

PreScribe

NORTHLAND DISTRICT HEALTH BOARD STAFF MAGAZINE



Community Continue to Support Countdown Kids



From the Chief Executive



Hi everyone,
As Christmas approaches and before we spend time with family, hit the beach and recharge our batteries, I would like to express my gratitude. The ongoing support within teams and throughout the organisation sees us overcoming endless obstacles and hurdles – year in, year out. Reflecting on 2018, I am reminded that every

time we faced challenges, staff have worked swiftly and collaboratively to deal with each obstacle.

Collaboration only works if teams feel supported. This is why staff wellbeing is of highest priority for the Board and Executive Leadership Team (ELT). It doesn't go unnoticed that many of you are constantly up against it, which goes hand in hand with working in healthcare. It is key that we have a supportive organisation that is always striving for effective methods to ensure your safety. Your ELT have approved several significant initiatives and programmes to help provide that support.

This leads me to the use of technology. Innovations such as Zoom video-conferencing have allowed us to communicate more effectively to our partners, reach a wider audience and reduce unnecessary travel. The successful Telehealth programme has been an important model of care change and a proven example of innovation. By increasing access to this technology, our patients – particularly in rural Northland – will be at an advantage when they can zoom in for consultations from their homes rather than having to travel to one of our facilities.

The beauty of working in health is that we get to make a real difference to peoples' lives. The 2018 Health & Social Innovation Awards late last month highlighted examples of projects that create positive change for our community. Thanks to the sponsors and organising committee, it was once again a highly successful event that highlights how many people put their heart and soul into their work. I congratulate everyone who entered, was nominated by their colleagues and who were acknowledged or won on the night – to me you are all winners. The winner of the Cedric Kelly Supreme Award and Collaboration Award, Te Ara Oranga was also acknowledged nationally by winning the Supreme Matua Raki Workforce Innovation Award at the Cutting Edge Conference in Rotorua in September. The collaboration between us, the police and the wider community has been central to the project's achievements so far. The project's success has made it a model for the rest of the country to use in the fight against methamphetamine, and we have put in a bid to secure extended funding.

There have been several projects this year that have improved efficiency. The E-referral system is saving our booking clerks many hours each week. The SAFER project is another time saving initiative – converting red days (days spent waiting for care or investigation) on the wards to green days – improving patient flow throughout the organisation, starting in ED.

We have a growing reputation for producing great music and videos to spread key messages through social media. First, we had Te Ara Oranga's 'Let's Make a Change', followed by 'You are Woman', the theme song for the Ngā Tātai Ihorangi – Our First 2000 Days project. This innovative programme delivers 10 key principles to ensure the health and wellbeing of expectant mothers are nurtured throughout their pregnancy and for the first five years of their baby's life. The programme is a collaboration between Northland DHB, other health providers, social services and a very kind couple, Kaylah and Reece, who allowed us to document their pregnancy.

The successful SUDI work in 2017 focusing on Māori women through whānau centred wānanga was a model for Ngā Tātai Ihorangi. The reduction of infant SUDI deaths in our region is ongoing, and we continue to lead the rates of exclusive breastfeeding after birth. The mothers and babies in our region are in good hands.

Another highly successful event this year was a research workshop held at Tohorā House in August. Doctors, nurses and Allied Health clinicians, community health providers and members of the Faculty of Medicine and Health Sciences, University of Auckland (UOA) came together to discuss the development of a research hub in Northland. This is a step in growing our reputation as a place of learning and strengthens our relationship with UOA.

Several long standing staff have retired this year, and on the flip side we have gone well over our 3000 staff threshold. This number will keep growing to keep up with demand. Paul Wellford has been appointed into the newly created Chief Operating Officer role. Paul is now supporting a number of projects that will result in safer (for staff and patients), more timely, equitable, efficient and effective patient and whānau centred care.

Throughout the year we have used consumer feedback, as well as our Consumer Council to help us assess how we work, enhance our services and focus on areas that need development. A patient's point of view is invaluable to highlight simple things like how we use language to frame situations for patients and improving how we operate at work.

The Meningococcal W outbreak is yet another challenge that only occurs in Northland. A mass vaccination programme was rolled out on 5 December throughout the region. This is our third vaccination campaign and seems to prove that Northland is more susceptible to infection than the rest of the country. Having a proactive response to outbreaks like this can be a challenge, but is another example of how effective our staff are under pressure – overcoming hurdles and putting the health of our patients at the forefront of decision making.

To all those volunteers and community groups that use their own time to support our work, thank you. Without your help, our hospitals wouldn't have the warmth and extra care that you provide.

There are so many staff members who have stepped up throughout the year during holiday weekends, giving up their break to put patients' needs first. A big thank you to you all and also to the staff rostered on over the Christmas holiday period. This is especially so as we see the usual influx of visitors to our beautiful region who will no doubt add extra pressure on our facilities.

Your Board and I continue to argue for greater investment in Northland health. Health is not a financial millstone around successive government's necks. It's an asset and the return on investment is at least two-fold. You are all an asset, and I'm immensely proud of the care you provide.

Enjoy your holidays and special time with family, whānau and friends. Take care of yourselves and everyone around you over this crazy period. Have fun and lots of laughs and we will all see what Santa and 2019 brings us.

Meri kirihimete me nga mihi mo te tau hou.

Kind Regards,

Nick

Te Ara Oranga Wins Supreme Award



Te Ara Oranga representatives with the Cedric Kelly Supreme Award

An initiative to reduce the hold that methamphetamine has over the Northland region, Te Ara Oranga was awarded the Cedric Kelly Supreme Award at the 2018 Northland Health and Social Innovation Biannual Awards in mid November. Te Ara Oranga also won the Collaboration Award, which recognises outstanding examples of collaboration within departments in the health service and/or between primary and secondary services that have contributed to service improvements or better health outcomes.

Te Ara Oranga is a joint initiative between New Zealand Police and Northland DHB who work together to reduce methamphetamine demand by enhancing clinical treatment services and increasing responsiveness.

The successful model enables police to refer people to treatment, with referral times reduced from 2–3 weeks to 24–48 hours. Pou whānau Connectors and Whānau Groups are employed to work in the community to support users. The focus is on placing people into jobs or work training to encourage a positive pathway for the future. Dedicated clinicians work across Northland to ensure early intervention screening in the emergency departments.

As at the end of September 2018, there had been:

- 68 arrests
- 25 firearms seized
- 62 search warrants
- 23 reports of concern for 53 children
- 208 police referrals to the DHB for treatment
- 2601 people screened in ED
- 681 cases managed by methamphetamine focus clinicians
- 67 new referrals to Employment Works
- 23 people into new work.

The theme song 'Let's make a change' is helping to deliver the key messages through social media networks.

The event's new venue and Gatsby theme added some glam to the evening. In amongst a jam-packed schedule of winners accepting their awards, the audience was entertained by hilarious MC Luke Bird and some fantastic dance/musical performances.

The awards celebrate and profile quality, innovation and integration across the Te Tai Tokerau health and social sectors and are a collaboration between Northland DHB, NorthAble Disability Services, Manaia Health and Te Tai Tokerau PHOs.

The four award categories Hauora Māori, Social Innovation, Quality and Improvement and Primary Care, highlight successful projects, groups and individuals from community and iwi organisations, general practice, and non-government and government agencies. The emphasis is on projects that bridge the gap of health inequities, particularly for Māori in our region.

Celebrating innovation was a vital element of the awards. Project winners were acknowledged for their contribution to social good, creating social wellbeing for Māori and improving social outcomes. These successful initiatives won their categories because of their community buy-in, ultimately leading to improving health statistics and reducing hospital admissions/lengths of stay.

Projects that achieve successful results by using better systems were also acknowledged for how they have contributed to tackling ongoing health issues in Northland.

An audience member was also a big winner on the night, taking home the Air New Zealand mystery draw of \$1000 worth of travel.

The work that all the winners and placegetters do on a daily basis supports northlanders to be better educated in making healthy lifestyle choices and will ultimately improve the overall health of our region and the future of our people.



First 2000 Days Most Important



New mum Kaylah Bermingham (left) with her mum Dee-Ann Brown holding three-week-old Ngāwai Madisyn-Blair Bermingham, Petina Stone and Taunaha Brown.

A new waiata 'You are Woman' was launched at Pehiāweri Marae in Tikipunga in late October. It marked the beginning of a new initiative by Northland DHB and service providers to ensure the health and wellbeing of expectant mothers are nurtured throughout their pregnancy and for the first five years of their baby's life.

Ngā Tātai Ihorangi – Our First 2000 Days is an innovative new programme of resources developed by Northland DHB with the support of health providers and social services. Its 10 key principles focus on Māori women through whānau centred wānanga, in an attempt to reduce the health inequity gaps for Māori in our region.

The resources include workshop displays, a workbook and a range of audiovisual resources for social media, which will be delivered via the Northland DHB Facebook page over the next 12 months. Mothers will also receive a wahakura (weaved bassinet) when they take part in the programme.

Ngā Tātai Ihorangi specifically focuses on the health of the mother and making good choices from conception onwards. The cessation of smoking and alcohol is key, as is engaging the services of a midwife to help and guide mothers during their pregnancy (Only 22 percent of Māori mothers currently attend antenatal classes). Encouraging separate sleeping is also essential and by providing the wahakura, babies have their own safe space to sleep in.

In 2012, Northland topped the statistics for SUDI rates in New Zealand – losing between 6 and 8 Māori babies a year. Northland DHB chief executive Dr Nick Chamberlain

took a proactive step that no other DHB or the Ministry of Health would by funding the SUDI work to reduce these numbers. This project focused on engagement and discussion with Māori women in mārae based wānanga. It aimed to reduce the key risk factors for SUDI of maternal smoking, adult/sibling bed sharing with an infant and the position of baby when sleeping. By the end of 2017 the programme was proving successful, with Māori infant SUDI deaths reduced to two and over 900 safe sleep spaces distributed.

For Ngā Tātai Ihorangi to be effective, the working group wanted to ensure the 10 key principles reached the wider community. Waiata was the perfect medium to achieve this. 'You are Woman' was written and performed by Taniora Tauariki and Gibson Harris, supported by the Hātea Kapa Haka group, Northland midwives and health providers. This wonderful music video sends the message that giving new life is the most important role women and their whānau have.

Filed by Dean Whitehead, the music video follows a young couple, Kaylah and Reece Bermingham, going through important milestones during their pregnancy. When cast and crew turned up for the final day's filming, they learnt that Kaylah and Reece's baby Ngāwai Madisyn Blair Bermingham had been born that morning!

"I congratulate everyone involved in the development of this taonga, which I believe will help us improve health outcomes for tamariki and whānau throughout Northland," offered Dr Chamberlain.

A Commitment From the Ministry of Health for Local Investment

In late September, the Minister of Health Dr David Clark announced Northland DHB would be receiving more than \$30 million towards improving facilities at Whangārei Hospital and the development of a combined outpatient and general practice facility at Bay of Islands Hospital.

Northland DHB submitted single stage business cases for a number of projects seen as critical in creating adequate capacity while redevelopment of Whangārei Hospital is planned.

These projects include a Whangārei Hospital Theatre extension, a new Endoscopy Suite and Cardiac Catheter Laboratory.

This interim work will enable our organisation to meet the demand for the immediate to short-term – the next 5–10 years.

Theatres and Endoscopy Suite

We are experiencing unprecedented growth for acute medical and surgical services. To meet demand pressures while Whangārei Hospital is redeveloped, temporary capacity is critical to providing theatre capability and a separate endoscopy suite.

To address this constraint in the short term, Northland DHB intends to:

- relocate and consolidate acute and elective endoscopy procedures to a vacant area in the hospital
- reconfigure the current theatre complex to allow a modular unit of two additional theatres to be clipped onto the main theatre corridor
- refresh the existing theatres, central sterile unit, storage areas and reticulated services.

The planned new suite will contain a second procedure room which will enable an increased number of

colonoscopy procedures to be undertaken. This will be essential to meet the rising demand arising from the fast growing population in Northland and will also enable bowel screening to be implemented from July 2020.

Cardiac Catheter Laboratory

The prevalence of cardiovascular disease (CVD) in Northland contributes to the greater life expectancy gap between Northland and the rest of the Northern region and between Māori and non-Māori. Addressing avoidable mortality through improved care for patients with CVD gives the most significant opportunity to reduce overall mortality and inequities.

Based on the NRA forecast, a predicted 1000 additional patients per year will benefit directly from a cardiac catheter laboratory in Northland by 2027. Its establishment will also help recruit specialist staff we have previously been unable to attract.

Outpatient and GP Facility at Bay of Islands Hospital

Following a decision by Ngāti Hine Health Trust not to proceed with its wellness centre project, Northland DHB developed a combined outpatient and primary care facility adjacent to the new hospital, which was opened at the end of September. Included in this stage of the project, Northland DHB will consider whether to refurbish the existing renal area or to include it in the new build.

This development within the Bay of Islands area is seen as vital to providing quality health services to the population who are spread in small pockets across the Mid North. The project aims to deliver a patient-centred and integrated model of care that sees collaboration across providers on after-hours primary health care, improved utilisation of clinical spaces, and access to service delivery in a community setting.



Photo credit – Northern Advocate



Meningococcal W Community Vaccination Programme



Dr Ailsa Tuck interviewing with media while crowds wait to be immunised

Late last month the Prime Minister and Minister of Health announced a community Meningococcal W vaccination programme to combat the community outbreak in Northland. A community outbreak is the epidemiological term for a sudden increase in occurrences of a disease in a particular time and place.

Northland has been the worst affected by the outbreak, with seven cases this year, including three deaths and four cases reported in September and October. There was no link between cases; they came from a range of ages, geographical areas and ethnicities.

“We have been working closely with the Ministry of Health for some months, and recently have been strongly advocating for them to approve this campaign as it’s the only truly effective preventative measure for our population,” noted chief executive Dr Nick Chamberlain. “The Ministry of Health advised us that vaccine stock is in short supply globally, but that they were able to purchase 25,000 doses which were used in Northland,” Dr Chamberlain said.

The free community vaccination programme started on Wednesday 5 December at selected high schools and community centres across Northland.

To best protect the community with the limited Meningococcal W vaccine available, Northland DHB focused on building the whole populations’ immunity by vaccinating those most at risk from the disease and those most likely to carry it and infect others. These two groups were children aged from 9 months to under 5 years and those aged 13 to under 20 years who are Northland residents.

Children under 5 are generally most affected by Meningococcal disease. As a result, vaccinating this age group will protect them from getting the disease. The vaccine cannot be given to babies under 9 months. The 13 to under 20-year-old age group generally carries the bacterium that causes the disease. Even if they have no symptoms, carriers can infect those around them. Vaccinating this age group will lower the number of carriers in Northland and stop the spread of Meningococcal disease across the entire community.

“With Christmas approaching, it was a huge logistical feat to vaccinate 25,000 children and youth before they went on holiday,” said Dr Chamberlain.



18 Month Ohana and Henni Devine - both Immunised

Community Continue to Support Countdown Kids



Madison Taylor, Lisa Tito, Patrick Tito, Whaiawa Tito, Oringa Barach, Yvonne Hunter, Dr Nick Chamberlain

Each year, a group of staff at Countdown Okara in Whangārei use their own money to buy items for the Baton's Up competition they organise as part of the annual Countdown Kids Hospital Appeal. This year the team managed to hit the target well before the three-month appeal was up. Countdown Group Manager for the Upper Northland Region, Madison Taylor said that the Okara store had to source raffle books from other stores to keep up with demand.

Nationwide, communities supported Countdown to raise \$1.2 million from August until the end of October. The Northland community appeal raised \$81,000 and staff from Countdown Okara presented Northland DHB Child Health Services with a cheque late last month.

The face of the Northland 2018 Countdown Kids Hospital Appeal, Whaiawa Tito and whānau attended the celebration. Whaiawa lives with type 1 diabetes and her parent's Lisa and Patrick Tito pay for her to use a Freestyle Libre Blood Sugar Sensor to monitor and control her condition. Patrick also has type 1 diabetes

and is aware that he is a role model for his daughter in how he manages his diabetes on a daily basis. He said it is neat to see Countdown and the community coming together to help Whaiawa and other kids by supporting this appeal.

The \$81,000 raised this year will go towards buying a stock of blood sugar sensors to loan out to parents who can't afford the device. The sensor gives parents and children a break from the daily finger pricks required to monitor insulin levels and enables them to do a period of intensive sugar monitoring to try to improve their diabetes control.

Northland DHB Chief Executive Dr Nick Chamberlain said it is amazing to have received almost \$800,000 over the last 11 years from the Appeal. "I'm blown away, they've delivered more than we expected. When you walk around our hospitals, you see the significant investment into equipment this money has enabled us to purchase, which we couldn't fund. It's a great partnership."



DHB Communications

Kōrero and Learnings



National DHB Communication Managers Conference 2018 attendees and Kaumātua Te Ihi Tito

There was no hiding the bad roads and isolation issues that our health professionals and patients deal with on a daily basis when the country's DHB communication managers came to Northland for their National Conference in October.

A road trip from Whangārei to Waitangi along State Highway One was added to the agenda to give them a sense of the distances involved for health workers in this most far flung of DHBs. The packed two-day programme, organised by Northland DHB communications manager Liz Inch, was purposely coordinated to unveil how we as a region work through obstacles to develop innovative projects that enhance the health and wellbeing of our people.

Acting Manager Internal & Stakeholder Communications at the Ministry of Health Charlotte Gendall said she was privileged to share experiences and learn about health initiatives and priorities in the host region.

Charlotte said Liz and communications officer Paula

Martin put together a particularly enriching programme which kicked off with a session outlining Hapu Wānangā – Te Wānangā o Hine kōpū.

A presentation on Te Ara Oranga was of particular interest. Attendees were fascinated to see how the Northland DHB, police and PHOs were working together on the integrated model of Police and Health activity to reduce methamphetamine demand.

Other sessions on Food Rescue (redistributing quality surplus food), Tukau Community Fund, Waharoa ki te toi medical research, an address by local Breast Screening champions and the presentation of Cook for Life – a cookbook written by the DHB's renal dietitian Olwyn Talbot-Titley rounded off 48 hours in the 'winterless north'.

All 12 attendees remarked on how much they had learnt from the genuine and passionate speakers and how community engagement and good communication had helped progress these projects. They all said they would be taking home these learnings to their own DHBs.

Honouring Success

The students from the 2018 Pūkawakawa programme had the special honour of sharing their farewell pōwhiri at Terenga Paraoa Marae in mid-October with the person who created it, Professor Warwick Bagg. After 10 years as the head of the programme, he is stepping down to take up a lead clinical endocrinology role at Auckland DHB.

The Pūkawakawa programme was started just over 10 years ago, to offer medical students the opportunity for a year-long placement in Northland. The aim is to expose them to the challenges and unique health issues in regional communities and to encourage them to consider returning to rural areas



2018 Year five Pūkawakawa students and Professor Warwick Bagg

to practice in the future. Students spend two thirds of their placement based at Whangārei Hospital and the final third in the rural communities of Kaitaia, Hokianga, Dargaville and Bay of Islands. They work in integrated care with GPs, rural hospitals and in the community.

Professor Bagg reflected on when he and others first began negotiating how they might start Pūkawakawa with the Northland DHB in 2007, saying they took a “yes we can” attitude. Within one year they had started, with 20 year five students taking their places in Northland. “I’ll never forget one of the mothers speaking at the inaugural pōwhiri about how she normally comes north to Te Tai Tokerau for a tangi and today she was coming here because her son was going to be a doctor. Tears were streaming down her face because of the positive change that this would make for her son.”

Professor Bagg said that at the beginning they had no programme or accommodation for the students, but the Northland DHB showed true partnership by providing accommodation which they still use today. He noted that 2018 had been a great year with the Faculty of Medical and Health Sciences celebrating its 50th anniversary and the Northland Pūkawakawa programme being extended to include Bay of Plenty and Taranaki. He announced that there would be a fourth programme in the Waikato.

Professor Bagg said that there are still issues with consent and with inequities within Māori health, and told students that their presence was helping to address these issues. He also touched on new challenges with artificial intelligence and said that we need to adopt this new technology and tailor it with the same “yes we can” attitude.

Several members of audience acknowledged Professor Bagg, including Northland DHB kaumātua and cultural advisor Te Ihi Tito who quoted a Zulu saying (translated). “We see you, we see the work that you have done and the work you will do – especially in diabetes.” He presented the Professor with a pounamu.

Professor Ngaire Kerse, Head of the School of Population Health at the University of Auckland, said that Professor Bagg had introduced agility to the University. “His phenomenal leadership of the Pūkawakawa programme has not only helped benefit our rural and regional areas where health delivery and care needs to be better, but the whole population of New Zealand will benefit from it. The programme has been one of the most important developments from the School of Medicine in the last 25 years.”

Northland DHB chief executive Dr Nick Chamberlain acknowledged that Professor Bagg was the founding father of this valuable programme. He and Professor Bagg discussed the positive partnerships forged through the Pūkawakawa Programme and the development of a research hub in Northland, which they see as a fantastic opportunity for the Northland DHB, our population’s health and also for the future students of Pūkawakawa.

Dr Chamberlain said he hoped the student’s experience had been as positive for them as it had been for the people of Northland. He asked that they carry on changing because he sees more and more that new doctors were making meaningful changes to the system.



2018 Year Six Pūkawakawa Students

The students all remarked on how welcome they felt at the Northland hospitals and in the communities where they were placed. All said their experience working with people living in such harsh conditions made them realise how privileged they were to have the support of their whānau and to have the opportunity to study and to learn from these communities.

Former Bream Bay College student Jaime Newton (in her fifth year studying medicine) said being able to come home to Northland and be involved in the programme has made her more confident and enabled her to refocus and realise what’s important.

Year six trainee intern Anna Thompson said she was told by one of the kaumātuas when she first arrived that, “If you come to Northland, it may lead you to marry a local”. Much to the crowds’ delight, Anna said this had happened for her. She said she had felt supported to speak up when she didn’t feel comfortable and confident to perform tasks, and she encouraged the other trainees to continue to adopt this. She hoped other DHBs would provide this sort of supportive environment as well.

Year five student Jack Louis Hailstone told of his most touching memory during his time in Te Kotuku Maternity ward where he had spent over 30 hours awake to support a couple about to have their first baby. “It looked like the consultant would have to take the mother to theatre. So I went home to grab some sleep, did some baking and came back to hear that the baby had been delivered. A few weeks later I saw the midwife on the ward and she said the couple had named their baby after me.” He said it amazed him how much of what they do can influence patients and how connected you become after such a short time.

Each student who spoke during the pōwhiri offered thanks to the Pūkawakawa coordinators Dr Win Bennett and Caroline Strydom for being like parents to them during the programme. They also thanked the Northland DHB, kaumātua and the Northland community for opening up to them.

Trainee intern Ben Booker spoke on behalf of all the students, saying that perhaps the best koha they can offer to the Northland DHB in return for its hospitality over the last year is a commitment to be the generation that replaces poverty, suicide and elderly statistics with a society that embodies the best attributes of the Northland spirit – kindness, inclusiveness and generosity.



Leaving on a High



Vanessa van Pomeran

After almost 40 years working for the Northland DHB, occupational therapist Vanessa van Pomeran timed her retirement to coincide with Occupational Therapy Week. This gave her the opportunity to say goodbye to 45 of her colleagues who gathered together for the twice-yearly Professional Forum at Tohorā House in October.

Vanessa is excited to start her new chapter, but said it was especially sad saying goodbye to her colleagues. She was also thankful to have been given a farewell by the Mental Health & Addiction Service, considering she hasn't worked for them for two-and-a-half years.

Her career path was steered into mental health when she and her husband first came to Northland in 1980 from Auckland. The only position available at the time was in the Mental Health Service. Since then Vanessa has had many different jobs within the DHB including a number of clinical and management roles. She also spent seven years as a paediatric occupational therapist in Child Health and worked as a professional advisor to other mental health occupational therapists. For the past two-and-a-half years she has worked as a needs assessor for NASC, Health of Older People service.

Vanessa's career high was being part of a pioneering team that initiated sensory modulation in the Mental Health service. She said this opportunity was instigated after the general manager of Mental Health Services at the time Dr Gloria Johnson went to a presentation in Auckland to look at ways to minimise restraint and seclusion. When she returned to Whangārei, she sent Vanessa to Wellington to find out more.

Vanessa explained that as modulate our sensory output. We have certain preferences that calm and soothe us such as smells, what we choose to wear, eat and listen to, the weight of blankets for sleeping,

etc. Sensory modulation had been used with children for a long time and American occupational therapist Dr Tina Champagne adapted the principles for inpatient unit use with adults. It was seen as an effective tool to minimise restraint and seclusion in acute mental health settings.

After learning about the practice, Vanessa helped establish a sensory room within the Mental Health unit at Whangārei Hospital. Recliner and massage chairs, aromatherapy, weighted blankets and various other sensory tools are used to calm patients.

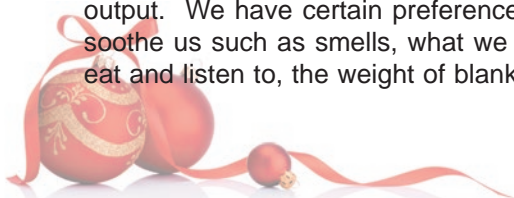
"We work out with the person what's calming and what's alerting so that they have an awareness of their own sensory preferences. In an acute setting, this is especially important as people don't have the usual things that they use to modulate and can resort to seeking sensory input that may not be effective. The aim is for people to identify their triggers, early warning signs and effective sensory strategies and implement them into their everyday lives."

Vanessa said that some patients are not ready to start talking straight away. But once they feel calmer and in more control, they are more likely to engage in talking-based or other forms of therapy. The other aspect of sensory modulation is the importance of considering the impact of the environment – a key consideration with the design of the Tumanako Unit.

The sensory room that Vanessa set up was used as a model for other DHBs to learn from. Vanessa was part of a team that undertook a nationwide research trial on Sensory Modulation in Acute Mental Health Wards under Te Pou. The trial discovered that it is a useful, easy to learn set of skills that are well regarded by mental health and addiction services.

Vanessa also developed a staff training package that included an introduction to the theoretical background of sensory modulation, an overview of the research and the guidelines for the room's use. Occupational therapists within the mental health service are the experts in providing individualised sensory modulation for individuals and in group settings. Since the early days, sensory modulation has been applied to other practice areas such as schools, health facilities, nursing homes and dementia care.

Now that Vanessa joins her husband in retirement they plan to travel and spend more time with family and grandchildren. She's also got her sewing machine set up and ready to go, with lots of projects planned. She said it's all quite surreal at the moment, but she feels honoured and privileged to have had such a well-supported career with the Northland DHB, and will be leaving on a high.



The Gift of Time



Hospital Volunteers at the annual Volunteers Luncheon

For some members of the public coming into a hospital can be an incredibly daunting prospect, as a visitor and especially as a patient. Thus volunteers play an essential role in making that experience more welcoming for everyone.

Whangārei Hospital has a dedicated team of 123 volunteers. Kaitaia Hospital has 14, who meet and greet patients and visitors and assist people on the inter-hospital bus. Bay of Islands Hospital has 4 volunteers. Volunteers work throughout the region in a variety of roles from driving vehicles, meeting and greeting people, assisting in the playroom on the Children's Ward, selecting and distributing books to patients and providing Justice of the Peace and chaplaincy services.

These volunteers offer their commitment for hundreds of hours each year and are integral to the culture and the running of the hospitals. Several have spent years within the hospital system in a variety of voluntary roles, and Daphne Griffen is a perfect example of someone who has truly dedicated her life to helping others.

Daphne started at Whangārei Hospital in 1978 as a Meet and Greet volunteer. She then moved to the physio pool, assisting clients in and out of the pool for 18 years and working alongside the physiotherapists. When the physio pool closed, Daphne returned to the Meet and Greet team and then took on the role of coordinating and delivering books and magazines around the wards and waiting rooms each week. Daph (as she is known) collects books and magazines from the Red Cross and local shops and delivers them in her own car to the hospital. These days Daphne has an offside, Ellie who distributes the magazines.

Daphne has extensive knowledge of the hospital and can confidently assist anyone coming through the doors, staff included. As the longest serving volunteer at Whangārei Hospital, she is the perfect example of the volunteers who work tirelessly, day in and day out, to support others with their "gift of time".

There are other individuals, clubs and community organisations that work quietly behind the scenes

donating beautiful knitting, toys, blankets and flowers for patients. Meals on Wheels provide food to patients in the community, and SPCA volunteers bring a team of four dogs – Joe Cocker, Fly, Tommi and Zeus – to visit patients in Tumanako, Ward 15 and Ward 2 as part of ongoing therapy and wellbeing. Tumanako occupational therapist Jeannet Penney said having the Outreach Therapy Pets like Tommi visit the wards on a regular basis is part of the sensory modulation therapy. Tommi is often the only visitor some patients have, and she helps reduce their feelings of seclusion. Often they will engage with the therapists while she's there more than at any other time.

To thank these wonderful volunteers, Northland DHB marked International Volunteer Day with a Christmas lunch. Each volunteer received a gift and spot prizes were donated by local businesses (Countdown Okara, Whangārei ITM, Bunnings, Maunu Pharmacy, New World Onerahi, Warren Hay Marine, K Mart, The Warehouse, IC Motors and Tyre Power) that appreciate the work these selfless people do for our community. Then Chaplain Reverend Sue White played the piano before a delicious festive meal was served.

International Volunteer Day, designated by the United Nations in 1985, is celebrated annually to acknowledge and show appreciation to volunteers. Global estimates place the number of volunteers worldwide at 970 million, which is equivalent of over 125 million full-time workers. The theme for 2018 was "Volunteers Build Resilient Communities". This day is viewed as a chance for volunteers and organisations to celebrate their efforts, share their values and promote volunteering among their communities.

Northland DHB welcomes new volunteers. If selected, a trial period of one month and a minimum commitment of six months are expected. Once signed up they will be provided with training and ongoing support to enable confidence and fulfilment from the roles that they undertake. Whilst on duty, our volunteers are responsible to the volunteer coordinator, Rose Armstrong or a designated staff member.



Daphne Griffen



Tommi



Journeying South



Mike Cummins

In 2014, after an eight month, 8000 kilometre caravan trip around New Zealand, Mike Cummins and his wife made the move Northland so Mike could take on the role of director of strategic projects at Northland DHB.

Before that, Mike had been in the South Island with his family since 1975. After four years with our organisation, he is returning south to Waddington, a small village in Canterbury to retire and be closer to his family.

Mike has thoroughly enjoyed his time with Northland DHB and said that after working in health for past 31 years, with the last four in Northland, the health problems facing the population here are entirely different to the rest of the country, especially in renal health which is a big issue here compared to the South. He said the distances contribute to the challenges of the region and the ageing population. He has thoroughly enjoyed his time at Northland DHB and hopes to do some consulting work as he eases into retirement.

First, he faces another long journey south as he helps relocate his son from Wellington to Greymouth before Christmas, bringing most of his family together in the South Island once again.

E-Bike Use Encouraged

Uptake of the e-bikes available to staff has been relatively slow since they became available in July this year, but sustainability development manager, Margriet Geesink is hoping during the summer months they will be put to better use.

To promote active lifestyles and sustainability, Northland DHB made the e-bikes available to offer a more sustainable transport option for staff to get to meetings and around our hospital bases.

The bikes can travel between 40km–80km in one charge and can be picked up from SAU bicycle parking below Vibe staff café, Tohorā House and the Kaitaia Hospital workshop area. All bikes are fitted with panniers (bags), mudguards, rear view mirror and come with locks, lights, hi-vis vests and helmets to keep you safe and to ensure you have somewhere to bring all you may need for a meeting.

To encourage the use of the bikes, they are available for staff to trial them for commuting, and so far 47 people have signed up. However, any time they are used for incidental private use, they won't be covered in the DHB insurance. To register to be part of the commuter trial check out the staff travel page on the intranet. If you try the bike and become hooked, we have been offered a special deal for staff from Northland EBikes to get \$60

worth of free accessories when purchase one from them, just you show them your DHB badge.

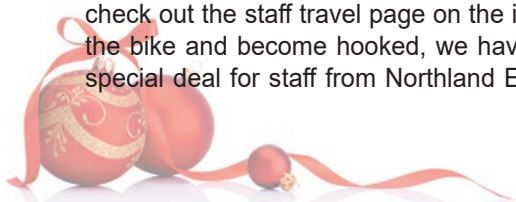
Alcohol and Drug Counsellor Jessica Miedema works from the Kamo office was one of the staff who trialled an e-bike. She decided they weren't for her, however she said they were very easy to work out and would like to see them more commonplace at all Northland DHB premises for use.

ENT booking clerk Allan McLachlan also gave the commute trial a go and was impressed at how easy it was to go uphill and is now starting to consider purchasing a bike for to commute to work on a regular basis.

To register and book a bike and access all the relevant information, go to the Staff Travel page via Staff Central. (link for online version)

The user guidelines list the conditions of use, safety precautions and give you all the information on location, bookings, bikes, locks and their use. After registration, the user receives access to the Outlook booking calendars of the bikes so you can book your trip.

There is an expectation that those who use these bikes have suitable cycling experience. If you're not sure or would like training, a skills session can be organised with Margriet Geesink, our sustainability development manager via email: Margriet.geesink@northlandDHB.org.nz.



Gold Medallist in our Midst



Paula Martin on the podium

By day Paula Martin is the communication's officer for the Northland DHB. But by night she is a weightlifting powerhouse who proved she is a force to be reckoned with after winning gold at the New Zealand Olympic Weightlifting Masters Nationals in Upper Hutt at the end of last month.

The qualifying event was the first time Paula had competed in the sport. However, she competed in masters swimming at the World Masters Games last year and at national level swimming as a teenager.

As an avid sportswoman, Paula has been doing Crossfit for the past few years as well as working on strength training for swimming. When one of New Zealand's best lifters suggested she would do well at master's level weightlifting she decided to give it a go. Just eight weeks before her win she started training with her coach Shane Ball at the Northland Olympic Weightlifting Club. She qualified late last month and travelled to Wellington for the competition with four other lifters from her club, who also all won gold.

Paula said she had to tackle two lifts during the competition – the Snatch and the Clean & Jerk. Each

competitor was allowed three attempts at each lift to get their heaviest weight. "It's very technical and you can get 'red-lights' for something not always immediately obvious. I won the gold medal after a tight competition with a lifter from the Bay of Plenty, who led by 1 kg after the snatch. I had two lifts disallowed and she missed her two final lifts."

Paula took control of the competition in the Clean & Jerk with her first lift and went on to set a Masters Record with her second. However, she got the dreaded red-light with her final lift, which would have been a personal best.

The weight divisions for the competition are set to change in 2019 which Paula says is great news because the division she entered won't be so wide. Currently it is 75–90 kg. This will change to 76–81 kg or 81–87 kg next year.

She is now considering her next challenge, but she encourages others to give masters sport a go. "It really is an amazing community and you never know what you're capable of until you try."



Marlin Hotel Goes Smokefree



Jackie Edwards-Bruce, TRoW, Maria Fenouillet and Paul Condron, Marlin Hotel and Sara Arblaster – TRoW.

The only smoking you will find at the Marlin Hotel in Whangaroa is smoked marlin on the menu. The Marlin Hotel has gone totally smokefree and is believed to be the first 'local pub' in Northland to do so.

In August, the Marlin Hotel closed for renovations and reopened as a family-friendly hotel and restaurant. Smoking doesn't align with the new look and feel of the hotel and the way the new owners want to do business. "We wanted to create a family-friendly atmosphere and attract people to enjoy the view, a healthier menu and environment," said Paul Condron, Chef and Manager.

"We removed the bar leaners and pool table and added more dining tables to create a family-friendly atmosphere. We let our customers know what we were doing, offering healthier menu options, and a cleaner, healthier look and feel to the place. We have a whole new clientele. We might be closing earlier than we used to, after the dinner rush, but that means we all have a better work/life balance.

"Going smokefree outdoors has been great for business. It has really turned the business around. The spend per head is completely different, it's so much better," says Paul. "But you can't go smokefree and expect the people will just come to you – you need to offer them something else, and our dining options did that."

"We at Te Rūnanga o Whangaroa fully support Paul and his commitment to the health and wellbeing of his staff, the customers and the community," says Cara Epiha, Toki Rau Stop smoking practitioner at Te Rūnanga o Whangaroa (TRoW).

"I encourage everyone to go to the Marlin Hotel this summer, it's an awesome drive and such a beautiful spot," says Bridget Rowse, smokefree advisor Northland DHB. "You'll be able to enjoy a great meal in the sunshine and 'fresh air' without a side of smoke."

The Marlin Hotel joins 34 other premises that offer smokefree outdoor dining in Northland. Go to www.freshairproject.org.nz to find out where they are.

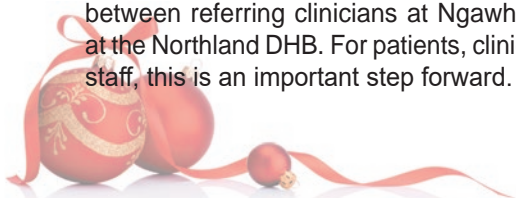
Northland DHB & Ngawha Lead The Way

In November, Northland DHB and the Department of Corrections Ngawha facility rolled out a first for New Zealand when they unveiled a new online referrals system to streamline healthcare efficiency within the prison system.

This online process will replace the paper based and fax processes currently in use. Project leaders Northland DHB, Department of Corrections and their IT partners HealthAlliance and Spark see the online referral pathway as a more secure tool to improve prisoner health. It guarantees against loss of information and improves timeliness and quality of communication pathways between referring clinicians at Ngawha and specialists at the Northland DHB. For patients, clinicians and support staff, this is an important step forward.

Northland DHB's Dr Alan Davis says the project is an enabler for future developments around the country. "As we move increasingly into the world of secure digital communications, the reliability and safety of traditional communications are becoming more exposed. Paper is easily lost and puts patient care at risk.

"This represents a first for the Department of Corrections in New Zealand. It highlights an important piece of work between the Department and Northland DHB, with our IT partners. The work done in Northland will allow the same process to be promulgated throughout other parts of the country."



Enlightening Enrolled Nurses

The efficiency of our region's enrolled nurses was evident at Te Tai Tokerau Enrolled Nurse Section Study Day on Friday 16 November. In just over a month they had put together a full day of valuable sessions for the 40 attendees.

Northland Enrolled Nurses Committee member Maree Tugaga said coordinating the day was a learning curve. But it was essential to give local enrolled nurses the opportunity to upskill before the end of the financial year, in case they were unable to attend the national conference in Hamilton next May. Maree said that there is not much out there for enrolled nurses and they are a dying breed, with several of the study day's attendees planning on retiring soon.

The Northland committee meets once a month, and they run the study day every two years.

This year's speakers came from Northland DHB, New Zealand Nurses Organisation (NZNO), North Haven Hospice and a gynaecologist covering a broad range of relevant topics including:

- Hip surgery precautions and aftercare
- How to use TED stockings correctly
- Using Kaupapa Māori to find your way home
- Methamphetamine
- Pay equity
- Professional Development & Recognition Programme (PDRP)
- Managing grief
- Bath in a bag, waterless bathing for infection control, independence and comfort

- Women's health – incontinence, menopause, when to get a checkup.

Attendees included those from Northland DHB, Kensington Hospital, rest homes and aged care, a Parkinson educator and a general practice nurse. When tallied up Maree said that they had a combined 886 years' experience in nursing. The longest practising nurse, Cheryl MacDonald (Dolly) had dedicated 53 years to nursing, mainly in theatre for both Northland DHB and Kensington Hospital. Sandra Gleeson wasn't far behind with 51 years, primarily in the Maternity Ward for Northland DHB. The newest registered nurse had worked just two months at the Tumanako Unit.

The feedback from the day was that overall the nurses loved their jobs and enjoyed the interaction with their patients and their patient's whānau. Some paid the fee themselves and others were supported by their employers to upskill. Certificates were issued as evidence of professional education so they can remain registered.

Northland has 35 NZNO registered Enrolled Nurses and around ten unregistered who work as Health Care Assistants, as Enrolled Nurse positions are rarely advertised.

Enrolled nurses work in teams under the direction of registered nurses. They provide health care and education in the home, community, residential and hospital settings. As regulated health practitioners, enrolled nurses are required to comply with professional standards and codes of practice, so study days like this are valuable.



Enrolled Nurses Study Day attendees and committee

Time to Take the Pledge

The Northland DHB Violence Intervention Programme team were in Cameron Street Mall on Friday 23 November to rally community support for the White Ribbon campaign.

The annual White Ribbon Day aims to end men's violence towards women. It encourages them to lead by example, speak to other men and 'Stand Up' by taking the online pledge and commit to taking one or more of the eight actions they believe will lead to good choices. These eight actions are:

- Listening and believing women.
- Reflecting on and changing their behaviour.
- Disrupting other men's violence towards women.
- Treating women as equals.
- Choosing how to be a man and how to act.
- Talking to a young man about breaking out of the Man Box.
- Thinking about what they watch and the media they use.
- Talking with young men about respectful relationships and pornography.

Throughout the previous week, all Northland DHB hospitals promoted the message to take the pledge with silhouettes put up in all public areas throughout the hospitals.

Statistics

- New Zealand has the highest rate of reported violence towards women in the developed world.
- Police investigated 118,910 family violence incidents in 2016 or about one every five minutes.
- That's 41% of a frontline officer's time.
- One in three women will experience partner violence at some point in their lives.



Iona Edwards, Vickie Rotzel, Paula Anderson, Beverley Johnston, Shonagh Check

- Less than 20 percent of abuse cases are reported.
- Approximately 3500 convictions are recorded against men each year for assaults on women.
- On average, 14 women a year are killed by their partners or ex-partners.
- Between 2009 and 2015, there were 92 IPV (Intimate Partner Violence) deaths. In 98% of death events where there was a recorded history of abuse, women were the primary victim, abused by their male partner.
- Family violence accounts for half of all reported serious crime.

It's time to take the pledge, so go to www.whiteribbon.org.nz.

Bikers out in Full Force

Despite the ominous prospect of rain, a loud roar energised around 2500 people lining the streets at the start of the annual Kamo Christmas parade on the last Saturday of November.

The annual Bikers' Toy Run kicked off the parade with the emotionally powerful hum spreading from Kamo to Maunu as the bikers rode through the city, escorted by Police. The bikers arrived at Whangārei Hospital in a sea of chrome and leather, congregating outside the main entrance as they waited to deliver toys and gifts to the children on Ward 2. Every year, hundreds of bikers from all over Northland take part in this much anticipated event.



Toy Run Bikers

Journey of a Flight Nurse

– Janet Barker



Michael Mills Retinalmagres

Janet Barker

Nursing has been a good career – both challenging and rewarding. It has given me some great experiences and I have made many wonderful friends from the colleagues I have met and worked alongside over the years. Aside from helping people in need, flying really is the best part.

I trained as a nurse in the UK and quickly specialised in the critical care nursing area, loving the challenge and reward of caring for critically ill and unstable adults and children. In 1984, I received a phone call on a day off asking if I would fly with a patient to a large tertiary hospital on the other side of the UK. In those days there were no dedicated air ambulances, but after my first flight, I was hooked.

Fast forward a couple of years and my husband and I emigrated to New Zealand. I took over as Charge Nurse of the Intensive Care Unit at Whangārei Hospital. To transfer critically ill patients back then (1986–1988) we had to use ambulances or, sometimes, small planes.

So I was delighted to learn in 1988 that Northland Emergency Services Trust (NEST) had been formed and planned to provide an air ambulance helicopter service around Northland. I was excited to be involved in this early development and the ICU staff of that time participated in many fundraising events to support the service and have a helipad constructed on the hospital roof. Before that pad, we would land down at

Horahora School. We had to wave at all the children as we transferred our patient into a waiting ambulance!

A core group of nurses mainly went on all flights, along with one of the consultant anaesthetists or paediatricians that were on duty. Many of the ICU nurses would be unofficially 'on call' to ensure the ongoing provision of what was rapidly seen as an essential service. As the years passed, the ICU facility on the ground was upgraded, redesigned and rebuilt and the flight service grew into the amazing operation it is today.

We have transitioned from the tiny Jet Ranger to a Squirrel and a BK 117 to one, then two, then three fantastic Sikorsky S76 helicopters. It is in these helicopters which we now proudly provide a truly Mobile Intensive Care Unit service with dedicated nursing and medical team members, robust audit systems and advanced operational policies and procedures in place.

Intensive care and flight nursing have been a wild ride at times – challenging, rewarding and tiring. They say that one hour in the air equates to two on the ground and I would agree with that.

However, it is great to feel you have done a good job after you have delivered an unstable, critically ill patient in a timely manner, so they can receive appropriate interventions, continue their treatments and start their recovery journey towards good health.

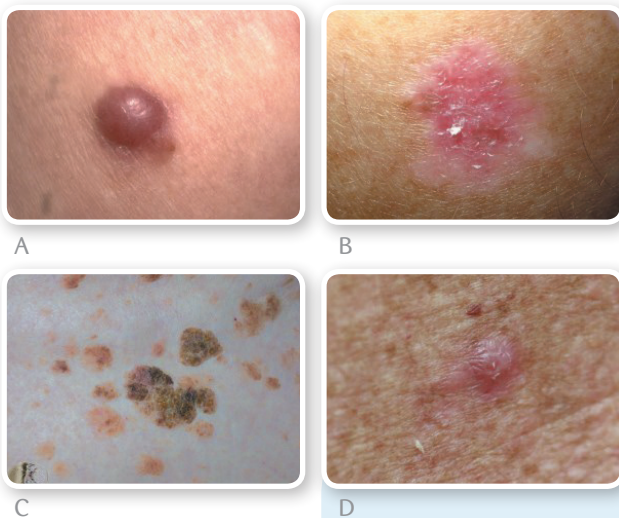


Where's Spot?

Early Detection Can Save Lives



By Katherine Megchelse



Which of these images are a melanoma?

Having a toddler, one is always looking for inspirational ways to both educate and influence behaviour. This article is not a reprint of Eric Hill's classic tale of a mother dog searching for her lost puppy. Rather an article that centres on you, or more specifically – your spots!

Many of us have freckles, moles, skin pigmentation and spots that are completely normal. It is the skin spots that are not our 'norm' that warrant a bit of detective work. With New Zealand having one of the highest rates of melanoma in the world, preventative self-care measures and unusual skin change awareness are essential to achieving a timely diagnosis and access to treatment.

Exposure to ultraviolet (UV) light from the sun is the main cause of skin cancer in New Zealand. Northland is known for its 'outdoor' lifestyle. Those who work outdoors or have occupations such as farming, fishing

and construction are at a higher risk of developing skin cancer. Even on overcast days, the UV radiation level may be sufficient to be harmful. Water, snow and sand reflect and magnify the damaging rays of the sun, increasing your risk of sunburn.

Severe sunburns, especially during childhood, increase the risk of developing melanoma and other skin cancers later in life. Good sun habits start early. Preventative self-care measures include: routine self-skin checks; general practitioner (GP) skin assessments; regular application of SPF 50+ sunscreen; wearing a wide-brimmed hat, long-sleeved shirt, pants and wrap-around sunglasses where possible.

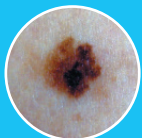
Get to know your skin. While the ABCDE (Asymmetry, Border, Colour, Diameter and Evolution) rule may be helpful, it is not the only form of detecting a skin cancer. Melanomas can be amelanocytic (lacking pigmentation) or nodular (raised). Even having your hairdresser check your scalp can assist with early detection!

A trained professional such as your GP is often the first port of call if you are concerned about a change in your skin's appearance. They can either perform a biopsy to obtain a confirmed diagnosis or refer on for a dermoscopy assessment.

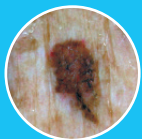
The primary focus of my role as a Melanoma/Skin clinical nurse specialist is to both expedite and enhance a patients skin cancer journey while providing specialist care, coordination and as a point of contact. I enjoy the educational side to the role and the opportunity to influence behaviour regarding skin cancer prevention. I can be contacted via email: katherine.megchelse@northlanddhhb.org.nz

Answer: A, B and D are melanomas. C is a seborrheic keratosis

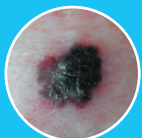
The ABCDE system (Not all melanoma lesions show these characteristics)



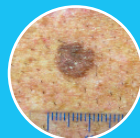
ASYMMETRY - Two halves of the mole are different from one another



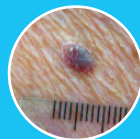
BORDER - The edges of the mole are poorly defined. It is ragged, notched, blurred or an irregular shape



COLOUR - The colour is uneven with shades of black, brown and tan. Melanomas may also be white, grey, red, pink or blue



DIFFERENT - from other lesions (ugly duckling) there is a change, particularly an increase, in size. Melanomas are usually bigger than the end of a pencil (6mm)



EVOLVING - Any change in growth? New or elevated?

Smiling Faces Farewelled



Viv Erceg

In early November we bid a fond farewell to two of our fantastic receptionists as they embark on new journeys.

Outpatient receptionist, Viv Erceg retired after 27 years of exceptional service working at Whangārei Hospital. Viv started work at Northland DHB as a receptionist in the General Manager's Department on 6 May 1991. In the early 2000s she became receptionist for the Corporate Team and then into the role of booking clerk in Ear Nose and Throat Department in 2004.

In 2005 Viv then moved into the Outpatient receptionist role where she had been ever since.

Clinical nurse manager Fiona Manderson said that she started in Outpatients in 2008 and for the last 10 years Viv and her exceptional customer service skills brighten the day of the patients, families and colleagues.

"She's always a sea of calm, even in the most trying circumstances. I've never seen her ruffled and her kind, compassionate and caring manner always shines through." Her colleagues will miss her, but wish Viv all the best for the next stage in her life.



Raewyn Sellers

Then it was standing room only for the farewell of the always smiling Raewyn Sellers, administrator and receptionist at Tohorā House, who left the organisation to move to Kerikeri.

Originally from Hibiscus Coast, Raewyn and her husband Garry moved to Whangārei four years ago and bought a lifestyle block after Garry heard all about alpaca and wanted to have a go at breeding them. Raewyn came to work at Northland DHB when Tohorā House was first opened three-and-a-half years ago and has made everyone who enters the building feel welcome ever since. When Garry was offered a job in Kerikeri they decided to make the move. Raewyn was looking forward to having time to join a walking group and not be tied to a lifestyle block, but a project managing a new build or renovations once they decide on a property looks like the next big thing on her horizon.

She said that her time at Northland DHB had flown so quickly and she had been very lucky to have always worked in such a beautiful building. But it was all the people that made it such a wonderful place to work and she will really miss everyone.



Recreational Water Quality

How your health can be affected



Northland is an amazing place to enjoy many activities in and around water including swimming, boating, diving, surfing, fishing, and collecting shellfish/mahinga kai.

Sometimes waterways; freshwater and coastal, contain microorganisms (bacteria, protozoa, algae and viruses) that can make you sick. The risk is usually low but can be increased by blooms of toxic algae, heavy rain and contamination like sewage spills, stock wading upstream and by birds.

Contact with these microorganisms can lead to:

- Gastrointestinal illness (diarrhoea and vomiting)
- Respiratory illness (asthma-like symptoms)
- Ear, eye and skin irritation or infection
- Tingling and numbness around the mouth or tips of fingers.

Young children, the elderly, and those with underlying health issues are at increased risk of illness and may experience more severe symptoms.

What you can do to protect Northland's recreational waters

- If you own stock don't let them wade in rivers, lakes, or on the coast, and fence off waterways
- Keep household septic systems in good working order
- Report any sewage spills or other contamination events promptly
- Pick up after your dog if it poos/fouls on the beach or near rivers or lakes
- Plant riparian zone next to waterways.

Shellfish/Mahinga Kai

Tips:

- Check <http://www.mpi.govt.nz/travel-and-recreation/fishing/shellfish-biotoxin-alerts/> for any shellfish biotoxin warnings and sign up to receive email alerts directly
- Look for signage warning it is not safe to collect shellfish/mahinga kai
- Wait 3-4 days after heavy rain before collecting shellfish/mahinga kai
- Keep shellfish/mahinga kai cool after collection.

Did you know?

Some of the microorganisms in recreational water that can make you sick are naturally occurring in the environment and are not contaminants.

Swimming

Tips:

- Check www.lawa.org.nz to see if it is safe to swim at your favourite swimming spot
- Look out for signage warning it is not safe to swim
- Wait 2-3 days after heavy rain for the water to clear
- Can you see your feet? If not, the water may not be safe for swimming.

Did you know?

It is often not possible to tell that water is unsafe just by looking at it.

- Check the **Northland DHB Facebook page** for up-to-date information and warnings
- Contact the **Northland Regional Council** if you are concerned about the appearance of any waterway
- If you think you are sick from eating shellfish/mahinga kai or due to swimming, see a doctor, and contact the On-call **Health Protection Officer** at **09 430 4100**

