lab, which has physical spaces at both Auckland City Hospital and AUT, will allow for timely, responsive design that yields tangible benefits for patients and health professionals.

Reid Douglas says the lab has a focus on rapid experimentation and prototyping so users can see the initial designs quickly and give their feedback about what works and what doesn't.

**Emergency Department signage**

One of the first projects to come out of the partnership was a solution to visually communicate the patient journey through the adult emergency department (AED) with the aim to reduce some of the tension around long waits.







4.0

# Healthier communities

All our community living healthier lives, less burdened by disability – another of our collective aims. Healthy communities rely on efforts from the health provider (us) and the people we serve. We have a strong belief in the benefits of partnership; working within our communities to provide better health prevention advice and support, and helping people to self manage their care.





## HEALTHIER COMMUNITIES

## 4.1

# The Kari Centre: meeting our targets

The Kari Centre, part of the Child and Adolescent Mental Health Service, has key performance indicators (KPIs) for the wait time from referral to the first face-to-face assessment of 80% of referrals within three weeks and 95% within eight weeks. While we were able to meet the eight-week target, we had consistently failed to meet the three-week target despite strenuous efforts by the team.

**“ WE WERE CLEAR THAT ANY IMPROVEMENTS WERE BY SYSTEM CHANGE AND NOT BY SIMPLY ASKING STAFF TO DO MORE. ”**

After analysing our lack of success with meeting our targets, we decided that continuing with the current strategies was unlikely to make any further difference; barriers to change were systemic and we needed a wider system change.

To support and guide change we involved an improvement specialist, who recommended a rapid improvement event (RIE). The leadership team discussed the RIE process with the wider service and we had a lead-in period of several months, which involved consultation with the teams.

We picked a group of staff to be involved in the RIE – a cross section of leaders and clinicians – to ensure wide representation and avoid a top-down approach.

Clear parameters were set for the outcome of the RIE in terms of KPI changes, and also patient and staff experience of any changes. We were clear that any improvements were by system change and not by simply asking staff to do more. We also included a consumer representative in the RIE team so there was a clear focus on patient experience and outcomes.

The RIE was held over three days in November 2013. With the clear parameters for outcomes, and having had a lot of data to drive the discussion, the improvement specialist led us through the process, which generated potential solutions.


The process resulted in system changes being suggested, including:

- developing a new client intake process, which eliminated or reduced barriers that made clients wait to enter the service
- creating a new intake team, which focused on entry to the service, and management of acute and short-term issues
- having staff open their diaries for administrators to book first appointments in pre-determined slots
- having equitable caseload planning with all staff
- arranging clinicians to fit with client times and needs, rather than fitting clients around clinician availability.



### Three and eight-week waiting times

	Nov 12	Dec	Jan 13	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan 14	Feb	Mar	Apr	May	June
% assessments in 3 weeks Aim = 80%	59	39.5	74.1	71.4	56	57.6	71.2	58.6	54.2	73.6	60	68.8	90.7	85.1	90.7	96.9	85.4	80	80.2	83.3
% assessments in 8 weeks Aim = 95%	85.9	92.1	96.3	93.7	96	94.9	98.5	100	97.9	100	100	100	100	100	97.7	100	100	100	97.5	98.2

 The target was met or exceeded.

“ THIS PROJECT WAS ESSENTIAL FOR THE KARI CENTRE TO MEET ITS KPIS, AND IN A WAY WHICH INVOLVED AND WORKED FOR (AT TIMES CYNICAL) STAFF, AS WELL AS ACHIEVE AN IMPORTANT PATIENT OUTCOME. ”

At the end of the RIE, we set a timeline and set up four work streams to progress the suggested solutions into practice.

### The results

Evidence of successful change can be seen in the key KPI data (see above) and also staff response. Before implementing the RIE we undertook an anonymous staff survey of various aspects of satisfaction with our systems and the perceived burden. This same survey was first implemented in February 2014, and all indicators were in a direction that showed positive staff experience of the changes.

We have consistently met our three and eight-week targets from November 2013,

three months before implementing the RIE. We believe the reason is that a number of the strategies, as well as culture change, occurred following the RIE process itself and before the official launch of the new ways of working.

### Where to from here?

The changes have been implemented in all relevant areas of the community Child and Adolescent Mental Health Service (CAMHS). We have learnt a lot from tackling and resolving this problem and we have tried to distribute this learning to others. We have discussed our methodology and outcomes in a variety of settings, including local and regional DHB forums, and have presented them to the national CAMHS KPI/Benchmarking Forum.

## HEALTHIER COMMUNITIES

## 4.2

# Looking after heart and health

Quitting smoking and understanding cardiovascular risk make up two of the Government's three primary care preventative health targets for 2013/2014. They are also two targets against which Auckland DHB has performed extremely well, exceeding the national targets in both instances.



We are celebrating our achievement of all six national health targets for April to June 2014, proving our dedication and commitment to providing high-quality services for patients and their families. As one of only two DHBs in the country to achieve all six targets, the results demonstrate a high-performing organisation focused on meeting the needs of patients.

With the support of local primary health organisations (PHOs), Auckland DHB achieved two key national health targets at the end of June 2014 in *heart and diabetes checks* (92 per cent, the highest in the country) and in *better help to support smokers to quit*.

Chief Executive Ailsa Clare says bringing together the work in both primary care and hospitals to help smokers quit is a demonstration of the determination to do the right thing for patients.

"This achievement wouldn't have been possible without the support of our local PHOs and I'd like to acknowledge their commitment and efforts to improve the health and wellbeing of the Auckland population," she says.

## So how did we do it?

### Smokefree

Quite simply, we couldn't have done it without primary care. A key success factor in achieving the target was the leadership shown by the PHOs. All of the PHOs put additional resources into project teams that supported General Practice to achieve the target. The DHBs also contributed additional funding to each PHO to proactively contact those patients who had missed receiving advice and support to quit from General Practice via text and phone.

Below is an example of the whole team approach undertaken by PHOs, in this case ProCare. ProCare ran a variety of successful campaigns under the 'Mission Smokefree' banner that engaged with practices and encouraged them to support their patients. Some of these campaigns included:

- **Mission Smokefree agreement** – asking the practice team to 'sign up' to this initiative. On signing, practices had to nominate a champion and then received the resource pack and access to a range of support.
- **Support and partnership** – working with the practices to tailor support as required.

TARGET

95%



of hospitalised smokers to be offered brief advice and support to quit; 90 per cent in primary care

OUR RESULT

97%

in hospital

100%

in primary care

TARGET

90%



of the eligible population to have had their cardiovascular risk assessed

OUR RESULT

92%

(top-performing DHB in New Zealand)

- **Reward and recognition** – using team breakfasts, lunches, sweet treats and hampers to recognise performance and best practice. Also offering rewards to patients who had made an ‘honest’ quit attempt in May as part of our World Smokefree Day activities.
- **Health promotion support** – staging World Smokefree Day activities with patient prizes and the availability of a health promotion grant of up to \$250 to create displays/activities to engage patients.
- **Education** – undertaking peer benchmark reporting coupled with an education programme throughout the year. Also launching the annual smoking cessation education session in November 2013, which was attended by more than 80 GPs and practice staff.

Reaching the hard-to-reach was accomplished by:

- **Cessation support via text message** – texts offering cessation support were hugely successful, with an average 30% response rate. The trial proved to an initially sceptical ProCare network that this was a viable option and well received by patients.

- **After-hours calling** – to patients not answering or not available during office hours.
- **Practice-led competitions and incentives.**

#### CVD screening

Heart and diabetes checks are completed at a patient’s general practice. The PHOs within Auckland DHB worked with their general practices to ensure people eligible for screening assessments had these completed. Three main methods were used to screen people:

- systematic identification of eligible people with an invitation to attend the practice for an assessment
- opportunistic assessment of people who visited their general practice
- virtual assessment completed from information stored in the patient record.

The PHOs and General Practices worked hard to establish a sustainable approach to screening, which is evident in the number of people who are reassessed every five years. Establishing sustainable practices means we are in a good position to maintain coverage at or above the target into the future.

## HEALTHIER COMMUNITIES

## 4.3

# Immunisation

By working with GPs and nurses across the district, we have achieved excellent results in the immunisation coverage rate for children. We have exceeded the national health target and in doing so, are ensuring the children in our district are protected from common infectious diseases.



Until 2012, the national immunisation target was for 95% of all two-year-olds to be fully immunised. However, although the target was achieved it was noted that many families were late in beginning the immunisation schedule for their babies and this left many unprotected at a time when they were particularly vulnerable. As a consequence, the Ministry of Health changed the target to 90% fully immunised at eight months by June 2014 with a view to reaching 95% by December 2014.

In June 2014, we had exceeded the new immunisation target with a 93% coverage rate, ie 93% of all children were fully immunised at eight months and 95% at 24 months of age. Since the eight-month target was introduced, our coverage has increased 3% overall, which can be broken down further into a 6% increase for Māori and 9% for Pacific, improvements on what has been an historical equity gap.

This result was achieved by working with all our health care providers on the following actions:

- increasing knowledge and awareness of immunisation guidelines; providing support for midwives and general practice staff; developing robust referral processes to Outreach Immunisation Services (OIS); and developing a strong and experienced steering group
- consistently identifying children overdue for immunisation, including those presenting as inpatients, in a timely manner
- commencing an integrated National Immunisation Register/OIS across both Auckland and Waitemata DHBs. Services are delivered by a non-governmental organisation (NGO) working with primary health care organisations (PHOs) and other primary care partners

**“ WE HAVE MADE EXCELLENT PROGRESS IN THE AREA OF CHILD IMMUNISATION. THE AIM FOR THE 2013/2014 YEAR WAS TO SEE 90% OF CHILDREN IN THE AUCKLAND DHB DISTRICT FULLY IMMUNISED AT EIGHT MONTHS OF AGE. AT 30 JUNE 2014 WE HAD EXCEEDED THIS TARGET BY 3%. ”**





- taking a whole-of-health service approach to ensure families are reminded and babies are offered immunisations whenever they come into contact with any health services. Hon Jo Goodhew, the Associate Minister of Health, acknowledged these achievements in her visit to Starship Children's Hospital during Immunisation Week 2014.
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## HEALTHIER COMMUNITIES

## 4.4

# Our health in our hands – a joint Pacific Health Action Plan

The Pacific Health teams at Auckland, Waitemata and Counties Manukau district health boards have worked together to develop a Pacific Health Action Plan for Auckland. Cooperation is the Pacific way – Whanau Ora, Fanau Ola, Fanau Fale. Here the team describes the plan and its vision.

We warm our collective hearts by



Our vision is for Pacific families to live longer and healthier lives. Working with the Auckland DHB we have developed a three-year joint Pacific Health Action Plan to improve the health of the combined Pacific populations across the Auckland region, ie within Auckland, Waitemata and Counties Manukau DHBs. The plan will see us working with doctors and nurses, Pacific communities, churches, schools and families. We will do this together and we will make things better for people who are sick and for those who are struggling or isolated. Whanau Ora, Fanau Ola, Fanau Fale – Cooperation: that's the Pacific way.

## What are we trying to achieve?

We wanted a plan to improve the health of our Pacific communities that put them in charge of identifying the issues and solutions. We have used a community development approach, which means working from the 'grassroots' up. This approach acknowledges that communities have the leadership and resources to drive their own solutions. The joint Pacific Health Action Plan also makes sure that Pacific values are at the heart of our work to support Pacific people to live long and healthy lives.

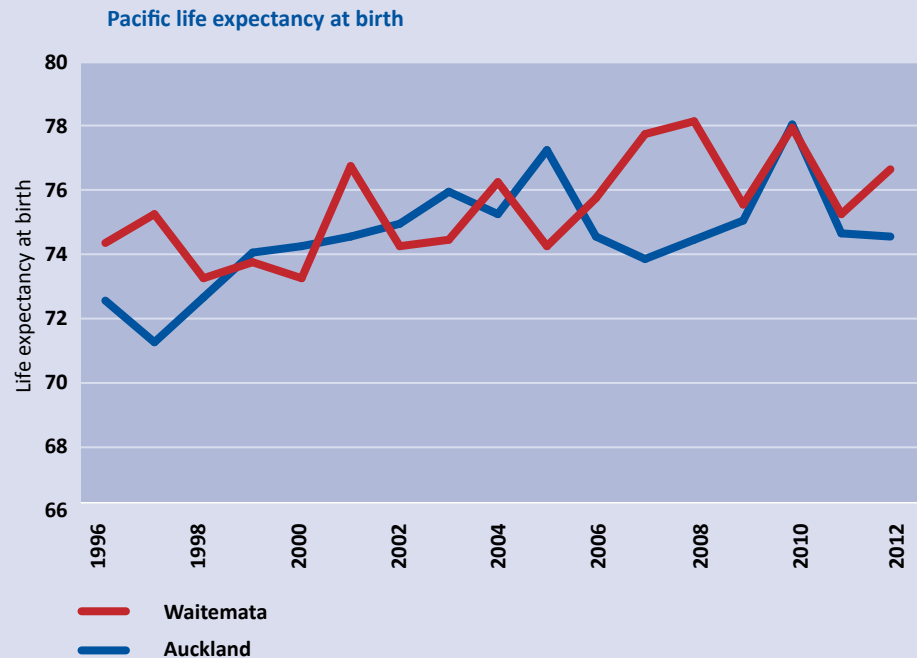
## Life expectancy – one example why the Pacific Health plan is important

A Pacific baby boy today can expect to live to 75 years, yet in the same area a Palagi (Pakeha) boy can expect to live to 83. That's an eight-year gap in life expectancy. Pacific women live about four to six years longer than Pacific men. Over time we want to see Pacific people living as long as Palagi. We also want the gap between Pacific men and women to close.

Poverty can explain some of the difference in life expectancy. Pacific lives are shorter because of particular diseases – heart disease, lung cancer, diabetes, obesity and stroke – and these are mostly related to lifestyle.

While we can't change poverty and other social problems quickly, lifestyle changes can happen immediately. Choosing healthy options on a daily basis can help improve quality of life and also how long we live.

Along with advice from doctors and nurses, there are excellent local and national organisations running health programmes. They understand that change is hard and people often need real help to quit smoking or manage their diabetes better, to reduce alcohol or cook in a healthier way.



The trend towards healthier lives is already noticeable. Pacific life expectancy at birth has been increasing on average approximately two years each decade for people living in the Auckland and Waitemata districts.

### Consultation

As part of developing the plan we carried out extensive consultation across the Auckland region in the second half of 2013.

- 236 people attended six community consultation meetings.
- We spoke to staff at both Waitemata and Auckland DHBs, including the chief executives, their senior management teams, the planning and funding teams and 27 Pacific employees.
- We also met with other local and national healthcare partners.

### What does the Pacific Health Action Plan look like?

The joint plan identifies 28 different actions under six priority headings:

1. Pacific children are safe, well and loved and their families are free of violence
2. People are smoke-free
3. People eat healthily and stay active
4. People seek help early
5. People use hospital services when needed
6. Pacific families live in warm, healthy houses that are not overcrowded.

### Results

We are expecting the first set of results at the end of 2014.

### Where to from here?

The DHBs are working together across the region to reduce health inequalities. The actions are covered in the Northern Regional Plan for 2013/2014. A working group has also been set up to oversee and monitor the plan. Three community parish nurses are being employed by the two Pacific providers in the Waitemata area to work closely with churches and communities to further implement five of the six priorities of the Pacific Health Action Plan in the community.







5.0

# Creating better value for you

As guardians of the health funding for our community we are focused on finding innovative ways to deliver healthcare. It's about being more efficient so we can continue to provide high-quality care to our patients and community now and into the future.



BETTER VALUE FOR YOU

5.1

## Identifying iron deficiencies early

It's estimated that a high proportion of patients coming into our facilities for treatment are either iron deficient or have iron deficiency anaemia. Anaemia increases the probability of transfusion during or after surgery and can be treated with iron as opposed to a red blood cell transfusion. Iron infusion treats the underlying cause and can reduce the probability of requiring a blood transfusion with surgery. Here we examine two aspects of the Patient Blood Management Programme and the results achieved in our orthopaedic and obstetric departments.

### Iron infusions in preoperative orthopaedic patients

In mid-2013 the anaesthetic assessment service identified that pre-surgery testing and treating of iron deficiency for patients undergoing high blood loss surgery would have significant impacts on the need for red blood cell transfusions in the perioperative period. Orthopaedics was an ideal service to set up this process due to the high volumes of patients having high blood loss surgery. A team was set up to examine ways to implement the process.

The objectives of this project were:

- early identification of iron deficient patients
- timely referral for pre-op iron infusion
- clear communication and a clear pathway for patients
- no substantial increase in current workload.
- process simulation and walking through the steps
- awareness raising with the appropriate staff
- team involvement in the process design
- teaching sessions
- process aids
- patient information
- reinforcement and evaluation.

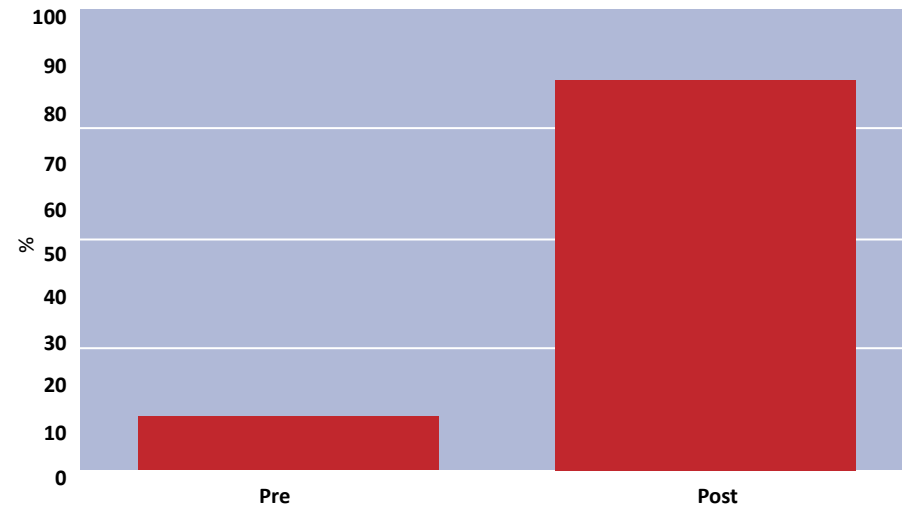
Workshops were run from September to December 2013. They mapped out the patient journey, identified eligibility criteria, simplified an algorithm for referral for intravenous iron infusions, set up documentation, and clarified data requirements and roles and responsibilities. Senior nurses from the Orthopaedic Clinic worked with the anaesthesia team and took the lead with their own staff by putting in place teaching sessions for the programme.

Making the proposal operational required putting in place the following:

“ DURING THE TRIAL PERIOD (27 JANUARY TO 30 APRIL 2014) TESTING INCREASED FROM A RANDOM 10% TO 87% OF ELIGIBLE PATIENTS. A FURTHER NINE PERCENT OF THESE PATIENTS WERE REFERRED FOR IRON INFUSIONS. ”



#### Testing for IDA post First Surgical Appointment



This graph shows the marked increase of testing for iron deficiency following the first surgical appointment.

#### Where to from here?

- **Rationalise blood testing.** All our high risk patients (ie high risk of blood loss during surgery) will continue to be tested for their haemoglobin and iron levels. Our low risk patients will only be tested if there is a medical requirement or their specialist flags possible anaemia as a concern.



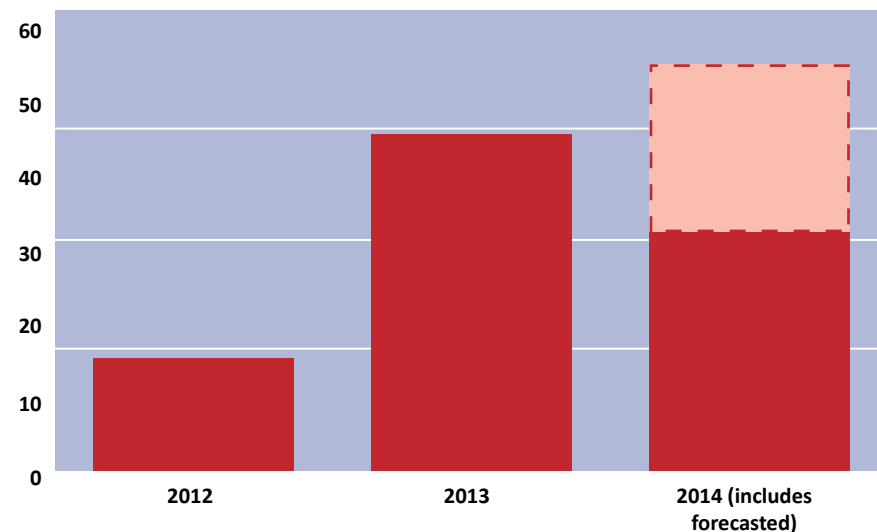
“ DURING THE LAST THREE YEARS THE NUMBER OF WOMEN RECEIVING IRON INFUSIONS HAS INCREASED THREEFOLD, WITH AN AVERAGE INCREASE OF 18G/L IN THEIR HAEMOGLOBIN LEVELS WITHIN THREE WEEKS. ”

- **Institute a referral for high ferritins.** A formalised process has been put in place for referral of any patient with high ferritins (ie above 600).
- **Evaluate impact on transfusion rates.** An audit will be conducted over four to six weeks. It will involve analysing the data on patients who underwent what are usually high blood loss surgeries and had an iron infusion. Historical data as a part of our MBOS (maximum surgical blood ordering schedule) project will be compared with our transfusion rates for patients who had the pre-op iron infusions (non-anaemic) and anaemic patients (historical data).
- **Survey patient satisfaction.** Patient feedback is being sought from those who have undergone iron infusions and the impact on their health outcome pre and post-surgery.

### Iron infusions in maternity patients

In mid-2012 the obstetric service initiated a project to test and treat iron deficiency for pregnant women in their third trimester. Similar studies overseas have shown that improved iron and haemoglobin levels reduce the risk of bleeding during childbirth, as well as

Number of women receiving iron infusions



The graph above shows the marked increase in women receiving iron infusions as adherence to the new approach increases.

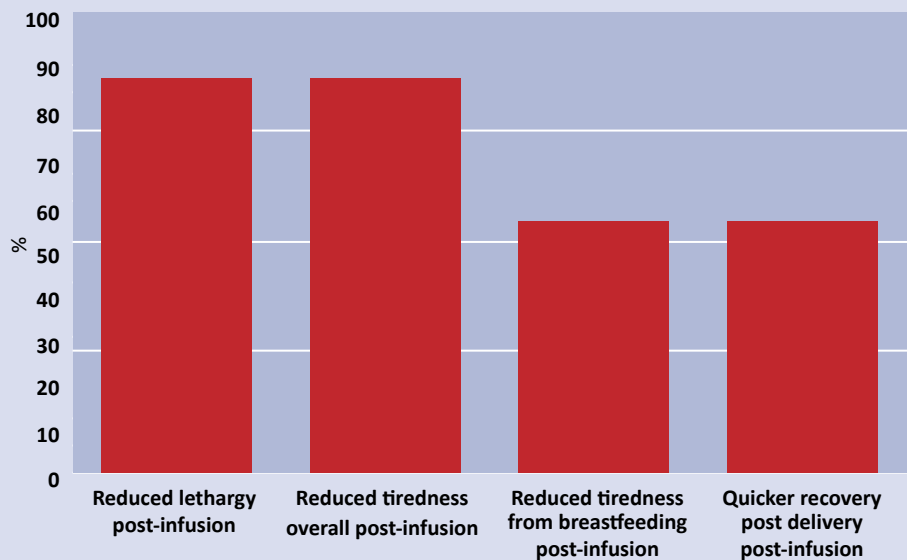
provide secondary benefits such as enhanced recovery post-delivery and the ability to meet the demands of breastfeeding.

The objectives of this project were:

- testing of iron and haemoglobin levels for all pregnant women in week 26-28 as a part of their care pathway
- timely intervention through oral iron and referral for iron infusion
- clear communication and a clear pathway for patients and staff
- no substantial increase in current workload.



### Iron infusions in pregnant women – results from the customer satisfaction survey



The graph above shows the response received in the customer satisfaction survey in terms of benefits experienced by women who received iron infusions.

Workshops were run from June 2012 to February 2013. They mapped out the patient journey, identified eligibility criteria, designed an algorithm for referral for managing iron deficiency anaemia, set up documentation, and clarified data requirements and roles and responsibilities. The workshop team comprised senior clinicians, nurses and midwives, and took the lead in driving all the various changes.

Making the proposal operational required putting in place the following:

- process simulation and walking through the steps
- awareness raising with the appropriate staff
- team involvement in the process design
- teaching sessions for all staff
- process aids
- patient information
- reinforcement and evaluation.

In the customer satisfaction surveys completed by the women who received infusions, the response was overwhelmingly positive, with the main improvements being:

- reduced lethargy and tiredness
- improved recovery post-delivery
- reduced tiredness from breastfeeding.

BETTER VALUE FOR YOU

5.3

## The hidden hospital

During the last five years, adult health services at Auckland City Hospital have seen 23% more patients presenting to the Emergency Department (ED), equating to more than 15,000 additional patients. Despite this incredible growth we've met the national target for shorter stays in ED and reduced the number of elective surgery cancellations due to lack of bed availability.



What could you do in 18 years? If the average time a patient spent in the ED was the same as it was five years ago, collectively our patients would have spent an additional 18 years waiting in the adult ED in 2013/2014.

In July 2009, when the national health target for shorter stays in EDs was first introduced, only 70% of our ED patients were admitted, transferred or discharged within six hours. In 2013 this was consistently around 95%. This is all the more impressive considering our adult ED has seen a 23% increase in patient presentations.

The improvements undertaken in the adult ED have been referred to as 'the hidden hospital', because without them we would have needed to build additional ward space, which was simply

not an option. In fact, it's been estimated that it would cost more than \$10 million per year to staff an additional 100 beds and more than \$20 million to build the required wards.

The innovation has involved a system-wide transformation of how acute care is managed at Auckland City Hospital, benefitting tens of thousands of patients by improving their quality of care, safety and experience in our healthcare system.

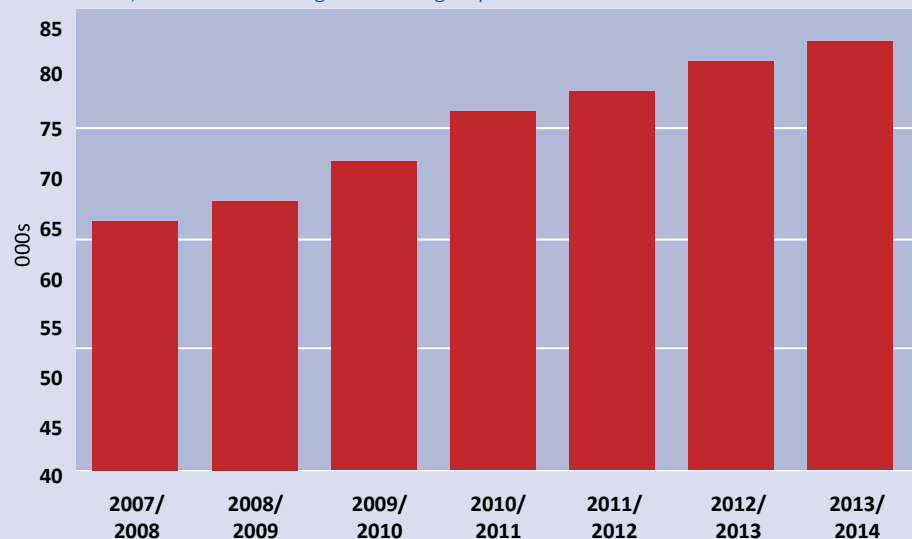
This innovation involved engaging the whole hospital system to reduce the time patients spent waiting for care in EDs, further treatment and discharge from hospital wards. The process began in 2009 when Auckland DHB formed a Performance Improvement Team consisting of experts in continuous improvement from other industries.

### Auckland DHB a finalist in New Zealand Innovators Awards

Auckland DHB's Hidden Hospital project was selected as a 2014 New Zealand Innovators Award finalist in the *Innovation in Health & Science* category. The awards are an initiative of the New Zealand Innovation Council with the aim of recognising great Kiwi talent and services. While our project didn't win the award, it was fantastic to be recognised for the work around reducing time spent waiting in the ED.

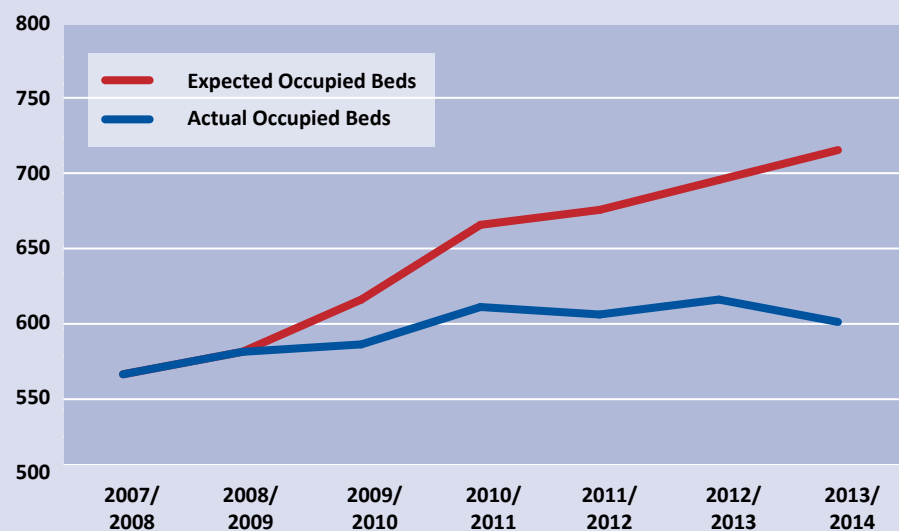
## Adult patient presentations

Acute, Elected and Arranged excluding Day Case and Ward Reviews



In five years, more than 15,000 additional patients presented to adult services at Auckland City Hospital.

## Hospital beds occupied at midnight



More than 100 fewer patients in beds every night in 2013/2014 than what we would expect based on increased presentations. It would cost over \$10 million per year to staff an additional 100 beds, and over \$20 million to build the wards.

## Did you know?

- If the average time a patient spent in the ED was the same as what it was five years ago, collectively our patients would have spent an additional 18 years waiting in the adult ED in 2013/2014.
- We have reduced elective procedure cancellations due to 'no bed available' by 90%.

This team worked alongside clinicians to apply principles developed outside of healthcare to innovate and implement sustainable ways to improve care for our patients and reduce the time they spent waiting.

	2008/ 2009	2009/ 2010	2010/ 2011	2011/ 2012	2012/ 2013	2013/ 2014
<b>Average number of patients per month</b> <small>(Acute, Elective and Arranged excl. Day Case and Ward Reviews)</small>	5608	5943	6351	6540	6706	6891
<b>% growth since 2009</b>	–	6	13	17	20	23
<b>Projected average midnight occupancy</b> <small>(based on % growth)</small>	575 <small>actual</small>	610	652	671	688	707
<b>Actual average midnight occupancy</b>	575	585	605	601	612	597
<b>Net bed savings since 2008 / 2009</b>	–	25	47	70	76	110
<b>% of patients waiting &lt;6 hours in adult ED</b>	64.1	70.2	81.4	94.1	93.6	94.4
<b>Electives cancelled due to normal inpatient bed availability</b>	276	168	147	223	88	21

BETTER VALUE FOR YOU

5.4

## General Medicine – saving 10,000 bed days

The General Medicine Service Excellence Team has identified and implemented a number of improvements to patient care and, in doing so, reduced waiting time for our patients. In less than two years the team has saved more than 10,000 bed days – the equivalent of an entire ward – and reduced the seven day readmission rates.



Feedback from General Medicine's major internal and external stakeholders helped identify challenges to improve patient care (particularly on evenings and weekends), improve patient flow, decrease day-to-day workload variation and improve the teaching and training experience for staff.

General Medicine is the largest inpatient service in the hospital, with 35 per cent of the hospital's total acute admissions and more than 13,000 patients per year. Smooth and timely inpatient flow can have multiple positive effects on the entire hospital, including reduced wait times for services, increased staff and patient satisfaction, and decreased congestion in the emergency department (ED) from which most of the medical patients are referred.

The team changed the way doctors were working, with a new medical model of care that now sees all 12 medical teams taking new patients each day. Medical teams are now ward based, allowing for better coordinated care between doctors, nurses and Allied Health staff. Acute and inpatient teams are split so that the acute teams can focus on new admissions, resulting in fewer patients being admitted to inpatient wards.

A standard escalation practice is helping coordinate hospital stays and discharge for patients who spend more than 10 days in hospital. The new model of care also doubled the number of consultants on Saturdays and Sundays and shifted doctor hours to align with patient referral patterns, offering more support during peak times.

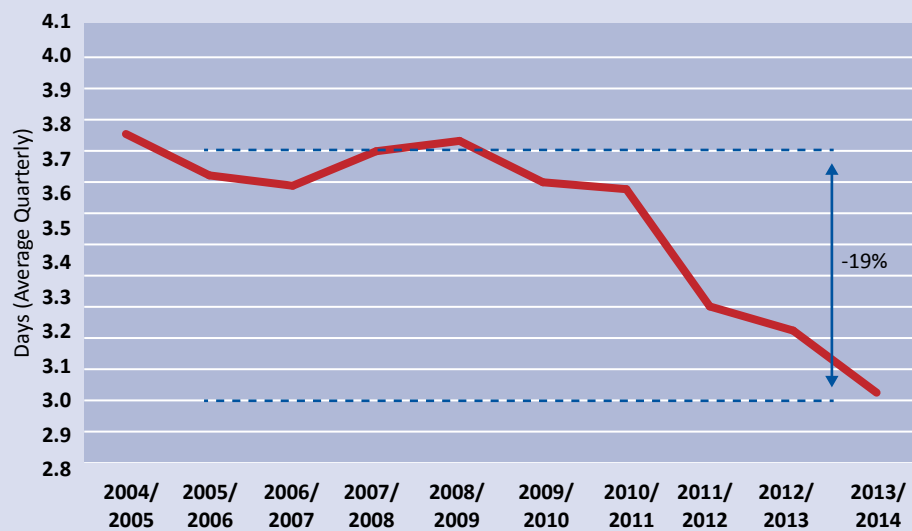
Analysis of the patient journey for ED referrals showed that General Medicine's efficiency in moving new patients through the ED was key to enabling Auckland DHB to meet the national health target of shorter stays in ED.

### Where to from here?

We are committed to making ongoing 'tweaks' to the models of care to find continuous improvements. For example, we lengthened the cycle times of the rotating juniors so they now spend more time on the ward. We are also proposing more quality projects to improve the relationship between professional teams on the ward and initiatives to standardise the work of the ward teams.



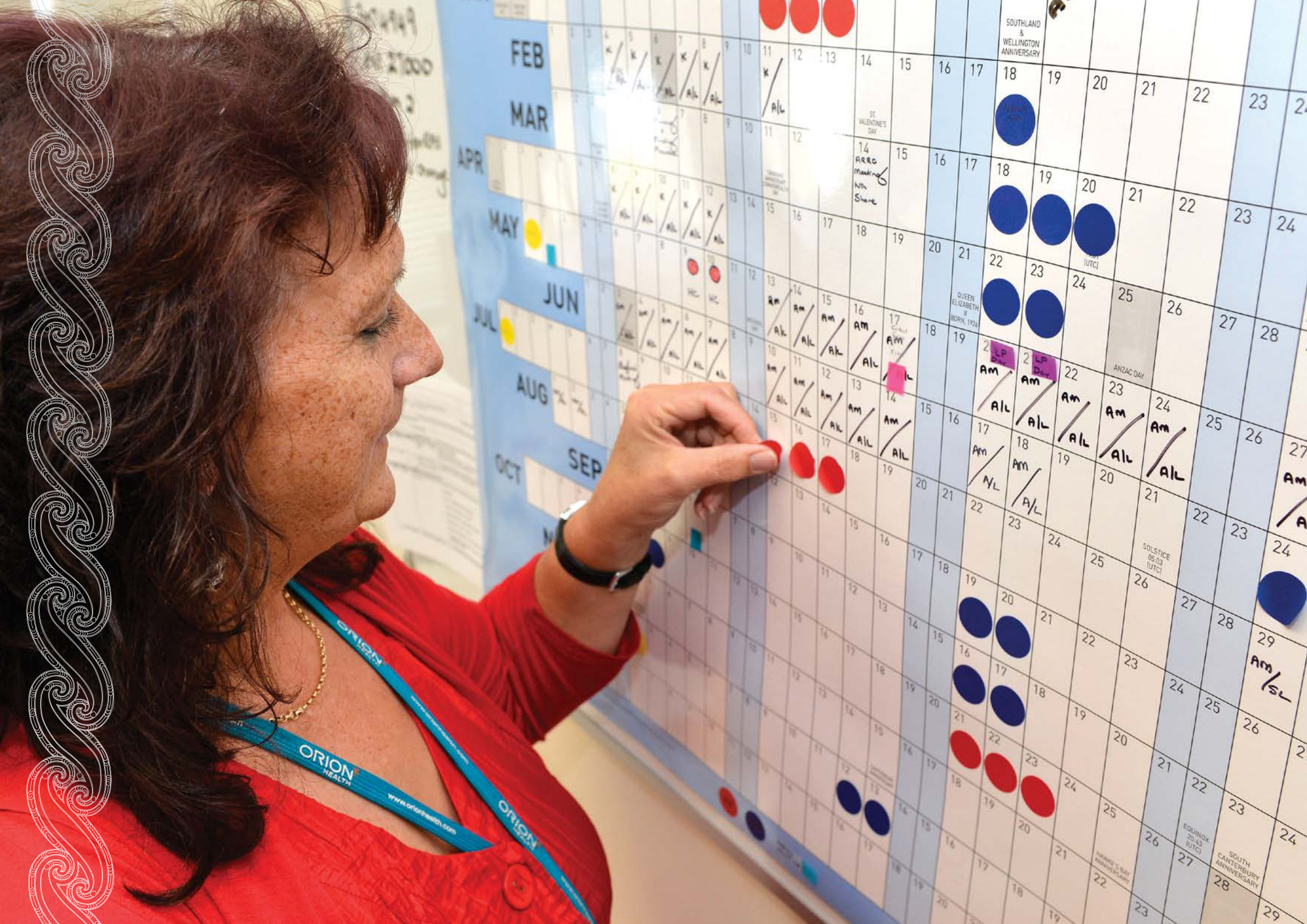
General Medicine average length of stay



This graph shows a 0.7 reduction in average length of stay resulting in 9,000 bed-days saved per year.

“ ANALYSIS OF THE PATIENT JOURNEY FOR ED REFERRALS SHOWED THAT GENERAL MEDICINE’S EFFICIENCY IN MOVING NEW PATIENTS THROUGH THE ED WAS KEY TO ENABLING AUCKLAND DHB TO MEET THE MINISTRY OF HEALTH ‘SHORTER STAY IN ED’ TARGET. ”



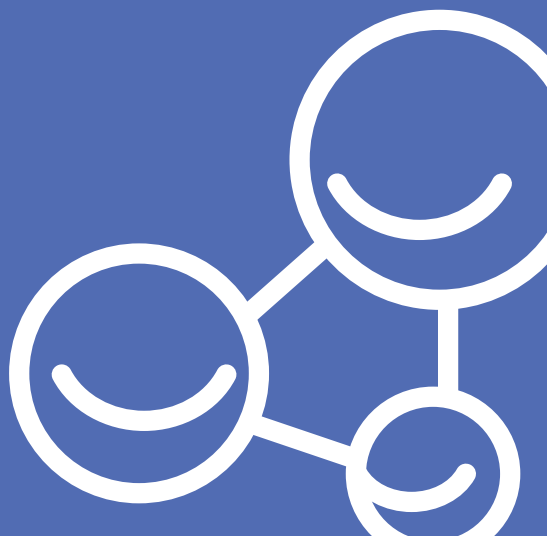




6.0

# The best teams to deliver quality

Our staff are vital to the effective and efficient operation of our organisation. They also help to define the experience of our patients and the community we serve. At Auckland District Health Board staff are listened to, have the skills and knowledge to do their jobs and know their role in the pursuit of healthcare excellence.



## ENGAGED WORKFORCE

## 6.1

# Valuing our workforce – our Local Heroes programme

At Auckland DHB we value our workforce and like to recognise those who go above and beyond to make sure patients get the best possible care.

Each month staff, patients, family of patients and visitors can nominate someone as a Local Hero. Nominations are open for clinical staff providing direct care as well as support staff, those behind the scenes and our many volunteers.

Nominations range from someone who always has a smile or who takes a lost patient to their desired location to those who just put in extra effort to get the job done.

We accept nominations via the Auckland DHB website, and nomination cards are also available in key locations in our hospital buildings. Local Heroes post boxes are located at the main reception areas at Greenlane Clinical Centre and Auckland City Hospital.

“ LOCAL HEROES IS AN EXCITING WAY OF RECOGNISING THE PEOPLE IN THE AUCKLAND DHB TEAM WHO GO ABOVE AND BEYOND TO MAKE SURE PATIENTS GET THE BEST POSSIBLE CARE. ”

Everyone nominated as a Local Hero receives a note of thanks on the nominator's behalf. Every month all of the nominations are reviewed and generally one is selected to receive a special award (some months there are two winners and both are recognised). Those nominated and the winner feature in Nova, our bi-monthly magazine, so we can share the stories of those Local Heroes in our midst.

**Tell us about YOUR local hero**

Who do you know who goes above and beyond for patients, their family members or their colleagues? Show how much you appreciate a member of the Auckland DHB Team by nominating them as a **local hero**.

Completing the nomination form will only take a few minutes but the pride of being nominated will stay with your hero forever.

**You can nominate by completing this card or online at [www.adhb.govt.nz/localheroes](http://www.adhb.govt.nz/localheroes)**

Name of the person you are nominating: \_\_\_\_\_

Team or ward: \_\_\_\_\_

Your local hero's phone number (if you know it): \_\_\_\_\_

Are you a: patient  staff member  visitor/family

Your name: \_\_\_\_\_

Your email or phone number: \_\_\_\_\_

\*We may wish to contact you to find out more information. Your details will only be used for the purpose of your local hero nomination and will be stored on a secure file.

**local heroes**

**AUCKLAND**  
DISTRICT HEALTH BOARD



## The 2013/2014 Auckland DHB Local Heroes



## Volunteers help keep the wheels turning

Like many hospitals around the world, Auckland City Hospital relies on time generously donated by our Volunteer-Site Ambassadors, or Blue Coats as they are affectionately known. These ambassadors provide friendly assistance, enabling people to find their way around the hospital, clinics, wards and other facilities. All our ambassadors are trained and easily recognised in their blue uniform. The volunteers complement the work of staff, with a caring, sincere attitude that contributes to the overall 'spirit of care'.

The Volunteer Programme was initiated in 2003 to provide a quality service for visitors to our Auckland City and Greenlane sites. Ambassadors complete at least one four-hour shift each week and are provided with free car parking, meal vouchers, uniforms and ongoing training. We also organise social occasions to say thanks to the team and give them a chance to meet other volunteers.

### By the numbers

- We have about 50 Blue Coats, of which 15 are based at Greenlane.
- Many complete two shifts each week, with some doing multiple shifts across both sites.
- Most have more than 10 years of service, having been with the volunteer programme from the start.
- Most Blue Coats are aged 65 or older, with one celebrating her 95th birthday at the volunteer centre in August.

The Blue Coats' demographic reflects that most of them are retired, although we do recruitment drives with younger age groups. The lifetime of work experience and backgrounds the retired Blue Coats bring to the programme means they fit in well with the diverse range of patients and visitors.



## ENGAGED WORKFORCE

## 6.2

# Essentials of care – getting the basics right

Having clean premises is vital in our mission to improve patient safety. In April of the reporting year we brought the cleaning contract in-house to help us meet our vision to be ‘the cleanest hospital in the country and a leader in innovation’. Recent audits indicate an average of 82% compliance compared with 42-50% when the cleaning service was outsourced, which means we are well on track.

The journey began in September 2013 when an audit of the cleanliness of Auckland DHB properties at Grafton, Starship and Greenlane found significant service gaps in performance and quality issues.

The audit identified that international standards were not being adhered to, there was a lack of accountability and oversight for performance management, and reporting was poor. It also found a lack of innovation and flexibility on the contractor’s part to meet the daily needs of the hospital.

Other issues highlighted included:

- poor supervision and customer service focus
- cleaners’ hours not meeting demand
- a lack of methodology used for cleaning
- inadequate and outdated equipment and cleaning technology being used
- unclear staff expectations
- inadequate bed cleaning.

In addition to the audit findings, independent hospital surveys had also highlighted low staff satisfaction with the cleaning service. The cleaning supplier

was seen as reactive, and not proactively supporting clinical care delivery. The lack of communication between cleaners and clinical staff was also an issue, with the potential to impact on patient outcomes.

### How did we fix the problem?

The recommendations to the Auckland DHB board were:

- 1. Transfer the cleaners to an in-house service.**
- 2. Implement a best practice approach aligned with the Victorian Cleaning Standards.**  
Developed in early 2000, these standards are in place for the state of Victoria, Australia and currently being reviewed in the United Kingdom. They have been adopted in New Zealand by most district health boards, private hospitals, residential care facilities, medical clinics, other health-related facilities and private cleaning companies.
- 3. Require cleaning standards to be benchmarked nationally and internationally.**  
The Victorian standards have been nationally and internationally<sup>4</sup> recognised as the benchmark for cleaning of health facilities in managing infection control.

4 Victorian Standards referenced in “Revised Guidelines on Contracting for Cleaning Services” Dept of Health, UK



**4. Introduce the '7 Steps' cleaning methodology to ensure consistency in service delivery and enhance compliance with infection control and hand hygiene policies.**

The 7 Steps methodology trains cleaners to follow a sequence of seven steps: high dusting, sanitising, spot cleaning, bathroom cleaning, dry mopping, wet mopping and visual inspection. Each step sets out specific areas to cover and the chemicals, equipment and process to use. The 7 Steps comprise the standardised training technique used at the Counties Manukau and Waitemata DHBs.

**5. Develop a robust quality management programme linked to the Top Cat auditing tool.**

Top Cat is an Auckland DHB audit programme for cleaning, which provides a checklist for audit and compliance against established standards. We use Top Cat to undertake weekly cleaning audits to monitor standards and take corrective action. This tool is used widely in hospitals and throughout the health sector.

**6. Develop a transparent and proactive audit process for continuous service improvement.**

**7. Build partnerships in the clinical network to manage infection control and improve the quality of service throughout the organisation.**

**What does the cleaning service look like now?**

We have 200 cleaners working across three sites (Grafton, Starship and Greenlane) and we have:

- implemented best practice aligned with the Victorian Cleaning Standards
- introduced the 7 Steps cleaning methodology to ensure consistency in service delivery
- enhanced compliance with infection control and hand hygiene policies
- introduced a new in-house training programme
- linked staff to the NZQA-certified Learning Literacy and Numeracy programme, and are now providing external tutors
- provided staff with new uniforms and new cleaning equipment (including new trolleys)
- introduced weekly cleaning audits at all three sites

- changed the set-up so that cleaners now work as part of the wards, and reduced variations between wards and between shifts.

Recent audits indicate the cleaning service is achieving an average of 82% compliance with the Victorian standards, including achieving 84% in Te Whetu (the Acute Mental Health Unit for Adults).

**Where to from here?**

In line with our vision to be the cleanest hospital in the country and a leader in innovation, we are continuing to work closely with staff to achieve 95% audit results.



## ENGAGED WORKFORCE

## 6.3

# Nurses release more time to care

Nurses have quadrupled the amount of time they spend with patients during a pilot at Auckland City Hospital of a world-renowned programme, Releasing Time to Care.



Releasing Time to Care (RTC) is a programme developed by the National Health Service (NHS) in the United Kingdom. It helps ward teams review the way in which they undertake activities, with the goal of removing waste and freeing up time to provide more direct patient care.

In 2012 Auckland DHB piloted a new 'accelerated' approach to implementing RTC with significant success. Following this the accelerated approach was rolled out to a further 28 wards in the reporting year, while 12 more wards started in September/October 2014.

Implementing RTC across Auckland DHB has increased the amount of direct care time staff have with patients, as the results from June 2014 opposite indicate.

### Making it our own

Since 2009 the RTC programme has developed and evolved, with contribution from teams across the DHB. With the development of the accelerated programme, it has become more apparent that although the foundations are still there, this is no longer an NHS programme and is in fact an Auckland DHB programme.

There is a strong sense of pride across the hospital about the improvements and innovations as part of RTC. We encourage

teams to replicate great ideas and practice wherever appropriate. Teams 'go see' the great work already done in other wards and get to hear first-hand about how these changes have impacted on patient care and staff satisfaction.

### Patient and staff engagement

Engaging the patient is a fundamental stage in all RTC activities and is consistent with our view of patients as partners in care. The programme achieves this through patient interviews related to specific modules, six-monthly patient surveys and exploring co-design opportunities.

Engaging staff in RTC and improvement activities is key to the programme's success and sustainability. We have found the energy, enthusiasm and leadership skills of the charge nurses and other senior nurses are vital to establishing an engaged workforce. Staff engagement is achieved through programme awareness sessions, module participation, regular communication during daily meetings, module-specific staff interviews, six-monthly staff surveys, and regular reward and recognition.

We look forward to ongoing development of RTC in the coming year, with more teams joining the programme and others building on their success and delivering more direct patient care.





Ward description	Percentage of direct care time
Accelerated RTC pilot ward (respiratory)	From 16% to 73%
Showcase ward (neurosurgery)	From 35% to 65%
Top performing ward (cardiology, ward 31)	From 29% to 77%
Average across all wards	From 33.8% to 48%

**Redesigning the medicine room on Ward 81, and other improvements across the ward, has increased its direct care time from 35% to 57%.**

**This has had a positive impact on patients as they receive increased direct care by nursing staff and a safer process for drug administration.**

## Upgrading medicine rooms leads to more nurse time

One example of an improvement achieved through RTC is the upgrade of the medicine rooms. Improving the rooms' flow and layout means nurses can dispense medications more effectively with fewer interruptions.

The medicine room on ward 81 had poor layout and ergonomic design that was not conducive to standardised and safe drug dispensing or good stock management and control. This meant it took longer to organise the drugs to be administered to patients.

A project team came up with a new design that achieved the following outcomes:

- Medicine room de-cluttered and obsolete/out-of-date stock removed
- Storage streamlined to allow for better stock management and rotation – 'first in, first out'
- Visualisation aides – better labelling, signals for minimum and maximum stock levels – to improve stock management
- Layout amended, with logical areas fitting in with administration protocols

- Waste reduction – less obsolescence
- Ergonomic design – lower storage shelving/cabinets
- Releasing time for nurses to spend more time caring for patients
- Improved patient safety – well-organised drug storage management and administration.

The medicine room refurbishment was completed in July 2014, just after the reporting year ended, and the feedback from staff to the charge nurse manager (via a six-monthly staff survey) has been extremely positive.

## Where to from here?

We have scheduled quarterly audits with the following indicators being used to evaluate the benefits:

- reduction in stock waste, mainly due to out-dated stock
- staff feedback survey
- reduction in medication errors – Risk-Pro audit
- monitoring the rate of releasing time to care.

## FUTURE FOCUS

## 7.0

# Our future focus

This chapter looks at areas of focus for the 2014/2015 financial year. While patient safety remains at the core of what we do, there are a number of other initiatives underway to improve quality.

These include: developing a new IT system to support clinical governance activity; rolling out the 'Families as partners in care' programme to all wards; and continuing to roll out the successful accelerated version of the Releasing Time to Care programme that is making a huge difference to the amount of direct care time our nursing staff have with our patients.

## Improving the patient experience

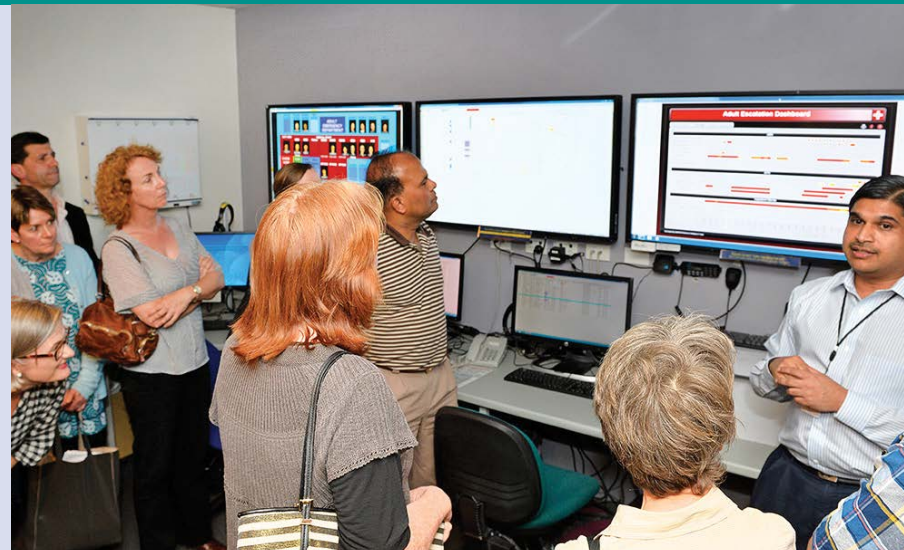
- Formalising a patient and whānau-centred care programme to bring together relevant work including:
  - An organisational health literacy review including improved way-finding
  - Improving letters sent to outpatients
  - Improving communication channels with a focus on redeveloping our website and creating an online knowledgebase
  - Rolling out the 'Families as partners in care' pilot that was run in 2013. The partners in care programme extended visiting hours to 24/7 for a nominated support person.
- Rolling out improvements identified through our Public Spaces work.
- Further developing of our Design for Health and Wellbeing Lab collaboration with AUT.
- Further developing of our experience measurement (eg use of real-time push-my-button devices and development of an Emergency Department (ED) patient survey).

## Improving our enabling infrastructure

- A new quality IT system to support our patient safety and clinical governance activity.
- More multidisciplinary team training using a variety of simulation tools, from high end labs to scenarios in ambulatory settings.
- Rolling out a clinical governance framework for each directorate, and ultimately each service, with data coming up and down to inform quality improvement.

## Surgical Site Infections (SSI)

- Continue to improve best practice around interventions known to reduce infection rates in orthopaedics.
- Introduce SSI surveillance for cardiothoracic surgery procedure.
- Focus on interventions known to reduce infection rates in cardiothoracic surgery procedure.



### Falls and pressure injuries

- Despite significant improvement we will continue to focus on reducing patient harm from falls and pressure injuries with a particular focus on ensuring we are identifying and reporting all relevant incidents.
- In the reporting year we launched a falls concept ward in Older People's Health to test falls prevention initiatives. A number of the initiatives are now being rolled out to other Older People's Health wards and will be considered for implementation in other areas across the organisation. These initiatives include the use of standard terms across disciplines for mobility need and toileting supervision, and use of coloured wrist bands to clearly identify patients with different levels of mobility need.

### Hand Hygiene New Zealand (HHNZ)

- Sustain current improvements in hand hygiene compliance while working towards achieving 80% compliance.
- As the Lead Agency for the HHNZ Programme, work with the Health Quality and Safety Commission to shift to a regional model of programme delivery.

### Releasing Time to Care

- Continue to rollout the successful accelerated version of Releasing Time to Care, which is freeing up nurses' time to provide more direct patient care.

### Medication safety

- Map medication pathways to identify interventions that enhance safety, processes, patient information and experience, and to inform best use of available multi-professional resources.
- Roll out electronic medicines reconciliation across the organisation. The initial focus will be patients over the age of 65 (Maori and Pacific people over the age of 55) with the intention that medicines reconciliation on admission will reduce the potential for medication-related adverse events in this population. The electronic process will significantly improve the flow of information back to primary care providers when the patient is discharged.
- Electronic prescribing and administration – we aim to have two of our Older People's Health wards using a fully electronic prescribing

and administration system by the end of 2015. This system will deliver a range of benefits to patients and healthcare providers.

- Improve the reporting system for medication errors. With these improvements in place we will be better able to understand the reasons that errors happen and put systems in place to try and stop errors from happening in the future.
- National Opioid Collaborative – as part of this national programme, we are looking at opportunities for improvement associated with pain management. This will include measures to ensure that patients' pain is recognised and treated promptly and appropriately while minimising the risk of adverse effects.

### Community and long-term conditions

- Develop processes and systems to support early discharge from hospital and rapid response models of care for our older people.
- Develop a frailty pathway for older people, ensuring that gerontology services are integrated into the Emergency Department with the aim to further develop intermediate models of care as an alternative to a hospital admission.
- Focus on falls, use evidence-based interventions in the concept ward, and develop pathways to prevent falls across the healthcare continuum including aged residential care, community and in-patient services.
- Coordinate care for every in-patient from day one of the patient's admission, in response to consumer feedback.

8.0

# Other quality improvement projects

Here is a selection of other quality improvement projects that have been implemented or are underway at Auckland District Health Board.

## **Acute Patient Flow and Shorter Stays in ED**

– From 63% < 6 Hours in ED to over 95% < 6 Hours. Reduced ED average length of stay by > 3hours yielding more than 150,000 hours or 6,250 bed days per year of waiting time avoided. Manage 28% increase in admissions without increasing nursing staff or size of department.

**Medical Oncology Clinic capacity** – Increase utilisation of available clinic capacity.

## **Medical oncology acute regional flow**

– Improve acute referral and admission process to avoid unnecessary acute admissions for non-oncology conditions and to reduce unnecessary delays in acute flow and reduce impact of acute flow on planned activity.

**Dose preparation for Anaesthesia (CIVAS - Central Intravenous Additive Service Phase II)** – Yet to be defined - Pharmacy producing prefilled syringes for use in anaesthesia to reduce anaesthetic medication errors intra-operatively.

**Clinical Pharmacy Services Improvement project** – Provide value-added clinical pharmacy service -for all high priority patients within 72 hours of admission.

**Interventional radiology clinical database and follow ups project** – Improve management of clinical information on IR cases for neurological and renal patients by building a clinical database developed to capture and manage each patient and their clinical outcomes. This reduces risk and can be used to enhance research and outcomes.

## **Programme to reduce unnecessary follow-ups**

– The programme has projects in Cancer and Blood, Neurology, Children's, Urology, Ophthalmology and Respiratory. The objective is to help services reduce unnecessary follow ups through providing an improvement 'DIY toolkit', reporting and project support.

## **Effective Pathways Programme (Otolaryngology ORL)**

– Implemented clinical pathways in ORL for: vertigo referrals, sinusitis referrals, surgery prioritisation, ORL follow-up protocols, head and neck nurse phone follow up and local anaesthesia clinic procedures.

Wider programme to promote definition and implementation of pathways across Auckland DHB (including Early Recovery After Surgery [ERAS] pathways).

**Surgical Site Infections** – Reduce instance of surgical site infections.

## **Abnormal Uterine Bleeding Pathway**

– Reduce the number of inappropriate referrals for premenopausal abnormal uterine bleeding from primary care to the General Gynaecology service. It is anticipated this will lead to improved triage processes, reduced demand for gynaecology visits and reduced waiting time to First Specialist Appointments.

## **Early pregnancy/miscarriage pathway**

– To avoid unnecessary/incomplete referrals and to reduce unnecessary follow-up and ultrasound scanning.



**Urology/Gynaecology Pathway for Incontinence and Prolapse** – To avoid unnecessary referrals to specialist surgical service and increase the percentage of patients treated through physiotherapy.

**Women's Assessment Unit acute service improvement** – To improve acute flow and increase the percentage of patients discharged or transferred within target timeframe.

**Accelerated Releasing Time to Care** – Engaging frontline staff in inpatient wards to improve the way they work and eliminate waste - therefore increasing direct patient care time and improved patient and staff satisfaction.

**Last Days of Life Review** – This project will examine and improve the care of patients and their family/whanau from a patient being diagnosed as terminally ill through to care of the family/whanau post-bereavement.

**Patient and Operations Planning (POP) programme** – Improve management processes to ensure the production plan drives budgets and the price volume schedule.

**Patient preparation to address Operating Room Direct Admissions delays on Level 8 ACH (TPOR)** – Introduction of an acute flow nurse on Level 8 to support completion of a pre-operation checklist

**Briefs and debriefs (TPOR)** – Expand use of briefs and debriefs across the Operating Rooms.

**Just-in-time consumables project (TPOR)** – Change behaviour in Operating Rooms to ensure consumables are only opened as required

**Central Sterile Supply Department contaminated instruments (TPOR)** – Reduce the number cancellations or delays due to contaminated sets from Central Sterile Supply Department

**Registered Nurse (RN) as Anaesthetic Assistant (TPOR)** – Support the development of a new national training programme that will extend skills for the RN to increase anaesthetic capacity and increase flexibility.

**Fraser MacDonald Unit Redesign Scope** – The redesign involves identifying goals; what we want to change; establishing design principles and the benchmarks we will use. The design will produce an improved facility and outline at a high level how we want the facilities and services to work.

**Co-design staff training** – We will improve from having limited in-house co-design skill and knowledge. Our goal is to have a group of people inhouse with core competencies in design and delivery of co-design workshops.

**Women's physiotherapy waiting times** – Reduce waiting time and waiting lists for patients waiting for physiotherapy. Ninety percent of urology/ gynaecology /colorectal/ sexual pain patients wait longer than six weeks for their appointments.

**Bacillus Calmette-Guerin (BCG) in bladder cancer – Part 2** – This project to evaluate BCG clinic outcomes following treatment and use of best practice guidelines for treatment is designed to ensure sufficient resourcing for patient volumes, maximise efficiency and quality in the BCG clinic.

**Medical oncology day stay utilisation** – Increase utilisation of available chemotherapy treatment time in day stay.

**Starship Magnetic Resonance Imaging (MRI) Utilisation** – Increase the utilisation of the Starship MRI facility to increase daily throughput.

**Same day of surgery admission** – Transplant patients brought into hospital on Ward 71 and 73 are often brought in the day before surgery to allow assessment on the ward the night before. This is not a clinically necessary step, rather a process step that if changed could reduce our patient's length of stay on the wards.

**Tamaki Localities project** – Working with the Tamaki community and community providers using co-design principles and methodology to determine what they what to work on to improve the mental wellbeing of people living in the area.

**Optimise oncology day stay utilisation - phase II** – Improve from a situation where treatment visits are variable in time duration, to predictable and accurate finish times. As a part of this, reduce the percentage of late and unforeseen deferrals of treatment visits.

**Implement virtual clinics in Radiation Oncology** – Improve the service from the current face-to-face follow up for Prostate-Specific Antigen (PSA) monitoring which requires patients to travel. Move to a 'virtual follow up pathway' model of care.

**LabPlus Service Excellence Programme** – This programme includes initiatives in patient safety, quality of care, economic sustainability and management systems. Financial benefits are planned in the areas of: annual leave management; automation; costing and pricing strategy; demand management; departmental synergies; direct treatment costs; fulltime staff management; repatriation of tests; service rationalisation and contract management.

**Improve the safety, experience and timeliness of in-hospital patient transit through a new patient tracking system** – Development of requirements and a solution for a system to optimise movement of patients and improve safety by reducing risk of the wrong patient being taken to the wrong location.

**Maternal Fetal Medicine (MFM) service improvement (flow)** – Improve flow through MFM clinics and improve utilisation of key resource.

**Haematology outpatient sustainability** – Ensure the Haematology outpatient service can cope with additional demand following the opening of Bone Marrow Therapy ward.

