

Quality Accounts 2014

QUALITY & **IMPROVEMENT**
DIRECTORATE



Contents

	Foreword
	Statement of Endorsement
2	Our Role
3	Our Health Profile
4	Our Vision, Mission & Values
5	Where the Money Goes
6	Our Services
7	National Health Targets
9	Serious Adverse Events
11	Quality Accounts
11	Improving medication safety for patients
12	Preventing Pressure Injuries
13	Preventing Falls – Zero Harm
14	Health Quality & Safety Commission Surgical Site Infection Improvement Programme
15	Reducing hospital-acquired blood clots (venous thrombo embolism – VTE)
20	Hand Hygiene (HH) – Improving patient safety
21	Diabetes Care Improvement Package (DCIP)
	Northland DHB and Primary Health Organisations (PHOs)
24	Whānau Pack – Tools for families and parents with teenagers
25	Patient/Consumer Experience
26	Building Whānau & Youth Resilience in Te Tai Tokerau
28	Partners in Care – Ward 15 Whangarei Hospital
30	Making adjustments using diabetes education (MAUDE)
31	Implementing the Northland Health Services Plan 2012 - 2017

Foreword

Welcome to the Northland DHB Quality Accounts. It gives you a snapshot of how we support the health needs of the people in our community.

These Quality Accounts are an annual report about new quality initiatives we introduce to help improve patient safety and care.

We aim to deliver a first-class service which is patient and family-focused and provides the right care and support when and where it is needed.

Statement of Endorsement

On behalf of Northland District Health Board and the Executive team we are pleased to present our 2014 Quality Accounts. It has been a privilege for us to lead our organisation through another year and to have the opportunity to describe our quality performance over the past year as well as outlining our improvement goals for the year ahead.

Northland DHB is challenged by the practicalities of delivering healthcare to a largely rural, dispersed, economically-deprived population with significant health inequities between Māori and non-Māori. With over 30 percent of our population being Māori, significant poverty, and a very high percentage over 65, we are seeing unprecedented demand for our health services in primary care, our hospitals, mental health and aged care.

Despite these challenges, we have made significant progress towards improving the health and wellbeing of our people and achieving a healthier Northland, and one of our greatest achievements is the development of a Patient Safety and Quality Improvement culture. To achieve “a healthier Northland”, we need to provide safe, high-quality care to all our patients. Hence, we worked with our clinical leaders to agree the terms of reference for an in-depth external Patient Safety and Quality Improvement Review which we commissioned in October 2013 and completed in April 2014.

The review sits in a context of increasing expectations on healthcare providers to deliver high quality care and ensure patient safety. There is also an expectation of much greater patient and family involvement in care, and transparency if things go wrong.

DHB success involves much more than meeting health and financial targets. The review contained 75 recommendations which we have now prioritised and will be working through with our clinical teams. Many recommendations have already been addressed, and there have been over 1,000 downloads or views of the document by our staff, which demonstrates the level of interest in improving the quality and safety of care for our patients.

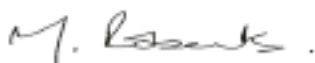
Providing safe, high quality, patient and whānau centred care is our greatest priority and it is good to be able to share the results that we are achieving across the Northland health sector. It demonstrates our commitment to our Northland Health Services Plan and the achievement of the “Triple Aim” of Improving Population Health and Patient Experience while also delivering high value and sustainable services.

This year we were able to celebrate some of the extraordinary quality projects and initiatives at our inaugural Northland Health Sector Awards. A number of the category winners are described in more detail with the Supreme award, borne out of a cluster of youth suicides in 2012, going to “Building Whānau and Youth Resilience”.

Over the last year we have continued to make good progress with all of our Quality and Safety Markers, but this year we have also included many of the other quality projects that are underway in our hospitals. We also describe a number of Northland Health Services Plan quality projects that we have delivered in partnership with primary care and the community.



Dr Nick Chamberlain
Chief Executive



Dr Mike Roberts
Chief Medical Officer



Margareth Broodkoorn
Director of Nursing & Midwifery

Our Role

Northland DHB, established under the New Zealand Public Health and Disability Act (2000), is categorised as a Crown Agent under Section 7 of the Crown Entities Act 2004.

Responsible for providing or funding the provision of health and disability services for the people of Northland, the DHB covers a large geographical area from Te Hana in the south to Cape Reinga in the north.

The DHB employs around 2,637 staff. Acute services are provided through the DHB's four hospitals, based at Whangarei, Dargaville, Kawakawa and Kaitaia, with elective surgery performed at Whangarei and Kaitaia. These services are supplemented by a network of community-based, outpatient and mental health services, a range of allied health services and a public and population health unit.

Some specialist services, like radiation treatment and rheumatology services are provided from Auckland or through visiting specialists travelling to Northland.

The DHB allocates funding across the health sector in Northland, contracting with a range of community-based service providers such as primary health organisations (PHOs), dentists, pharmacies and other non-government organisations (NGOs).

Our Communities

Population

Northland's population at the 2013 Census was 151,689, 3.6 percent of New Zealand's population. About half live within the Whangarei District Council area, 37 percent live within the Far North District Council area and 13 percent live within the Kaipara District Council area.

Māori

Nga Iwi o Te Tai Tokerau comprises 30 percent of Northland's population. Out of the total Māori population, about half live in the Far North District, 40 percent in Whangarei, and 10 percent in Kaipara. Iwi in Northland include Ngati Kuri, Te Aupouri, Ngaitatoko, Te Rarawa, Ngati Kahu, Whaingaroa, Ngapuhi, Ngati Wai and Ngati Whatua.

Ageing population

Northland's population is 'ageing' because the number of children is decreasing while the older population is increasing significantly. The child population (0-14 years), is projected to drop from 21.6 percent in 2012 to 19.7 percent by 2026. Northland's older population (65-plus years) is projected to grow from 16.9 percent to 24.5 percent over the same period.

Socio-economic status

Northland has one of the most deprived populations in the country. While 20 percent of New Zealand's population is in the lowest quintile of the deprivation index, the equivalent measure for Northland is 35 percent.

The most deprived local authority area is the Far North District Council with 51 percent of the population in the lowest quintile; within this district the most deprived areas are Hokianga 83 percent, Whangaroa 41 percent and north of the Mangamukas 55 percent.

Rurality

The only true urban area in Northland is Whangarei, which contains about one-third of the region's population. Kaitaia, Kerikeri, Kaikohe and Dargaville are rural centres with populations of about 5,000 each. The Northland population is distributed across a region which takes over five hours to travel from its northern to southern extremities and up to two hours west to east. Northland has the highest proportion of unsealed roads in New Zealand and public transport is very limited.



Our Health Profile

Māori

Māori experience low levels of health status across a whole range of health and socio-economic statistics. They comprise 30 percent of Northland's population, but 45 percent of the child and youth population, a key group for achieving long-term gains. Māori experience early onset of long-term conditions like cardiovascular disease and diabetes, presenting to hospital services on average about 13 years younger than non-Māori.

Child and Youth

The child and youth population in Northland is projected to decline over the coming years, but it remains a priority because healthy children make for healthy adults and because children are more vulnerable than adults.

The deprivation index, which scores New Zealanders on a ten point deprivation scale, placed 70 percent of Northland adults and 85 percent of Northland children on the most deprived half of the index.

Older People

Our ageing population is placing significant demands on health services provided specifically for older people (residential care, home-based support services, day care). It also increases the prevalence of long-term conditions which become more common with age.

Long Term Conditions

About three-quarters of deaths in Northland are from cardiovascular disease (heart disease and stroke) or cancer (the most common sites are trachea-bronchus-lung, colorectal, prostate and breast).

Twenty-one (21) percent of adult Northlanders have been told they have high blood pressure and 13 percent told that they have high cholesterol, both known risk factors for cardiovascular disease.

While diabetes is not a major killer in itself, it is a primary cause of heart disease and a great deal of unnecessary illness and hospitalisations are related to poor management of the condition.

Oral Health

Northland's five-year olds have repeatedly had the country's highest average score of damaged (decayed, missing or filled) teeth and one of the lowest percentages of teeth without tooth decay (33 percent compared with the national average of 41 percent). Data for adolescent oral health is scanty, but it suggests a similar, if not worse, picture.

Lifestyle Behaviours

The way people live their lives and the behaviours they exhibit have an enormous influence on health status. There are a wide range of influences, but key ones are smoking, diet, alcohol and other drugs, and lack of physical activity.

Mental Health

Rising to the Challenge, the latest national plan for mental health and addictions outlines priorities for achieving further system-wide changes to improve service provision and outcomes. The plan covers people who use both primary and specialist mental health and addiction services, and their families and whānau.

Social Influences

Many of the causes of ill health rest with social and economic factors, such as housing, education and economic prosperity. The health sector cannot affect these directly, but as a district health board we work collaboratively with other government and local body organisations to achieve a healthier Northland.

Our Vision, Mission & Values

Our Vision:

A Healthier Northland He hauora Mo Te Tai Tokerau

Our Mission:

Mission – Achieved by working together in partnership under the Treaty of Waitangi to:

- Improve population health and reduce inequities
- Improve the patient experience
- Live within our means.

Mahi tahi te kaupapa o Te Tiriti o Waitangi he whakarapopoto nga whakaaro o te Whare Tapa Wha me te whakatuturutahi i te tino rangatiratanga te iwi whanui o Te Tai Tokerau.

Our Values:

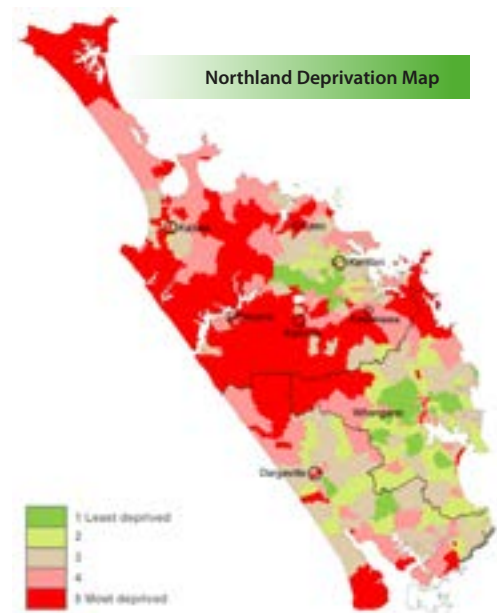
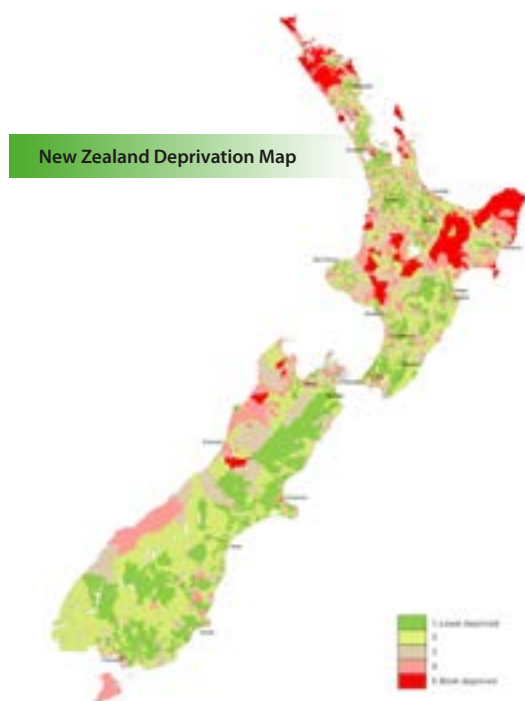
People First - Taangata i te tuatahi - People are central to all that we do.

Respect - Whakaute (tuku mana) - We treat others as we would like to be treated.

Caring - Manaaki - We nurture those around us, and treat all with dignity and compassion.

Communication - Whakawhitiwhiti korero - We communicate openly, safely and with respect to promote clear understanding.

Excellence - Taumata teitei (hiranga) - Our attitude of excellence inspires confidence and innovation.



Where the Money Goes

Whangarei, Dargaville, Bay of Islands and Kaitia Hospitals (surgical and medical services, emergency departments, imaging, laboratories, maternity, public health, etc.)

\$251m

Primary health (general practitioners, community dental services, radiology, etc.)

\$57m

Health of older people (including residential care, rehabilitation)

\$56m

Mental health services

\$52m

Māori health services

\$7m

Community pharmacies

\$40m

Community laboratory services

\$7m

Inter-district flows (publicly funded health services paid to other district health boards and others for services provided to Northland patients)

\$65m

TOTAL

\$535m

EACH DAY IN NORTHLAND

On average, each day in Northland:

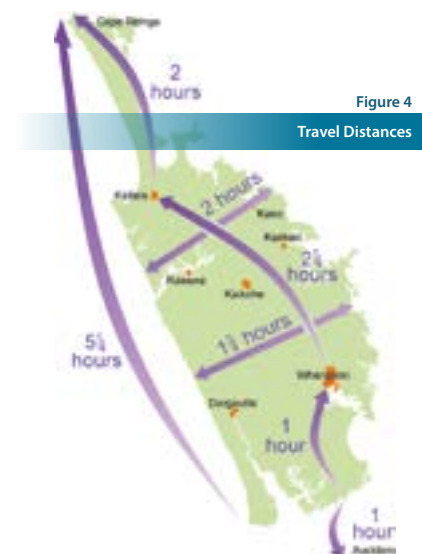
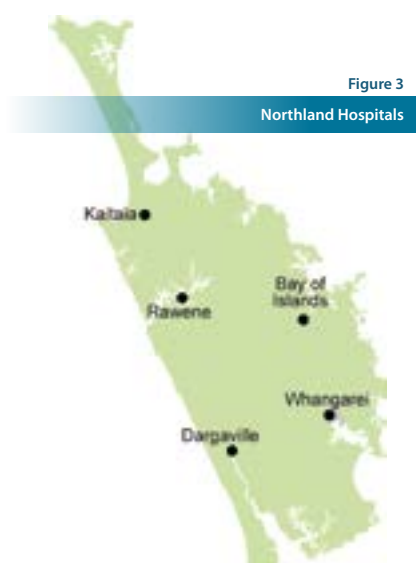
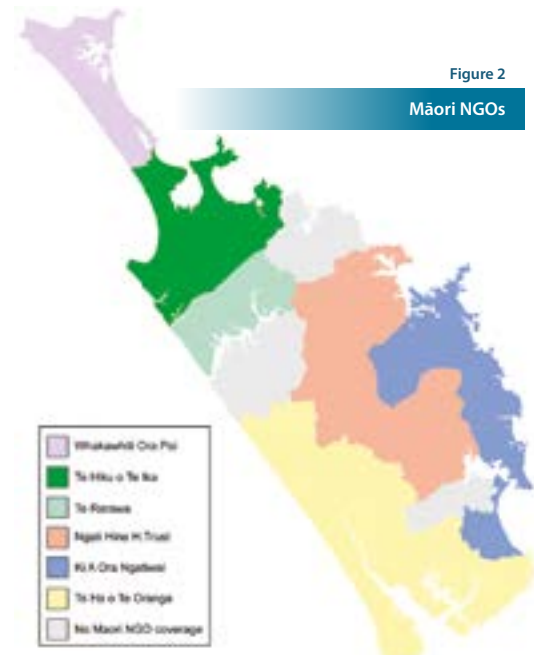
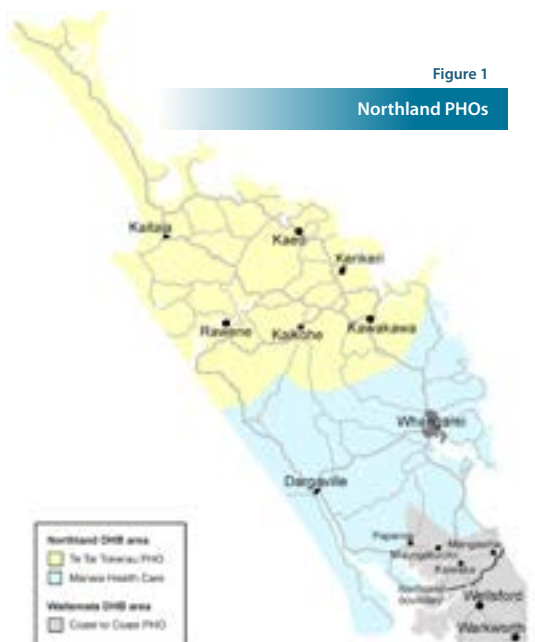
- 121** Emergency Department attendances
- 100** Inpatient discharges
- 1,903** Outpatient attendances
- 73** Outpatient missed appointments
- 13** Northland patients discharged by other DHBs
- 9** Chemotherapy attendances
- 45** Renal dialysis
- 42** Theatre events
- 227** Radiology exams
- 2,169** Lab tests, NDHB hospital
- 717** Lab tests, NDHB community
- 5** Babies born in hospital
- 4** Deaths in Northland
- 3** Mental health hospital admissions
- 495** Mental health community visits
- 1,887** General practice consultations
- 6,556** Prescriptions processed by pharmacies
- 102** Community visits by allied health services
- 192** District nursing visits
- 179** Oral health visits in primary schools
- 8** Immunisations for 2-year olds
- 7** Immunisations for 8-month olds
- 39** Breast screens
- 839** Subsidised bed days in aged residential care
- 1,780** Hours of home-based support services for older people
- 92** People assessed by hospice services' nursing teams

And we do much more!

Our Services

There are currently 153 GPs and 162 practice nurses across 38 general practices providing primary healthcare to Northlanders enrolled with Northland PHOs, and non-enrolled and non-resident patients.

Northland DHB has 220 contracts with 118 non-government organisations (NGOs) including Māori health providers and Whānau Ora collectives who provide a range of public health, primary healthcare and community services across Northland.



National Health Targets

The 2013/14 year saw three changes to the health targets. These included the introduction of agreed Level 2 hospital data in the shorter stays in emergency departments (ED), and a staged increase to 90 percent in the national goals for the increased immunisation and the more heart and diabetes checks targets.

Northland health targets: quarter 4 (April–June) 2013/14 results							
	Shorter stays in emergency departments	Increased access to elective surgery	Shorter waits for cancer treatment (radiotherapy & chemotherapy)	Increased immunisation (8-month-olds)	Better help for smokers to quit – hospitals	Better help for smokers to quit – primary care	More heart & diabetes checks
Ranking Quarter 4, 2013/14	15	1	1	18	16	6	4
Quarter 3, 2013/14	93.1%	111.6%	100.0%	87.5%	95.9%	84.6%	84.1%
Quarter 4, 2013/14	92.9%	125.0%	100.0%	88.0%	93.8%	96.6%	90.1%
National goal	95.0%	100.0%	100.0%	90.0%	95.0%	90.0%	90.0%

The DHB ranking shows the DHB's relative performance compared to other DHBs. In most cases, a rank of one represents comparatively good performance, and a rank of 20 represents relatively poorer performance. However, where DHBs have achieved the national goal, they are all considered to be good performers.

Shorter stays in Emergency Departments (DHB)



The target is 95 per cent of patients will be admitted, discharged, or transferred from an Emergency

Department (ED) within six hours. The target is a measure of the efficiency of flow of acute (urgent) patients through public hospitals, and home again.

The DHB had a slight increase (92.9 percent 2013/14 Quarter 4) of performance when compared to Quarter 4 2012/13 (92 percent). We are working on measures to address acute patient flow and to work in a more integrated way across the health sector, such as the Northland Health Services Plan project 'Urgent Healthcare'.

However, it has been acknowledged that, until we have a new Whangarei Hospital ED and a co-located Acute Assessment Ward, we are unlikely to achieve a sustained >95 percent performance. The Whangarei Hospital site master plan has some new innovations that should help us address these challenges in a shorter timeframe than was originally anticipated.

Improved access to elective surgery (DHB)



The target is an increase in the volume of elective surgery by at least 4,000 discharges per year. DHBs planned to

deliver 152,287 discharges for the 2013/14 year, and have delivered 9,646 more.

Northland DHB has achieved its 2013/14 health target – Improved access to elective surgery reaching 125 percent. For the full year, 8,202 people have been provided with elective surgery, which is 1,638 patients (25 percent) more than planned.

This is now the seventh year in a row that Northland DHB has exceeded its full year health target. The Ministry of Health considers us an outstanding performer in elective services since 2007/2008.

Better help for smokers to quit (DHB)



The target is 95 percent of patients who smoke and are seen by a health practitioner in public hospitals.

Disappointingly our hospital target dropped in Quarter 4 to 93.8 percent from 95.9 percent in Quarter 3.

National Health Targets

Shorter waits for cancer treatment (DHB)

Shorter Waits for
Cancer Treatment



The target is all patients, ready-for-treatment, wait less than four weeks for radiotherapy or chemotherapy.

Six regional cancer centre DHBs provide radiation oncology services. These centres are in Auckland, Hamilton, Palmerston North, Wellington, Christchurch and Dunedin. Medical oncology services are provided by the majority of DHBs.

Northland DHB met the target of 100 percent of patients commencing treatment within four weeks of referral for radiation and chemotherapy treatment.

Primary Health Organisations (PHO) Health Target Performance

For 2013/14 there were three primary care health targets: More heart and diabetes checks, Better help for smokers to quit and Increased immunisation rates.

Increased immunisation (PHO)

The national immunisation target is 90 percent of eight-month-olds will have their primary course of immunisation at six weeks, three months and five months on time by July 2014 and 95 percent by December 2014. This quarterly progress includes children who turned eight months between April and June 2014, are enrolled in a PHO and who were fully immunised at that stage.

Immunisation protects people against harmful infections, which can cause serious complications, including death. It is one of the most effective, and cost-effective medical interventions to prevent disease.

Both Northland PHOs met the increased immunisation target, a pleasing result from an increased effort in this area. Manaia Health PHO reached 92 percent, up four percent from 12/13 Quarter 4 (88 percent).

Te Tai Tokerau PHO reached 90 percent, up 11 percent from 12/13 Quarter 4 (79 percent).

The overall Northland result is 88 percent for the eight-month milestone, up from 83 percent (2012/13). This is lower than the combined results of our two PHOs because the two PHOs do not cover the entire Northland population.

An immunisation communications strategy has been endorsed by the multi-agency (primary and secondary) steering committee focused on increasing timely immunisation rates in Northland.

Better help for smokers to quit (PHO)

The national target is that 90 percent of patients who smoke and are seen by a health practitioner in primary care are offered brief advice and support to quit smoking.

Manaia Health PHO result is up 30 percent from 12/13 Quarter 4 (79 percent) to 110 percent as, in addition to offering advice in primary care settings, they contacted patients who had not recently attended their general practice to offer them brief advice and support to quit smoking.

Te Tai Tokerau PHO has made considerable improvement since last year, up 18 percent from 12/13 Quarter 4 (64 percent) to 82 percent 13/14 Quarter 4.

More heart and diabetes checks (PHO)

More Heart and
Diabetes Checks



This target is 90 percent of the eligible population will have had their cardiovascular risk assessed in the last five years by July 2014.

Manaia Health PHO has met this target reaching 92 percent, up 10 percent from 12/13 Quarter 4. Te Tai Tokerau PHO improved greatly, up 24 percent to 88 percent from 64 percent 12/13 Quarter 4.

What are the changes to the health targets in 2014/15?

Increased immunisation

From Quarter 1 2014/15 (July 2014 onwards), the Increased immunisation health target for children aged 8-months increases to 95 percent, to be achieved by December 2014.

Faster cancer treatment

From Quarter 2 2014/15 (October 2014 onwards), the 62-day faster cancer treatment indicator will become the cancer health target, and also from that date the current shorter waits for cancer treatment target will shift to be included in the DHB performance measures.

What is the Integrated Performance and Incentive Framework (IPIF)?

The IPIF is being developed with DHBs, PHOs, general practices and patients as a core mechanism to lift performance, improve clinical integration and improve quality in the primary healthcare sector over the next three-five years. The development and staged implementation of this improved performance programme is an important step to strengthen the wider healthcare system.

What is the relationship between health targets and the Integrated Performance and Incentive Framework?

Health targets will likely remain an important part of the IPIF. The first year of IPIF is a transitional year where the three primary care health targets form the majority of the IPIF measures. These are increased immunisation, better help for smokers to quit, and more heart and diabetes checks. Several DHBs and PHOs are already successfully meeting the health targets. In addition, IPIF will measure performance against cervical screening and two-year-old immunisation rates.

PHOs will receive incentive payments linked to how they perform against these targets. Individual PHO targets are phased in the transition year so that PHO cash flow is not significantly disrupted as the new system is put into practice. The sector is still expected to meet the primary care targets as soon as possible.

For 2015/16 and beyond it is likely that health targets will be incorporated into the IPIF, with the placement to be finalised. Work is underway to decide how financial incentives should best be applied.

Serious Adverse Events

DHBs are responsible for publicly releasing a summary of each Serious Adverse Event (SAE) case in 2013/2014.

In all of this work the emphasis is on improvement, and reducing preventable harm in the future.

The following context is important to understand when interpreting the data in this report.

1. A **serious adverse event** is one that leads to significant additional treatment, but is not life threatening and has not resulted in major loss of function. A **sentinel adverse event** is life threatening or has led to an unexpected death or major loss of function.
2. DHBs have been advised to report all SAEs for 2013/2014, irrespective of preventability. This is a change from previous years, where some DHBs reported only those SAEs which were considered, following review, to have a preventable element.

Northland District Health Board reports sixteen Serious Adverse Events 2013/14

Main Summary	Findings	Progress on recommendations
Baby required blood transfusion. During insertion of intravenous line the luer connection was held by a staff member whilst the extension set was tightened. 1¼ hours later monitor alarming, extension set connector had unscrewed and was separated causing large loss of blood requiring further fluid and blood transfusion.	Luer connection not tightened to extension set properly. Baby monitored in a level 2 area. Inadequate staffing of the Special Care Baby Unit (SCBU), unit overcrowded may have led to delay in recognising baby's deterioration.	Double-checking of luer connections in place. More staff recruited for SCBU. Protocol developed for closing unit to further patients when at full capacity. Processes developed to escalate the moving of patients to other areas.
Two patients had attended the emergency department with uncomfortable, painful eyes and deteriorating vision following uneventful procedures. One following an eye injection the second patient following cataract surgery.	It was found on investigation that visual testing had not been done at the emergency department visit and the patients waited an extended length of time then left. They returned to the emergency department the following day and subsequently both patients needed to go to theatre for emergency treatment and antibiotics, and required further intervention requiring transfer to a tertiary hospital.	A protocol and programme of education has been put in place in the emergency department. A check list has been developed so appropriate information can be directed to the ophthalmology department. An ophthalmology link nurse role has been developed in the Emergency Department.
Dictation from a surgical clinic following the patient's surgery was lost that resulted in a three-month delay for an appointment, prior to referral for further oncology treatment.	It was found there was no accountability by the typists for missing documentation or missed dictation. The multidisciplinary team were not taking a collaborative approach, there was no audit of breast cancer patients with symptoms, and the form used for documenting team meetings was not electronic so not easily available.	The patients are now provided with clinic nurse contact details. Appointments are made or the patient is phoned after the team meeting. Audits are done on every clinic to ensure outcomes for patients. A database has been developed and maintained for follow-up. Clinic notes are picked up by the typists following a clinic which has details if a patient Did Not Attend and if a letter was dictated or not regarding this. Typists email the surgeons if there is any missing dictation of information and report on progress. The meeting form is in progress.

Main Summary	Findings	Progress on recommendations
Patient received several doses of chemotherapy unnecessarily following incorrectly-read biopsy results.	Results reported incorrectly. Unusual histology noted slides re-examined and found previous readings incorrect. No possibility of slides being mixed. Only specimens of that type examined on that day.	All breast malignancy cases are now double reported. Retrospective and prospective audit undertaken to check for possibility of other errors - no errors identified. Laboratory staff to keep interruptions to pathologists to a minimum. Review of workforce staffing levels to be undertaken.
On readmission, patient noted to have pressure injury following a previous extended stay in hospital. Poor documentation – unclear status of injury and deterioration of pressure injury prior to discharge. Patient required to go to theatre for treatment.	It was found on investigation that high-risk factors were not clearly considered. Documentation was unclear and was inconsistent. There was uncoordinated wound management and a variety of types of dressings used.	Northland DHB pressure injury group continues to monitor pressure injuries. In all ward areas, audits of ten patients are completed each month. Education continues with staff using consistent terminology in documentation and the implementation of a Pressure Injury Resource Pack to all areas.
Failure to identify and treat early a child referred for investigation of small lump. MRI showed malignancy requiring child to be transferred to tertiary hospital for active treatment.	Following investigation, it was found that there was a lack of sonographers creating workload issues, resulting in delays for MRI. Timeliness for paediatric MRI and general anaesthetic lists was delayed. Poor management and lack of communication to Whānau regarding hospital stay. Equitable access to specialist services - Far North.	Student sonographer and locum numbers increased. Senior clinical staff will ensure effective plans are made and communicated to Whānau and significant others prior to admission.
Nine patients ranging in age between 69-91 years experienced falls with harm. One fell and fractured their nose. Three patients fell and fractured their hips. One fell and fractured their femur and finger. One patient in outpatients fell and fractured an arm. One fractured their pelvis. One fractured their cheek bone and eye socket. One suffered lacerations to their face and suffered a brain bleed related to the fall.	Eight patients (one patient was an outpatient) had had a falls risk assessment done, five of those were noted to be of a high risk of falling. Two patients fell out of their chairs while sleeping, one fell out of bed reaching for their walking frame, one patient was found on the floor and was unaware of wanting to get up, three patients became unsteady when standing and lost their balance and fell, one patient slipped off the bed while getting into it and one patient fell whilst up walking. All but the one outpatient person had a fall management plan in place.	The Northland DHB falls project continues with a variety of devices being used or trialled to alert staff to the fact a patient with a high risk of falling has left their bed or chair. These include sensor mats and electronic devices, along with beds which are lowered right to the floor. The use of sensor alarms attached to patients is becoming more widely used. Regular chart audits are undertaken to show that documented risk assessments are completed.

Quality Accounts

Improving medication safety for patients

Studies have shown that more than 50 percent of medication errors occur at transitions of care, such as admission to and discharge from hospital¹.

There are often changes to a patient's medicines when they are admitted to hospital. Some of these medicine changes are unintentional, due to poor information and some are intentional but not always clearly documented. Both types of change can result in medication errors and/or patient harm².

Medicine reconciliation at admission is the process of obtaining and documenting an accurate medication history, ensuring the patient is prescribed all appropriate medications while in hospital.

Setting up a robust and consistent medicine reconciliation service was a priority to help reduce medication errors and improve patient safety. An accurate medication list and reconciliation at admission provides the foundation for improved prescribing, diagnosis and medicines management throughout the admission.

The pharmacy department wanted to reduce medication errors at admission and improve documentation and communication of medication changes at transition between primary and secondary care. This, in turn, leads to a better platform for the discharge process.

Currently the pharmacy department report the number of patients receiving completed (i.e. both the pharmacist and prescriber roles in the process are completed) medicine reconciliation at admission, which is in line with national requirements. Prior to implementing our new service strategy in September 2013, we were often not meeting pre-determined targets. With the new approach, we have since been achieving them consistently.



In May 2014 a new electronic medicine reconciliation process was implemented. With this in place the pharmacy are now able to develop better measures of patient outcome, for example, number of discrepancies resolved.

Northland DHB now has a robust and sustainable admission medicine reconciliation process and has recently rolled out an electronic recording system that means that medicine information identified during the admission reconciliation process can be shared more easily at discharge with primary care providers.

Says pharmacy manager Helen Dunn: "Medicine reconciliation is a valuable process in reducing medication error at admission. However, current staffing does not allow for every patient to undergo the process. As per our service specification, we are delivering to target > 95 percent of all priority patients and 70 percent of all admissions to serviced areas. Now that we have a sustainable service, we need to determine whether our target group is reflective of the best outcome; a review is underway as to whether our target group should be changed. We also need to review effort versus outcome to see whether any (mostly pharmacist) resources can be freed up to develop the medicine reconciliation service further e.g. at discharge."

"An accurate medication list and reconciliation at admission provides the foundation for improved prescribing, diagnosis and medicines management throughout the hospital stay. We hope for ongoing system improvements, and that this project will be a lead into other medication safety initiatives,"

Harriet Sands - Senior Pharmacist



[1] Sullivan C, Gleason KM, Rooney D, et al. 2005. Medication reconciliation in the acute care setting: opportunity and challenge for nursing. *Journal of Nursing Care Quality* 20: 95-98.

[2] Stowasser DA, Stowasser M, Collins DM. 2002. A randomised controlled trial of medication liaison services - acceptance and use by health professionals. *Journal of Pharmacy Practice and Research* 32: 133-40.

Preventing Pressure Injuries

Pressure injuries are preventable. The development of pressure injuries while in our care leads to poor patient outcomes. In early 2013 the Pressure Injury Prevention Group, implemented the Northland DHB Pressure Injury Prevention policy, along with a risk assessment tool and a 'package of care' across all inpatient areas.

This year, staff have been actively engaged in patient skin assessment, risk screening and implementing the packages of care. Ongoing education has been provided with the support of ward champions, where the focus has been about prevention and measuring of pressure injuries, documentation and management. A learning package and tools have been developed to assist nursing staff in decision-making.

There has been a change of practice from relying on an air mattress as the only method of preventing pressure areas to the implementation of an individualised assessment and management plan, which includes the appropriate mattress.

A further initiative is the pressure injury alert sticker which has been introduced and is now placed in the patient notes to ensure that all injuries are reported. It has also provided a true picture of how many pressure injuries are occurring across the DHB. Grade 3 and 4 pressure injuries, the most serious type, are now reported as an incident with major harm initiating a full investigation. The

focus for the Pressure Injury Prevention Group, led by senior nurse Sharon Kerwin, is emphasising the importance of accurate identification of moisture lesions versus pressure injuries and the appropriate prevention and management for both.

A Pressure Injury champion's workshop has been planned to provide education and to support best evidence-based practice.

First Do No Harm has been working with Northland's aged residential care facilities on pressure injury prevention. Northland DHB Pressure Injury Prevention Group aims to work collaboratively with aged care facilities across Northland to share learnings.



Preventing Falls – Zero Harm

The majority of falls in hospitals often relate to the unfamiliar environment of the hospital, the care provided by hospital staff and multiple individual risk factors that predispose the patient to falling. The risk factors most commonly seen in hospital patients are previous falls, muscle weakness or difficulty in mobilising safely, dementia, delirium, continence problems or urinary frequency, medication that increases the risk of falls and a drop in blood pressure when standing, which leads to dizziness.

Northland DHB's Falls Prevention Group is working with clinical teams so they become more aware of simple preventable hazards, such as cluttered environments, inadequate lighting and call bells within reach. These are just a few of the factors that can contribute to a patient falling. A fall can be life-changing for an older person, impacting on their independence and wellbeing with implications for their family/whānau.

We continue to work closely with "First Do No Harm" regional falls programme and we are engaging the aged care facilities to share our learning and continue to progress the falls prevention message.

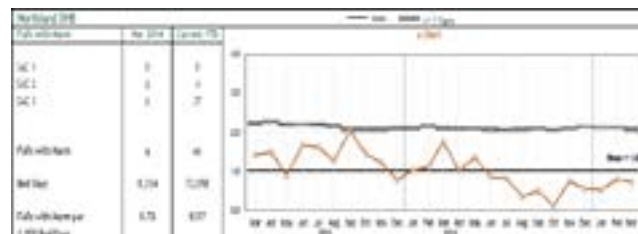
To continue on the road of improvement, this year we have made changes to the nursing assessment to include risk screening for falls. This is based on best practice guidelines from literature by NICE UK guidelines and Health Quality & Safety Commission Open Campaign's Frances Healey.

The Falls Group have produced a video of a real patient story; it is told by patient Noeline and her daughter Sharon and demonstrates the devastating effects a fall can have on someone's life. A real patient story helps to capture the hearts and minds of nurses and other health workers to fully understand what really matters to the patient, Whānau/family.

The Assessment, rehabilitation and stroke multidisciplinary team, supported by senior management, have produced a musical video on preventing falls which is used for patient education.

This year the Falls Group focused on further reducing falls due to inappropriate use of bedrails and inappropriate prescribing of night sedation for those patients identified as high-risk for falls.

First Do No Harm reporting demonstrates that we have had a change in practice and, as a result, have reduced our falls with harm. However, we continue to see falls (without harm) occurring in our wards.



Noeline (right) with daughter Sharon tell their story about the devastating effects of a fall.

"The physical effects for those who suffer a major injury after falling can be devastating. However, the psychological and social impacts may be even more prevalent and can have far-reaching consequences."



Health Quality & Safety Commission Surgical Site Infection Improvement Programme

The effects of a surgical site infection on a patient are devastating, as well as costly to both the patient and to the health service.

A collaborative and evidence-based approach is necessary to avoid infections. Healthcare-associated infections are one of the most common adverse events in healthcare with up to 10 percent of patients acquiring one or more infections. The Health Quality & Safety Commission has developed a national surveillance programme to accurately measure surgical site infection rates, post-knee and hip replacement surgery.

Information collected previously lacked consistency and robustness. By providing a standardised evidence-based approach, a reduction in infection rates and improvement in patient safety is expected. This approach will also identify and improve clinical practices nationally.

Three key initiatives will be rolled out at various stages:

1. Antibiotic prophylaxis - antibiotics to help prevent an infection starting;
2. Chlorhexidine skin antisepsis - special antiseptic applied at the time of operation;
3. Clipping, not shaving - this means the hair on a patient's leg is no longer shaved as this can cause lots of tiny cuts. The hair is clipped instead.

As an additional measure, Northland DHB has introduced pre-operative showering and cleaning with antiseptic impregnated sponges and wipes. The patient is provided with the sponges and is given wipes to use when they arrive for surgery. All three initiatives have now been implemented and compliance-measured and are reported on.

A reduction from the initial report of 3.3 percent infection rate to 1.8 percent infection rate in the October to December reporting period.

Future Focus

"Continue to reduce infection rates by embedding the practices recommended by the programme as 'business as usual' into Northland DHB," *Infection Control clinical nurse specialist - Sandra Cunningham.*



Reducing hospital-acquired blood clots (venous thrombo embolism – VTE)

The risk of developing a blood clot increases tenfold in patients admitted to hospital versus non-hospitalised persons, with contributing factors being general ill health, malignancy, reduced mobility and poor fluid intake, as well as surgical procedures, particularly orthopaedic and other high-risk surgeries.

About 10 percent of all patients who develop a blood clot, will experience a blood clot in the lung (Pulmonary Embolism, PE) and will die as a result of their PE.

Longer-term problems from a blood clot for survivors and the resulting costs to the healthcare system can also be substantial. Approximately 30-50 percent of patients with deep vein thrombosis (DVT) will develop post-thrombotic syndrome, characterised by persistent lower limb oedema and pigmentation. Lower limb ulceration occurs in 5-10 percent of cases, and 2-4 percent of patients will suffer chronic pulmonary hypertension following a blood clot in the lung.

In New Zealand in 2012, 759 patients suffered deep vein thrombosis and/or pulmonary embolism while still in hospital or were readmitted within 29 days of surgery. The patients needed an estimated 2,178 extra bed days at an estimated cost of \$1.7 million (excluded from this number are patients who develop a blood clot but are treated at home).

The thrombosis project started in June 2013. The clinical leader for this work is Dr Margy Pohl, an orthopaedic surgeon. The remaining team was made up of doctors, nurses, a pharmacist and management staff.



The project has alignment with the Health Quality & Safety Commission (HQSC) Patient Safety campaign. In turn this project 'fits' under the Northland Health Services Plan and our organisational triple aim framework for a Healthier Northland.

Project objectives:

- 1) Reduce the incidence of hospital-associated blood clots during hospitalisation or within 90 days of discharge by 50 percent by December 2014, for all surgical adult admissions who stay more the 24 hours;
- 2) All new medical staff will be educated in blood clot assessment and prevention by December 2014;
- 3) Implement an organisational standardised policy. All inpatients will receive education and information of blood clot development;
- 4) Development of online staff training.

"Stop the clot!"

Staff worked through the Institute of Health Improvement process, which helped to guide them to identify the changes they needed to make. Some of the key changes were a standardised medical assessment tool for all patients in surgical services.

They also worked with a patient focus group. All of the patients had developed a blood clot either whilst in hospital or shortly after discharge. These patients helped the team develop a patient information booklet.

Patient quotes:

"I had never heard of blood clots in hospital. I thought you only got them when you went overseas on an aeroplane."

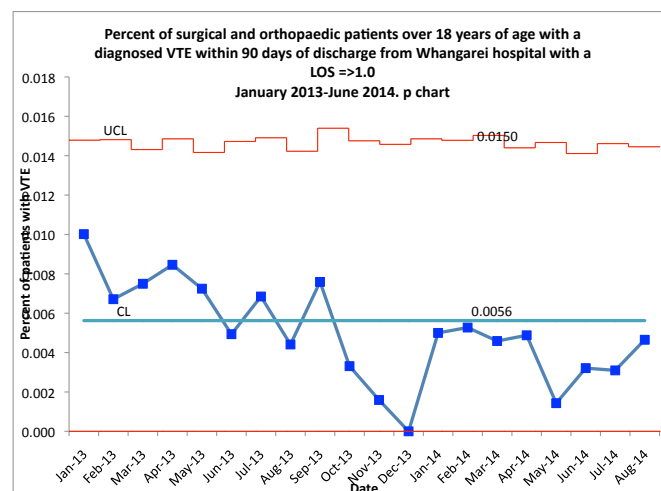
"Nobody told me about the possibility of getting a blood clot or what I could do to help myself and try to stop a clot happening."

"Every day a nurse would come and give me an injection in my stomach. No one ever told me what it was for."

Results

We have seen reductions in patients developing a blood clot whilst in hospital by more than 50 percent, and readmissions have also reduced. For the 12-month period ending June 2014, 21 fewer patients were readmitted to hospital with a blood clot. This is an approximate cost saving of \$100,000 over 12 months for the hospital.

The key to continuing this improvement is to ensure staff and patients are well educated and that they carry on monitoring and reporting the results. We believe this will support the sustainability of positive patient outcomes.





REDUCING HOSPITAL ACQUIRED VTE

'We are making a difference, but we can do better with your help' - Dr Mike Roberts Chief Medical Officer

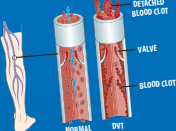
Introduction

The risk of a blood clot increases tenfold in patients admitted to hospital. Blood clots are preventable for most patients. In 2013, 37 patients were re-admitted to Whangarei Hospital with a blood clot. We also know there were more patients who had been in hospital, were discharged with a blood clot but were treated and managed in the community.

In the fiscal year 2012/13 - 759 patients throughout New Zealand suffered deep vein thrombosis/pulmonary embolism while still in hospital or were readmitted within 30 days of surgery. *(Source: National Audit Office 2012/13)*. These patients needed an estimated 2178 extra bed days at an estimated cost of \$1.7 million.

WHAT IS DEEP VEIN THROMBOSIS (DVT) OR PULMONARY EMBOLISM (PE)?

A DVT is a blood clot that can form in one of the veins in the body. They happen most often in the legs. They may partly or completely block the flow of blood in that vein. Some of the clot may travel through the vein to the lungs - this is called a pulmonary embolus (PE). A pulmonary embolus can block the blood supply to the lungs and can be fatal.

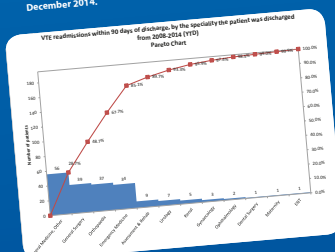


About 10% of all patients experiencing a pulmonary embolism (PE) will die as a result of their PE. Mortality for survivors and the resulting costs to the health care system can also be substantial. Approximately 30-50% of patients with a deep vein thrombosis (DVT) will develop post-thrombotic syndrome (PTS), characterised by persistent lower limb oedema and bolic syndrome (PTS), characterised by persistent lower limb ulceration occurs in 5-10% of patients. Severe PTS will suffer chronic pulmonary hypertension cases and 2-4% of patients will suffer chronic pulmonary hypertension cases and 2-4% of patients will suffer chronic pulmonary hypertension cases following a PE. In Australia VTE has been estimated to result in about 2,000 deaths annually. *(National Policy Framework: VTE prevention in acute hospitalised patients in NZ 2012)*

VTE Project Objectives

WHAT ARE WE TRYING TO ACCOMPLISH?

1. Reduce the incidence of hospital associated VTE during hospitalisation or within 90 days of discharge by 50% by December 2014, for all adult surgical patients with a length of stay greater than 24 hours.
2. 90% of all admitted surgical adult patients will have a VTE risk assessment in place within 24 hours of admission by Dec 2014.
3. 100% of all adult surgical patients will receive information and education about the risks of hospital associated VTE by December 2014.



The Team



Dr Murgu Pohl explaining the risks of VTE to a patient

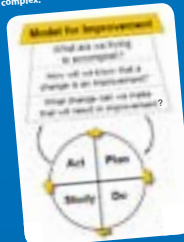
Project Clinical Leader - Dr Murgu Pohl, Orthopaedic Surgeon
Project Sponsor - Dr Mike Roberts, Chief Medical Officer
Project Lead - Cristina Road
Haematologist - Dr David Wei
Senior Pharmacist - Harriet Sands
Gynaecologist and Obstetrician - Mr David Bailey
Clinical Nurse Manager, OT - Mike Geytenberger
CNS Pre-Assessment - Jay Summers
Quality Facilitator Clinical Services - Dee Telfer
Governance Group - Clinical Governance Board
Patient Focus Group

A Healthier Northland
He Hauora Mo Te Tai Tokerau

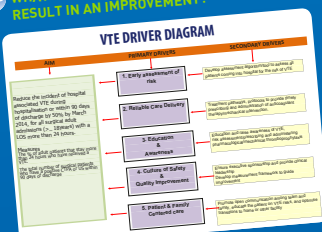
Methodology

MODEL FOR IMPROVEMENT

The Model for Improvement is made up of a set of fundamental questions that drive all improvement and the plan-do-study-act (PDSA) cycle. The model is an improvement framework both widely applicable and easy to learn and use. This model has been found to support improvement efforts in the full range from very informal to the most complex.



WHAT CHANGES CAN WE MAKE THAT WILL RESULT IN AN IMPROVEMENT?



This is a tool to help us describe our theories of improvement - it helps us to organise our ideas as we answer 'What changes can we make that will result in improvement?' A driver diagram can be updated throughout an improvement effort. The VTE team have also developed a change package relating to each of the primary drivers.

What we are doing...

GENERIC ASSESSMENT TOOL

A generic assessment tool was developed by the clinical team. Small regular PDSA cycles were commenced which lasted several months before we finally settled on this document.

PATIENT FOCUS GROUP & DEVELOPMENT OF PATIENT INFORMATION LEAFLET

Five people who have been in Whangarei hospital as a patient and developed a VTE helped us design a patient information leaflet.



The nursing staff have been asked to hand their patients these educational leaflets and to discuss VTE.



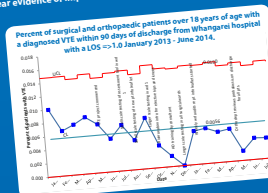
MOODLE EDUCATION PACKAGE & REVISED POLICY AVAILABLE AUGUST 2014

Result To Date

HOW DO WE KNOW THE CHANGES WE HAVE MADE ARE AN IMPROVEMENT?

The Shewhart chart (control charts) is a statistical tool used to distinguish between variation in a measure due to common causes and variation due to special causes. Shewhart charts include a centre line and an upper and lower limit.

The graph below shows 10 data points under the medium - this is clear evidence of improvement.



The T-chart below demonstrates the time between patients being diagnosed with a VTE. As the project has developed, the time between VTE events has increased - supporting our evidence of an overall reduction in VTE at Whangarei hospital.



The C-chart below shows a reduction in the VTE re-admission rate.



Conclusions

Not only have we seen a reduction in patients diagnosed with VTE, but re-admission rates are also less. For the 12 month period ending June 2014, compared to the same period ending June 2013, 21 less patients were re-admitted with VTE.

This is an approximate cost saving of \$100,000 over 12 months for the hospital.

(Based on in-house calculations, on average a patient admitted with a VTE stays for about four days at a cost of approximately \$1200 per day.)

The key to continuing this improvement is to monitor and report on-going results.

This we believe will support the sustainability of these positive patient outcomes.



QUALITY & IMPROVEMENT DIRECTORATE

NORTHLAND DISTRICT HEALTH BOARD
Dr Peter Roberts CMO & Dr Sue Clarke

“We have already reduced the number of patients who develop a blood clot whilst being in hospital. Simple interventions, increased awareness and sound patient education really does make a difference”.

Cristina Rood - Project Lead







Hand Hygiene (HH) – Improving patient safety

Hand hygiene is a Health Quality & Safety Commission programme which aims to reduce the number of healthcare acquired infections (HAIs) patients get whilst being treated in hospital. Hand hygiene is a critical measure in the fight against the spread of infection as international evidence shows that improved hand hygiene practice reduces HAIs in hospitals.

The Institute of Healthcare Improvement's 'Model for Improvement' is being used on this project targeting historically poor compliance and with progress monitored by a steering group. The group intends that any improvements would be spread to other areas and ultimately embedded as business as usual over time.

The Hand Hygiene NZ project was rolled out across Northland DHB in 2009, led by the Infection Prevention and Control team with five areas audited three times per year for the national database. Despite considerable efforts, compliance is patchy. However, September results showed an increase in overall performance to 76 percent compliance with hand hygiene.

Staff know the rationale behind good hand hygiene compliance. Hand hygiene should sit within the minimum standards of patient care and increasingly, and correctly, patients expect this from staff.

"I just assumed that all staff working in a hospital would wash their hands, why don't they?" remarked a patient.

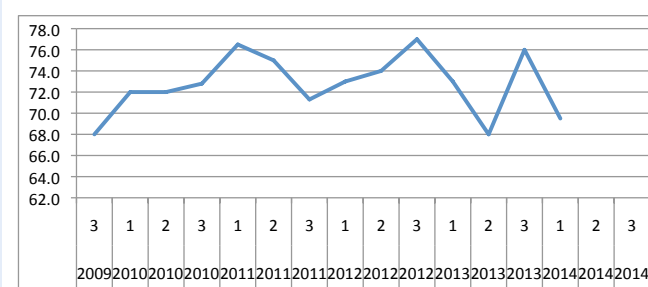
The Quality & Improvement Directorate became involved in the hand hygiene project in late 2012. A steering group was formed, led by the chief medical officer and a target set – 90 percent hand hygiene compliance to be achieved by June 14.

The hand hygiene audit is now transitioning to the frontline, with senior staff empowered to take ownership, perform local auditing, develop improvement pathways and set their own audit schedules, all under the guidance of Infection Control nurses. There is evidence that frontline ownership will lead to stronger buy-in and improved hand hygiene outcomes. The model for improvement is being used on activities targeting areas/groups with historically poor compliance and progress monitored by the steering group.

*"Show that you care,
be seen to be clean"*

*Dr David Hammer,
Microbiologist & Clinical Project Lead.*

Northland DHB Hand Hygiene overall compliance percent by quarter (3x per year).



Patient case study use is being considered to show staff a patient's journey/timeline, the care interventions provided by healthcare workers and potential connection with onset of an infection. Case studies would offer a human face to demonstrating the serious impact infections have on a patient's recovery.

Glen's Story

How hospital-associated infections can impact on a person's life and family.

<http://www.youtube.com/watch?v=RI5BB6TmZvA>

© Copyright 2011

Victorian Infection Control Professionals Association (VICPA)

The hand hygiene project still has a long way to go towards reaching the 90 percent compliance target. Continuous efforts and innovation are needed to keep staff energised and motivated to reach the target then sustain changed behaviour to benefit patients in the long term.

*Left to right – Surgeon Mr John Lengyel with Dr Hammer
(and his alter ego cut out)*



Diabetes Care Improvement Package (DCIP)

Northland DHB and Primary Health Organisations (PHOs)

Background

Over a period of eleven years, the “Diabetes Get Checked” programme was provided at no cost to those primary care patients living with diabetes. The Ministry of Health had invested approximately \$8million a year into this activity, which was largely delivered by general practice teams and involved an annual review of best practice in the management of diabetes.

A programme evaluation indicated outcomes could be achieved and the recommendations were that funds be redistributed to a new Diabetes Care Improvement Package (DCIP).

There was no nationally consistent model for the proposed improvement packages, and DHBs had the flexibility to negotiate with primary care as to what form these packages should take. In Northland, the new DCIP model was developed jointly between Northland DHB and the two Northland PHOs, Te Tai Tokerau and Manaia Health, with feedback from a wide variety of people.

From July 1 2012, the *Get Checked* programme was replaced with the **Diabetes Care Improvement Package**. Although the diabetes check was no longer free after June 30 2012, it was expected that all patients with diabetes should continue to have their annual diabetes check, as part of evidence-based good diabetes management.

The Situation in Northland prior to July 2012

At the time, Northland had 7,837 known patients with diabetes registered with GP practices within Northland’s two PHOs.

Diabetes in Northland is forecast to increase by 72 percent from 2009 to 2026; much of this increased demand will manifest itself as additional workload for primary healthcare and community services. It was seen as a priority that the capacity and capability within primary healthcare is developed to deal with this predicted increase in demand. It was believed the problem could be reduced through better systematic identification and management of patients with diabetes.

Northland was fortunate to already have access to a web-based electronic clinical assessment, management and decision-support system for cardiovascular disease (CVD) and Type 2 diabetes, which provides a consistent format for recording

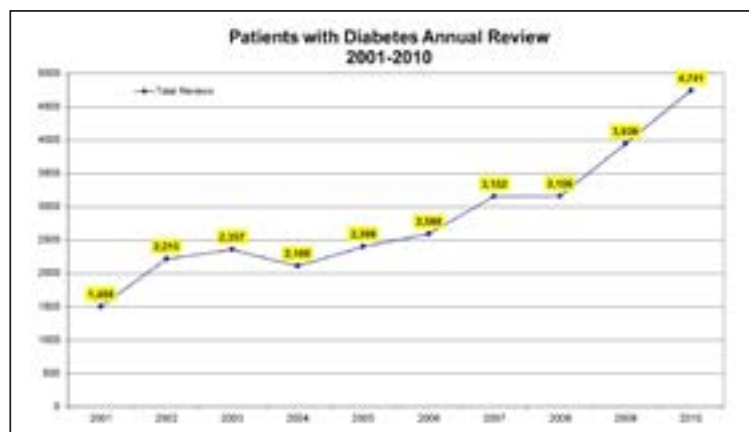
findings from a CVD assessment and diabetes check, including a foot check and the recording of when a patient last attended retinal screening.

In the past few years, whilst Northland had achieved or been close to the national target of 80 percent of known patients with diabetes attending Diabetes Annual Free Checks, it should be noted it had not always achieved this for Māori with the last quarterly report indicating only 59 percent for Māori¹.

[1] It should be noted that the number of patients with diabetes per practice also varied significantly with twelve practices having under 100 and three practices with over 500 identified patients with diabetes.

The Situation in Northland prior to July 2012

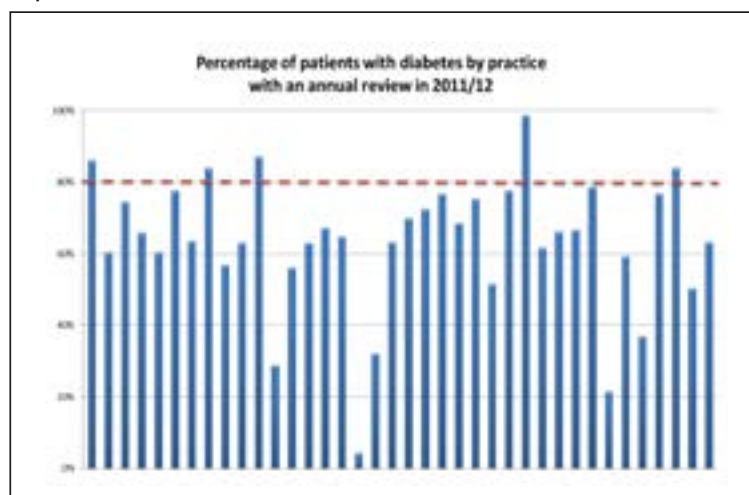
Graph 1



Graph 2



Graph 3



Northland had also not done so well on the management of blood sugars, particularly for our Māori population. Graph 2 shows progress in managing blood sugar levels between 2001 and 2011.

At the end of December 2011 the percentage of Māori with HbA1Cs under 64mmol/mol was 61 percent and non-Māori was 79 percent.

A similar disparity was reflected in our Quintile 5 population when compared to other quintiles. Of those patients with less than optimal glycaemic control, 49 percent had a Quintile 5 address. The bulk (75 percent) of those were Māori but 26 percent were non-Māori.

We were also aware there was variation in performance indicators relating to the management of diabetes by GPs. The two indicators reported on, i) percentage of Diabetes Annual Review and ii) good blood sugar control, showed a wide variation in performance between GP practices within Northland¹. Much of the focus of the new model was about reducing the difference in these outcomes and ensuring Northland continued with its existing robust data reporting system and feedback to GP practices.

Range between practices across Northland (Te Tai Tokerau and Manaia PHOs)	
Diabetes Annual Check	13%-89%
Good Glycaemic control	36%-88%

The new DCIP model should not be seen in isolation from the other developments/initiatives that were taking place or planned for diabetes services and other long-term conditions. Many of these were (and continue to be) targeted at assisting GP practices, especially the nursing workforce, to follow best practice guidelines and evidence-based practice.

[1] It should be noted that the number of patients with diabetes per practice also varied significantly with twelve practices having under 100 and three practices with over 500 identified patients with diabetes.

Details of the Diabetes Care Improvement Model

In Northland, the expectation is clear that responsibility for the provision of primary care-led diabetes services remains with the GP practice, and there is an expectation all Northland GP practices participate in the DCIP programme. Completion of an annual diabetes check is part of evidence-based good practice guidelines. This includes a foot check and the recording of the completion of retinal screening.

The principles embedded within the new DCIP model were for positive action to:

- Redress the current inequitable outcomes for Māori patients with diabetes within Northland;
- Support and strengthen a continuous quality improvement culture within primary healthcare;
- Support GP practices to plan for and audit their outcomes for their enrolled population;
- Continue to develop capacity and capability of the workforce for diabetes in primary health services;
- Strengthen multidisciplinary working and, in particular, to support a nurse-led delivery model of diabetes services (as appropriate). This includes the current provision of Māori health providers' nurse-based services.

Funding constraints demand that services be targeted towards meeting the needs of those most in need. The focus for the DCIP is therefore on high needs patients (identified as Māori, Pacific or from Quintile 5 as this is where Northland's greatest need is²).

The model involves a quality team from each PHO to support each GP practice to develop a specific diabetes action plan for that individual practice on an annual basis. Improvement in performance on specified indicators over a 12-month period are measured. The targets are negotiated with each GP practice used as a benchmark for their current performance.

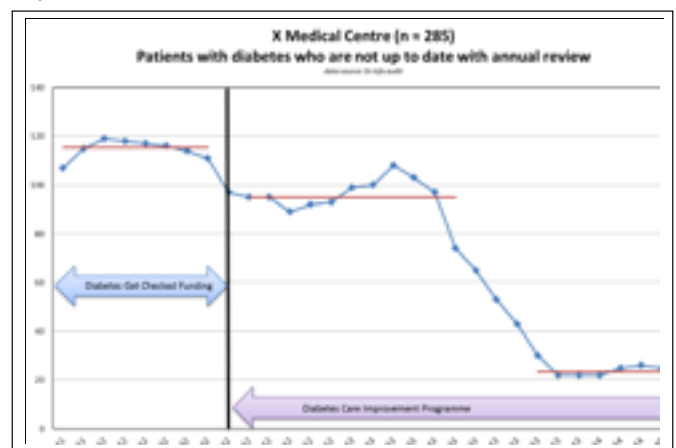
Some results two years on

The graphs below suggest that the new DCIP model with components to support a new way of working is effective and provides a foundation for further improvement at both PHO level and a shift in consequent performance by an individual practice (Graph 5 below) as well as at general practice level.

Graph 4 (NorthlandPHOs)



Graph 5

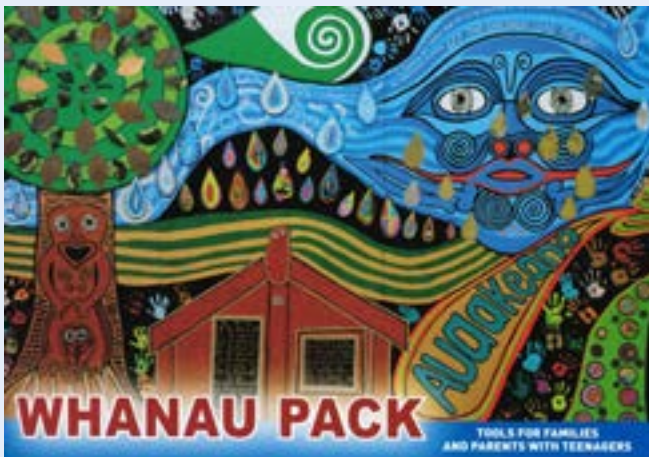


In terms of benefit to patients, the following provides a snapshot of progress made over 18 months.

How much did we do?	How well did we do it?	Is anyone better off?
5,948 (↑897)	70 percent of patients with diabetes had a structured review in the year;	80 percent+ treatment to target for hypertension and microalbuminuria
2,496 (↑429)	77 percent of Māori with diabetes had a structured review in the year	525 more patients are recorded with improvement in 'good control'
		Māori rate of good control = 65 percent - up from historical flat line of 60 percent

[2] Northland does not normally report data broken down by Pacific ethnicity because the numbers are relatively small and mean that individuals are potentially identifiable at the GP Practice level data.

Whānau Pack – Tools for families and parents with teenagers



Statistics show that a significantly-higher proportion of Northland secondary school students reported currently drinking alcohol than that found for the rest of New Zealand. Binge-drinking was very common among students with 45 percent of all Northland students (or 64 percent of those who were current drinkers) reporting that they had drunk to this extent at least once in the previous four weeks.³

Recent studies demonstrate the significant, enduring, and protective influence of positive parenting practices on adolescent development. In particular, parental monitoring, open parent-child communication, supervision, and high-quality of the parent-child relationship deter involvement in high-risk behaviours, such as drinking and self-harm.⁴ For example, research shows that rangatahi who share meals with their whānau at least five times a week, are less likely to smoke, abuse alcohol, become overweight or have suicidal thoughts and behaviours. They are more likely to feel better about themselves, do better at school and feel more connected with their parents and family.⁵

Northland DHB's aim was to develop a unique Tai Tokerau (Northland) resource that provides simple, positive parenting strategies for use by people who work with whānau; to enable parents/caregivers to strengthen their relationships, communication, role-modelling and quality time spent together with their rangatahi.

We examined traditional Māori parenting strategies⁶, along with the latest international and local evidence on parenting and results from the Youth2000 series of National

youth health and wellbeing surveys. Key information on the developing adolescent brain was assessed, together with evidence on the impact of early drinking of alcohol by young people. Current information on alcohol, drinking guidelines and the Sale and Supply of Alcohol Act 2012 was collated into a book called the Whānau Pack.

We developed in the opening chapters of the resource, a rationale highlighting the importance of delaying the onset of early drinking. A process-based approach was used to highlight the areas of time, boundaries, monitoring, communication and role-modelling as key parenting factors with simple everyday strategies promoted in each area. Strategies for delaying the early use of alcohol by rangatahi and staying safe are also explored.

The Whānau Pack is a 60-page booklet featuring local imagery from Te Tai Tokerau. A set of four posters highlighting key messages from the resource were also produced. An electronic version was created and made available through a number of websites.

Conclusions: Presenting simple parenting strategies in a visually spacious manner has resulted in a much sought-after resource by both those working with whānau and parents/caregivers. They have indicated feeling inspired by the simplicity of the resource and a relevance to them from the use of local people and locations from Tai Tokerau which has given the resource a distinctly New Zealand feel.

This resource is now used by other health providers around New Zealand.

[3] Adolescent Health Research Group. (2011). Youth'07: The Health and Wellbeing of Secondary School Students in New Zealand. Report for the Northland District Health Board. Auckland: The University of Auckland

[4] Elise R. DeVore and Kenneth R. Ginsburg. *The protective effects of good parenting on adolescents*. Current opinion in Pediatrics, August 2005 - Volume 17 - Issue 4.

[5] Council of Economic Advisors (2000, May). *Teens and their parents in the 21st century: an examination of trends in teen behaviour and the role of parental involvement*. Washington, D.C.: Author.

[6] Kuni Jenkins and Helen M. Harte. (2011). *Traditional Māori parenting: an historical review of literature of traditional Māori child rearing practices in pre-European times*. Te Kahui Mana Ririki, Auckland, N.Z.

References

Adolescent Health Research Group. (2011). Youth'07: The Health and Wellbeing of Secondary School Students in New Zealand. Report for the Northland District Health Board. Auckland: The University of Auckland

Elise R. DeVore and Kenneth R. Ginsburg. *The protective effects of good parenting on adolescents*. Current opinion in Pediatrics, August 2005 - Volume 17 - Issue 4.

Council of Economic Advisors (2000, May). *Teens and their parents in the 21st century: an examination of trends in teen behaviour and the role of parental involvement*. Washington, D.C.: Author.

Patient/Consumer Experience

Northland DHB wanted to know and understand the patient's experience whilst they were in hospital.

In the past, there had been a lack of useful information gathered from the National Patient Satisfaction survey. This survey relied on patients/consumers completing a long paper survey, then posting the survey back to the hospital. Response rate was between 30-38 percent. The administration of the process was costly to the organisation with minimal gain.

We developed a cost-effective electronic system to obtain feedback from patients whilst they were being cared for in the hospital.

Quality & Safety Commission. The success of this 'trial' encouraged us to make it a part of our normal practice. A staff member was subsequently employed to visit the wards on a daily basis, with patients offered the opportunity to complete the survey using an i-pad or the questions asked of them. The responses are gathered and put together in a report for staff. Having the provision to regularly update the wards and departments on the feedback of their patients is extremely helpful and important.

By collecting and studying this information, we have a better opportunity to look at ways of continually improving patient safety and care.



Building Whānau & Youth Resilience in Te Tai Tokerau

During 2012, Northland was experiencing significantly higher suicidal behaviour, particularly affecting Rangatahi Māori.

This project was developed and sought to build resilience, enhance protective factors and reduce the vulnerability of Rangatahi in our schools, Whānau and communities. Playworks (a local theatre company) wrote Matanui, supported by Haka and Waiata, gifted by the Henare Whānau. A theatre in education play was followed by a drama in education workshop, which includes an introduction to local community support networks. Matanui became the signature strand of the *Building Resilience* project.

The three strands of activity, known as the '*Building Resilience Project*', consisted of:

- Matanui
- Travellers Programme
- Suicide Prevention Training

The inequality that existed in youth suicide for Rangatahi Māori was significant during 2012; Northland lost 19 young people under the age of 25 years to suspected suicide. Of these 19 young people, 15 identified as Māori. Reflecting the complexity of issues and risk factors, the project consisted of a multi-strand approach with key elements to:

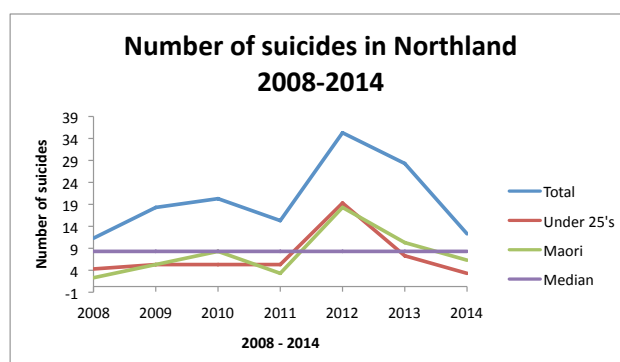
- Build on the strengths within schools, Whānau, hapu and communities;
- Enhance resilience, practical skills and making positive choices and;
- Further develop collaboration between schools, communities, service providers and agencies.

An evaluation was developed, providing process and outcome components. The impact on youth, Whānau, community and school environments was positive. All outcome components were met in the domains of supported youth, resourceful youth, strengthened school teams and strengthened communities.

It was important to engage people very early in the project, so they felt they had contributed and could move forward fully-informed. The participation was awesome, collaboration was crucial. Every relationship became important and new ones needed to be developed quickly. Key people within communities were targeted and brought on board with the concept so they could then advocate and use their mana within their community to promote the project.

"I've had huge trouble trying to work with the school but, since then, even though I've been there three years, the kids, they're coming up and saying 'so I can come and talk to you eh Miss so, if I'm depressed, I can ask you stuff eh.' (PHN)

Matanui created opportunity for youth to talk and supported them to build confidence to talk about issues that concern them. Youth identified with the play and could recognise when they or someone else needed help to deal with life challenges and can identify more people who are available to support and how to access them.



Based on the evaluation findings, future delivery of theatre in education and the four training programmes would make positive contributions to promote Whānau and youth resilience for suicide prevention in Tai Tokerau. Rangatahi can contribute positively to seeking answers to issues/challenges affecting rangatahi. We need to continue investing in our Rangatahi supporting them with a broad knowledge and experience base.

"Like for me, I would trust them [support people] 'cos they seemed really nice people. They are there to help you if things were really bad, they would tell and help you."
(Female, 14yrs)

"Thank you for this life lesson, more than a play, it's a life lesson; we are greatly honoured and privileged to have you here." (Male, 16yrs)



Photos by Sarah Marshall Photography



Partners in Care – Ward 15 Whangarei Hospital

We are a 20-bed ward that comprises a four-bed Acute Stroke Unit and 16-bed Rehabilitation Ward at Whangarei Hospital. The patients on the ward are often very sick. A consistent theme amongst complaints we received over the last two years was regarding communication and interaction with families about some of the patients discharge process.

We were fortunate to be able to participate in a national Partners in Care Programme and identified that we would aim to develop processes that ensure consistent engagement with whānau/family across the whole patient discharge planning process on Ward 15. The Partners in Care Programme guided the ward through a series of processes to capture and understand patient experience and to then work alongside patients/families to redesign and improve the patient experience on our ward.

The first phase was the preparation phase and this was probably the most challenging of all the phases. We were unsure of the concept of ‘patient co-design’ and this made it difficult for us to visualise what we might need to do. We found it difficult to identify a particular consumer (past patient or current) to embark on the process with us, due to the average age of our patients and Northland’s geography. While consistently having one consumer would have been an advantage, we engaged with consumers available on the ward at the time and this worked effectively.

The second phase was about capturing the experience and we did this by conducting two sessions to identify issues about discharge from a patient/family perspective and then staff perspective. The information shared was themed and then compared to the view from patients/families and staff. It was particularly telling and revealed a significant gap between staff views of issues that patients had for discharge and patients’ views of issues about the same topic.

The third phase encouraged us to understand the experience and this saw us drill down on some of the themes that we had identified in the session. We explored further the themes of visiting hours and participation in patient therapy and care by interviewing patients/families and utilising the patient experience questionnaire.

We then moved on to the fourth phase, which was about improving the patient experience and this is the phase we are currently undertaking. We have identified four ideas we wish to implement, which are:

1. Care partner concept;
2. Revision of Ward 15 visiting hours policy to Ward 15 families and friends presence policy;
3. Business card of ward contact details and family/friends presence;
4. Patient-centered discharge summaries.

These four pieces of work are currently in progress and have continued on after the programme finished in June. This supportive programme has focused on giving us the tools and confidence to collect patient experience and then utilise that to redesign processes. The co-design method is becoming part of the ward and we are using it in other design work. It is a new way of thinking that requires conscious effort but is proving to be extremely rewarding and satisfying.

“Could a greater miracle take place than for us to look through each other’s eyes for an instant.” Henry David Thoreau

Partners in Care Programme



Car parking – trying to find a carpark – adds stress when coming to a meeting

Goal Setting meetings identifying patient deficits

Discharge meeting gaps in information supplied

Utilising the phone to join in meetings

Length of notice for meetings on ward – phone calls on the day of the meeting



Meetings

Not informed that patient had transferred to rehab

Variation in treatment by different health care team workers

Inconsistent/Conflicting messages from healthcare staff



During Hospital Admission

Incomplete collection of pt information in ED ie social section in Drs section, ACC46 not completed No MDT assessments

Variation in completion and process for using discharge planning page in acute A to D Planner

Acute A to D Planner mostly completed by Nurses and Drs

Patients for rehab not always seen by MDT team prior to referral

If patient reviewed by sub acute rehab team then assumed for admission to rehab "A & R Rumour"

Conflict for acute MDT maintaining patients waiting for rehab vs discharge planning

Not always a discharge plan from acute ward

24 statis of patient not always considered by whole team

Pathways not completed

Rehab A to D Planner discipline focused not patient centered

PATIENT MAPPING SESSION 27/2/2013

WARD 15 MAPPING SESSION 25/11/2013

Explain what the red tray means to patient and carers / family

Not taking in to consideration families who have to travel long distances to visit

Need system to identify who is identified carer / family to be allowed to enter ward outside visiting hours .

Staff having time to walk patients

Family/ carer can be a great resource and help to staff on ward

Having to identify themselves at the door to be let in

Ask family do they want to participate in caring for the patient.

? Information/ orientation given to designated family members if assisting with patient

Visiting hours – family vs visitors

Family involvement with cares on ward



Carer participation

Arranging a time for pick up

Equipment – how to get it home

Transport – worried about having a suitable vehicle to get patient home. Need to understand the kind of vehicle needed to transport patient home – pt able to get in and out of



Transport

Transport home – taking equipment Cost of coming to pick up patient

Patients driving post discharge – patients who have had a stroke

Medication instructions - How much is a large glass of water

Picking up script – may need to leave patient alone at home if chemist not on route – rural issue

Medication at discharge – discharge dispensing



Medication

Medication reconciliation / history not always correct on admission

Medication information not clearly identified on discharge summary

Medications not correct on discharge

Patients not clear about whether to take old medications as well as new medications

Special authorities not completed

Do it right do it once

Discharge summaries not easy to read

Can you still get back into hospital if things don't go well at home

Information overload at discharge

Discharge summaries not being taken out of the envelope/being read once home

Discharge summaries full of jargon



Discharge

Access to modifications to home on discharge

ACC delays

Availability of House Officer to complete discharge summary

Lots of questions on day of discharge by family

Availability of beds in Aged Residential Care

Patient education about personal alarms and taxi vouchers

Valuables and belongings not returned on discharge

EDD usually in red , a lot of reviews rather than setting the discharge date

ACC/NASC require X days notice prior to discharge but difficult to give if no EDD

Who tells the patient they are for discharge and when the EDD is

Relying on other health care workers on discharge – will they know about pt – will they know how to provide same care as hospital staff

Communication issues about follow up – arranging appointments

Lack of physio resource post discharge in rural areas

Confusion with ACC role vs other post discharge



Post Discharge

Only patients living in Whangarei get post discharge follow up

Availability of Allied Health outside of Whangarei

Long wait time for community SLT once discharged

No written information about CARS service

Not allowed to give timeframe that CARS service will see patients post discharge

Delays in equipment supply post discharge

Should equipment arrive and be set up before the patient arrives home

Equipment not being provided on discharge ie urinal

Equipment – how to get it home



Equipment

Equipment being available for loan on discharge

Equipment on discharge may be different to the equipment that family have been taught with during training on the ward

Confusing equipment hire process

Making adjustments using diabetes education (MAUDE)

For several years, Northland Diabetes Service has recognised that a gap exists in the provision of self-management education for people with Type 1 Diabetes.

The diabetes centre team examined the Dose Adjusted For Normal Eating (DAFNE) programme, which is delivered elsewhere in New Zealand (suited to the needs of people with Type 1 or those on multiple daily insulin injections). The programme has some relevant content but overall would not meet the needs of our Northland population.

The team went on to develop the MAUDE programme in response to a request by diabetes consumers, and particularly those with Type 1 diabetes, for an education programme. People with Type 1 diabetes have complex needs around the management of diet, lifestyle, medication and reducing the risk of long-term complications. This has been a multi-disciplinary team collaboration, drawing on the strengths of clinical nurse specialists, the resident psychologist, dietitian and diabetologist.

A consumer group assisted the diabetes team to develop the programme. Some of the core components of DAFNE were included but new components, most specifically the psychosocial aspects of living with diabetes, were introduced to address the needs of Northlanders. The programme is portable, flexible in its delivery style and content and can therefore respond to the individual group's needs.

Self-management is fundamental to enabling people to live well with diabetes and reduce the risk of developing any long-term complications associated with diabetes. Self-management entails understanding and following a holistic approach to diabetes management, including diet, activity and self-adjustment of insulin therapy.

The following poem was written by a MAUDE participant:

This little black box
Reminds me of my illness all the time
Reminds me of my every move
No secrets, no excuses
I hate my little black box
No good times, no fun times
Reminds me of doing so wrong all the time
O how a month can change
I love my little black box – my friend this time
I high five myself, I'm in control of
My little black box, most of the time
Education the tool to success
It's helped me out of this downward mess
My friend and I shall take each stride
In the good and fun times
From this time on

Evaluation

Validated Problem Areas In Diabetes (PAID) surveys were completed pre and post the course by participants. Blood tests were obtained pre and post the course. The PAID questionnaire and the blood results were analysed and presented in graph form. Evaluations were also completed for each of the four sessions. This information provided feedback that would help us determine any changes needed for future programmes.

There was evidence of a marked improvement for the participants of the MAUDE programme. This was able to be canvassed in a variety of ways, including using the questionnaire, personal reports and with group members providing written confirmation of emotional and behavioural changes they had made. These changes resulted in better management of their diabetes, reduced stress levels, improvements in mood and more acceptance of their diabetes.

Personal patient report:

“Spending time with other people who live with diabetes has been so refreshing and informative. It means that I don't feel so alone and can live a more relaxed and stress-free life. That is so important.”

Future Focus

Maintaining a flexible programme accessible throughout Northland.

Diabetes remains a national and local health priority.



‘Self-management is fundamental to enabling people to live well with diabetes and reduce the risk of developing any long-term complications associated with diabetes.’

Implementing the Northland Health Services Plan 2012 - 2017

The implementation of the Northland Health Services Plan (NHSP) 2012-2017 is a collaborative, Northland-wide health sector response to the challenges of our ageing and high-need population. In previous years we have described the background rationale for the five-year strategic plan and the governance and management structure to support the NHSP work. This year we report on progress with implementation.

Five major NHSP projects have been established to accelerate action towards achievement of our headline targets and the triple aim.



Each of the five projects First 2000 Days, Integrated Urgent Healthcare, Patient & Family Centred Care, Neighbourhood Healthcare Homes and Fit for Life, is sponsored by an Executive Leadership Team member and a senior medical professional provides clinical leadership. Dedicated project management resource has been provided to facilitate progress.

- First 2000 Days focuses on improving the health of our children by supporting young women pre-conception, through pregnancy and childbirth and then caring for children in their first five years.
- Integrated Urgent Healthcare is a project focused on ensuring people with acute need receive the right care at the right time in the right place.
- Patient and Family Centred Care will address a number of the recommendations of the Patient Safety and Quality Review. It is focused on changing the culture of health service delivery to engage with consumers at all levels of health service decision-making, as partners in care.

- Neighbourhood Healthcare Homes is a project involving the establishment of networks of general practices, primary and community health services working together in new ways to optimise the healthcare experience of families. These networks are also expected to strengthen the sustainability of general practice, primary and community health services through developments such as collaborative models of care and secure information sharing.
- Fit for Life provides a focus on healthy lifestyles towards achievement of our smokefree 2025 goal and the prevention and management of obesity. This project provides support to the work of Te Roopu Kai Hapai Oranga, Alliance Leadership team.

Alongside the five major NHSP projects, considerable effort is being applied to the NHSP headline actions through strategic innovation.

Information Technology Integration

A number of successful IT integration programmes are improving communication and linkages between primary care and hospital services. Two Shared Care pilots are using two products, Manage my Health and Collaborative Care Management System (CCMS). A project to pilot the CCMS secure messaging system between general practices and hospital specialists has commenced. CCMS will also be used to share health information across three primary care providers; Te Whareora O Tikipunga, Paihia Medical Centre, and Ki A Ora Ngatiwai.

An alternative information-sharing application, Manage My Health, has commenced in Dargaville between the general practice, Te Ha Oranga o Ngati Whatua, Dargaville Unichem Pharmacy and the DHB district nursing service. Piloting of portals to allow patient access to some clinical information and online communication with the general practice is underway at three general practices: Bush Road, PrimeCare and Kerikeri Medical Centre. One of these practices, Bush Road, is undertaking a pilot to enable patients to have online access to their whole clinical record.

Health Literacy

The Diabetes Health Literacy Project is being undertaken by Workbase Education Trust, using rural primary care diabetes services in Northland as the pilot. Site reviews have been completed at Kerikeri Medical Centre, Te Hauora o te Hiku o te Ika and Hokianga Health Enterprise Trust. Action plans have been developed for each review site. A number of resources, including a health literacy poster and progression framework are being developed. These resources will be adaptable for other LTCs in the primary care environment.

Health literacy articles have been published in the Northland DHB PreScribe magazine and screensavers developed, promoting health literacy. A health literacy presence has also been established on the Northland DHB website.

High Five Enrolment

This project is aiming to implement systems that ensure all new-born babies are enrolled with:

1. A general practice;
2. The national immunisation register;
3. Newborn hearing screening;
4. A well child provider;
5. An oral health service.

Strengthening the Perinatal Journey for Women Experiencing Multiple Adversities in Pregnancy

This is a collaborative project between Northland DHB, Mania PHO and the Health Promotion Agency. The primary objective is to improve outcomes for children by reducing the impact of maternal/parental adversity such as: addictions to alcohol and other drugs (including tobacco) gambling, domestic violence, depression; poor housing.

Workforce Enablement

A Whole of System Workforce Strategy and Action Plan is in development aligned with the workforce objectives of the NHSP.

Eliminating Inequities

An Equity Kaitiaki Group (EKG) has been established to ensure the Northland Health Services Plan (NHSP) projects are guided by an equity framework. The purpose of the EKG is to:

1. Provide advice and support relating to eliminating inequities to the NHSP Oversight Group as a programme of work responsible for meeting the strategic goals of Northland DHB and the NHSP;
2. Provide advice and support to project managers on Māori health and issues of inequity in the development and implementation of the projects to ensure the projects do not increase inequities and contribute towards eliminating inequities;
3. Monitor progress on key initiatives/projects and recommend solutions to resolve issues with the implementation of the NHSP that may compromise the realisation of eliminating inequities.

The members of the Equity Kaitiaki Group are:

- Kim Tito (GM, Māori Health and Mental Health & Addictions);
- Lynette Stewart (CEO, Ki A Ora Ngatiwai);
- Ellie Berghan (Population Health Strategist Māori Health);
- Jensen Webber (Portfolio Manager, Māori and Pacific Health);
- Jim Palmer (Operations Manager, Te Poutokomanawa);
- Ngaire Rae (Health Promotion Manager, Northland PHOs);
- Liane Penney (NHSP Portfolio Manager);
- Lyn Rostern (Population Health Strategist, HOP, DSS & Palliative Care);
- Hemaima Reihana-Tait (Associate Director of Nursing, Primary Care);
- Win Bennett (GP Liaison Officer).

NHSP Office

The NHSP Office provides support to the NHSP governance, administers the Strategic Investment Fund Prioritisation Group and provides the centralised project management resource to the five major projects. An NHSP project management guide and templates have been developed and training provided to strengthen project management across NHSP projects. As the NHSP projects develop the NHSP Office will produce consolidated reporting on their outcomes and benefit.



NORTHLAND DISTRICT HEALTH BOARD

Te Poari Hauora Ā Rohe O Te Taitokerau



Northland District Health Board

Maunu Road

Private Bag 9742

Whangarei 0148

Phone: (09) 470 0000

Fax: (09) 470 0001

www.northlanddhb.org.nz