NORTHLAND DISTRICT HEALTH BOARD
Te Poari Hauora Ā Rohe O Te Tai Tokerau

Maternity Quality and Safety Programme Annual Report 2020

Foreword

It gives us great pleasure to present the Northland District Health Board Maternity Quality Safety Programme (MQSP) Annual Report. Akin to all other District Health Boards in New Zealand, 2020 was a year which saw the health service in Northland take on an altered shape and form due to the Covid-19 global epidemic. The maternity service in our region was no exception and we were acutely aware of the cultural and social impact that the necessary restrictions had on our women and whānau. We applaud the manner in which all staff, including Northland's self-employed midwifery workforce, rose to the occasion to face head on the unique challenges associated with our Northland Covid-19 response.

In addition to Covid-19, staffing issues also impeded some of our MQSP work in 2020. With key vacancies now filled we look forward to returning to an unhindered focus on all MQSP activities.

As we continue our intention to address equity, we also look forward to the focus of our work being guided by the strengthened adoption of Nga Tatai Ihorangi - *Me Whakapapa Te Ora (protection of whakapapa)*. We partner with all other services within the Rural Family Community directorate in this approach - an approach which has the potential to not only inform strategy and future initiatives, but also the conversations we have with women and their whānau.

The challenges the maternity service in Northland is mindful of relate to the workforce shortage in the Far North; increasing co-morbidities within our population; the subsequent pressure on the secondary service in Whangarei coinciding with the impact on whānau of a necessary change in place of birth; and our on-going perinatal mortality rate. These issues for our health service are influenced by the impact of rurality and deprivation but ameliorated by the cultural richness of our area, the overall acceptance within our population that birth is normal and the commitment of our entire maternity workforce.

We acknowledge all the births in Northland in 2020 and we also understand that both joy and sorrow can accompany birth. To those whānau who have experienced the grief associated with baby loss, we want to assure you of our unwavering commitment to keep your loss uppermost in our minds as we find ways to further develop the maternity services for you, our Northland families and whānau.

Jeanette Wedding
General Manager, Rural, Family and Community Health

Sue Bree
Director of Midwifery & Service Manager, Maternity

Acknowledgments

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Photographs generously provided by Naomi Waldron

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**Matters highlighted in green boxes indicate an equity perspective*

Glossary

Caesarean Section	An operative birth through an abdominal incision.
Episiotomy	An incision of the perineal tissue surrounding the vagina to facilitate or expedite birth.
Gravida	A pregnant woman.
Maternity Facilities	A maternity facility is a place that women attend, or are resident in, for the primary purpose of receiving maternity care, usually during labour and birth. It may be classed as primary, secondary or tertiary depending on the availability of specialist services (Ministry of Health 2012).
Multiparous	A woman who has given birth one or more times.
Neonatal Death	Death of a baby within 28 days of life.
Parity	Number of previous births a woman has had.
Primiparous	A woman who is pregnant for the first time.
Primary Facility	Refers to a maternity unit where women are expected to experience normal birth with care provided by midwives. It is usually community-based and specifically for women assessed as being at low risk of complications for labour and birth. Access to specialist secondary maternity services and care will require transfer to a secondary/tertiary facility. Primary facilities do not provide epidural analgesia or operative birth services. Primary maternity facilities provide inpatient services for labour and birth and the immediate postnatal period.
Postpartum Haemorrhage	Excessive bleeding after birth that causes a woman to become unwell.
Primary Maternity Services	Primary maternity services are provided to women and their babies for an uncomplicated pregnancy, labour and birth, and postnatal period. They are based on continuity of care. The majority of these maternity services are provided by Lead Maternity Carers (LMCs).
Secondary Facility	Refers to a hospital that can provide care for normal births, complicated pregnancies and births including operative births and caesarean sections as well as other specialist services such as anaesthetics, paediatrics, radiology, laboratory and neonatal services.
Standard Primiparae	A group of mothers considered to be clinically comparable and expected to require low levels of obstetric intervention.
Stillbirth	The birth of an infant after 20 weeks gestation, which has died in the womb and weighed more than 400 grams.
Weeks' Gestation	The term used to describe how far along the pregnancy is. It is measured from the first day of the woman's last menstrual cycle to the current date.

Abbreviations

ACMM	Associate Clinical Midwife Manager
CCDM	Care Capacity Demand Management
CTG	Cardiotocograph
DHB	District Health Board
ED	Emergency Department
FGR	Fetal growth restriction
FTE	Full time equivalent
GAP	Growth Assessment Programme
GDM	Gestational Diabetes Mellitus
GP	General Practitioner
HCA	Health Care Assistant
IDM	Index of Multiple Deprivation
IMAC	Immunisation Advisory Centre
IUGR	Intrauterine growth restriction
LARC	Long acting reversible contraception
LMC	Lead Maternity Care(r)
LUSCS	Lower uterine segment caesarean section
MCGC	Maternity Clinical Governance Committee
MERAS	Midwifery Employee Representation & Advisory Service
MESR	Midwifery Emergency Skills Refresher
MEWS	Maternity Early Warning System
MDT	Multi-disciplinary team
M&M	Mortality & Morbidity
MQSP	Maternity Quality Safety Programme
NEWS	Newborn Early Warning System
NICU	Neonatal Intensive Care Unit
NZCYES	New Zealand Child and Youth Epidemiology Service
NZDep	New Zealand Deprivation
NZRC	New Zealand Resuscitation Council
PACU	Post Anaesthesia Care Unit
PPH	Postpartum hemorrhage
PPS	Pregnancy and Parenting Service
REC	Reportable Events Committee
SAC	Severity Assessment Code
SGA	Small for gestational age
SANDS	Stillbirth and Neonatal Death Support
SCBU	Special Care Baby Unit
SMO	Senior Medical Officer
SUDI	Sudden Unexpected Death in Infants
TPO	Te Puawai Ora
WCTO	Well Child / Tamariki Ora

Northland DHB Vision and Values

Our Vision

"He Hauora Mo Te Tai Tokerau - A Healthier Northland."

Our Mission

To work together with Northlanders in partnerships under Te Tiriti o Waitangi to:

- improve population health and equity
- improve patient experience
- improve staff wellbeing and sustainability
- achieve value and financial sustainability.

Our Values

Living our Values for Safety, Health and Wellbeing

Tāngata i te tuatahi / **People First**
Whakaute (tuku mana)/ **Respect**
Manaaki / **Caring**
Whakawhitiwhiti Kōrero/ **Communication**
Te Hiranga / **Excellence**

Northland DHB is committed to ensuring equity of access, experience and outcomes for those populations who need our support the most. This is particularly so for Māori equity in Northland and to recognise their Tiriti status as Tangata Whenua. Our position on this matter aligns with our commitment to eliminate inequities and should be read in conjunction with our overall approach to achieving optimal health and wellbeing for all Northlanders.

(Eliminating Inequities Position Statement, Northland DHB, 2020)

Healthy Whānau

Happy Whānau

Our voice is heard

(Vision of Whanau expressed during community consultation by Te Poutokamanawa, 2019)

Alignment of maternity services within Northland DHB

Ngā Tātai Ihorangi

Kia tupu ora ai ngā uri whakatupu
That the generations yet to come will grow and flourish

NORTHLAND DISTRICT HEALTH BOARD

Nga Tatai Ihorangi, as described below, is an integral part of the Rural, Family, Community Directorate and will steer us forward as we work to improve our maternity services for Māori whānau and in efforts to address equity.

Tātai is a tool Māori used to arrange information into sequential order. It describes the relationship from one to another and is used to demonstrate the relational connection of components. ***Ihorangi*** are the finite details which make up a bigger picture and contributes to the whole. Ngā wānanga o Hine kōpū is a component of Ngā Tātai Ihorangi.

The learnings gained in Ngā wānanga o Hine kōpū contribute to the overall vision

'kia tupu ora ai ngā uri whakatupu; that the generations yet to come will grow and flourish'.

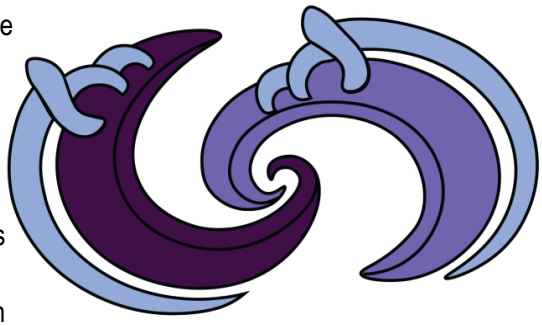
Hapu māmā need to be nurtured and cared for as they are the keepers of te ira tangata. Investing in hapu māmā ensures the secure safe passage of the 'seed' to the fulfilment of the dreams and aspirations of whānau.

Manaakitia te mahuri he tupuna kei roto'

Nurture and take care of the future that grows within"

Purple represents Te Kore. The dwelling place of Io Matua. All living beings derive from Te Kore

The centre is depicted in the shape of a spiral that consists of both Te Kore and Te Ao Mārama being present. From here when we exit te whare tangata we are infused with Mauri Ora, the essence of life



Blue represents Tangāroa. Before you are born you are in water, it gives us life, without it we cannot exist

Moving through Te Wheiao to Te Ao Mārama, this is a time of celebration, a time of reflection, and a realisation of a self-determined pathway to wellness

The hand that is seen on Te Kore represents our tupuna who guide wairua to the whare tangata. The other hand on Te Ao Mārama is the whānau who welcome the new addition. It also represents the hands of those who will have a part in caring for this life

Principles Nga Tatai Ihorangi

1. **He kākāno au i ruia mai i Rangiatea** - Celebrating YOU. We are all descendants from the divine universe; I celebrate in the uniqueness that is me.
2. **Manaakitia te māhuri he tupuna kei roto** - Nothing is more important than giving new life. Nurture and take care of the future that grows within, for one day they will stand as the ancestors of tomorrow.
3. **Kia puta ora ai ngā hua** – Every pregnancy is a new pregnancy. Take care of yourself and be present in the moment. This is the most important role you will have in your life time. This is your chance to help in the creation of a miracle.
4. **Me whakapapa te ora** - Whānau begins with whakapapa. Our greatest taonga tuku iho is whakapapa which is derived from Atua. Aspirations for oranga are about ultimate wellness and thriving.
5. **He ōhanga wairua he puna tangata** - Your tūpuna chose you. Acknowledge the unique and special status of ngā Hine kōpū as the keepers of te ira tangata.
6. **Tahia te ara kia kitea ai te huarahi, ahu atu tō matā ki te ao mārama kei reira ngā uri whakatupu kāhore ano i whānau mai e tatari atu ana i a koe** - Clear away the obstacles to have a healthy, happy pregnancy.
7. **Nau te rourou nāku te rourou ka ora te iwi** - Share your wisdom in a hapu wānanga. Each whānau come with their own stories they have received from tūpuna. These stories are shared in a wānanga space that gives them life and allows for matauranga to be validated in a Māori way.
8. **I haere mai koe e te ahuru mōwai ki te ao mārama tau ana** - From one safe space to another. Acknowledging the sanctity and safety of te whare tangata as te ahuru mowai and transferring that safety to a waikawa safe sleep space.
9. **Ko te whenua te wai-ū mō ngā uri whakatupu** - Ukaipo is used to describe our divine mother Papatuanuku. She gives us sustenance and nurtures all who dwell upon her. Breastfeeding connects us to our whenua, te whāngāi ū nurtures not only our body but also our spirit.
10. **Tihewa Mauri Ora** – Infused with the essence of life.

Me whakapapa te ora – protection of whakapapa

This whakatauki encourages mothers empowerment, health and kaitiaki for her children and contributes to her babies being born healthy, then able to reach their full potential

All DHB maternity services in Northland are within the **directorate of *Rural, Family, Community.*** The Service Manager – Maternity Services has responsibility for the management of Te Kotuku Maternity Unit in Whangarei however the primary units in Rural Hospitals are managed by the Operations Managers for each area.

Maintaining a ***connected maternity service*** throughout the region is achieved by:

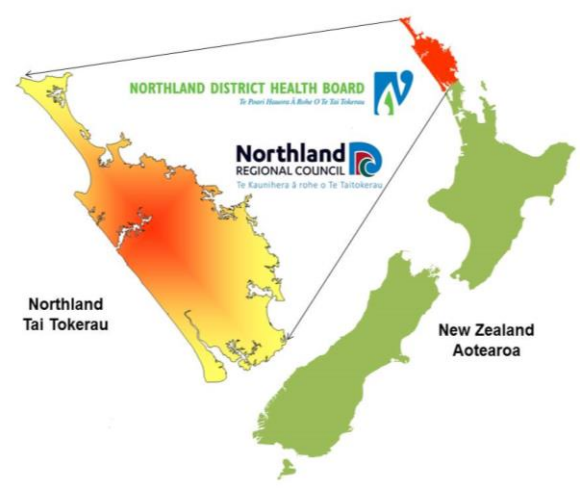
- the ACMM in each of the primary units are members of the regional midwifery leadership group;
- midwives based in Whangarei are responsible for delivering education and quality updates in primary units ;
- zoom capability for all regional meetings including M&M meetings;
- regular on-site visits / meetings at primary units with the Director of Midwifery;
- representation of rural midwives on key maternity related committees;
- scheduled weekly obstetric clinics

Integration of the DHB and community LMC midwifery workforce is achieved by promulgating a 'one team' approach. There is good collaboration between both groups in all areas of Northland and there a strong sense of goodwill towards each other, especially at times when additional assistance is required to meet unexpected clinical workloads. Monthly meetings are held in each area which both LMC and core midwives attend. The Chair of Te Tokerau NZCOM is included in all meetings where issues of mutual concern are discussed.

The wordle represents the first step in creating a revised vision for the maternity service in Northland along with an updated strategic plan.

Our Region

General Population

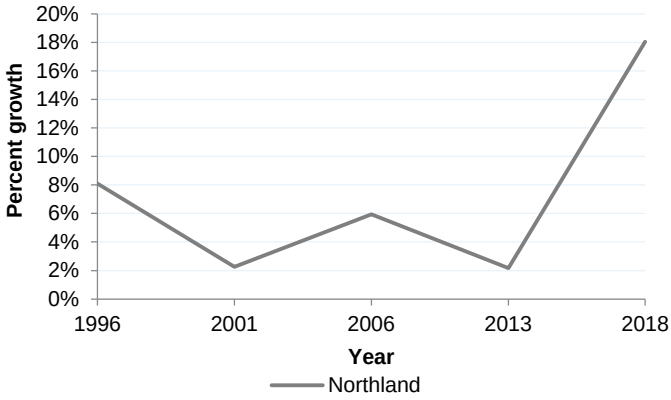


Northland has a population of approximately **193,170** people

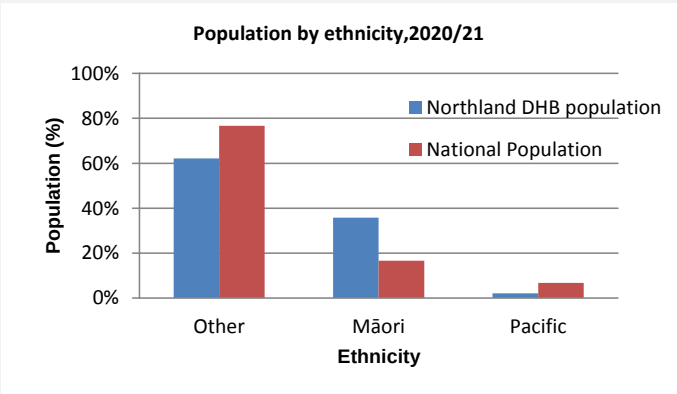
Northland District Health Board and Northland Regional Council geographical boundary

Northland population growth over time

There has been significant growth in Northland population. This graph depicts growth up to 2018; however it is apparent that the trend continues



Source: Statistics New Zealand (2019)



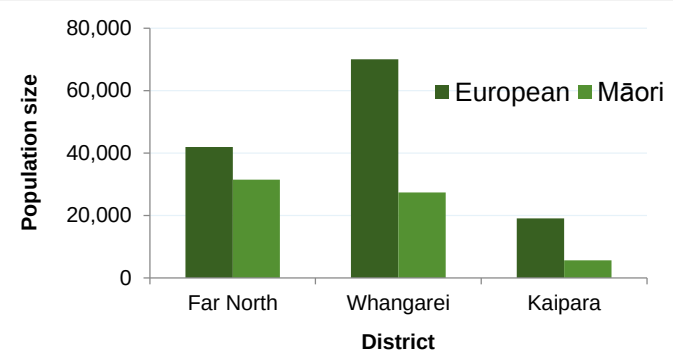
Ethnicity [1]

Northland has a much higher proportion of Māori and lower proportion of Pacific people living here compared to national rates

[1] https://www.health.govt.nz/new-zealand-health-system/my-dhb/northland-dhb/population-northland-dhb

Ethnicity by Territorial Authority in Northland

The Far North has the highest proportion of Māori within Northland population



Source: Statistics New Zealand (2019

Northland region has three districts governed by their respective Territorial Authorities - Whangarei District Council, Far North District Council and Kaipara District Council.

Northland Territorial Authorities and their respective boundaries

Deprivation

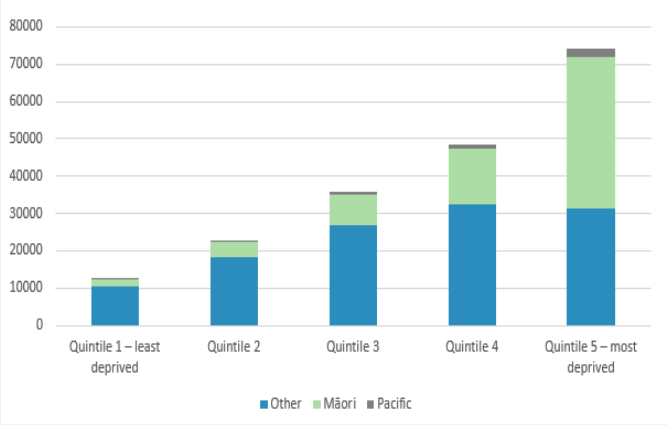
Northland DHB area, showing overall Index of Multiple Deprivation (IMD) [2]deprivation with the most deprived areas shaded darkest.

[2] Source: Statistics New Zealand (2019)

Deprivation 2020/21 [3]

As depicted in this graph, deprivation is reported in 'quintiles'. Quintile 1 represents the least deprived section of the population while quintile 5 represents the most deprived section.

In the Far North, these relatively high (Q5) levels of deprivation occurred in Ahipara, Kaitaia and the Karikari Peninsula, and further south in areas around Kaikohe. In the Whangarei area, there were 43 data zones with Q5 health deprivation



In the Northland DHB, 29 percent of people were among the 20 percent most deprived in NZ, and only 6 percent were among the least deprived 20 percent

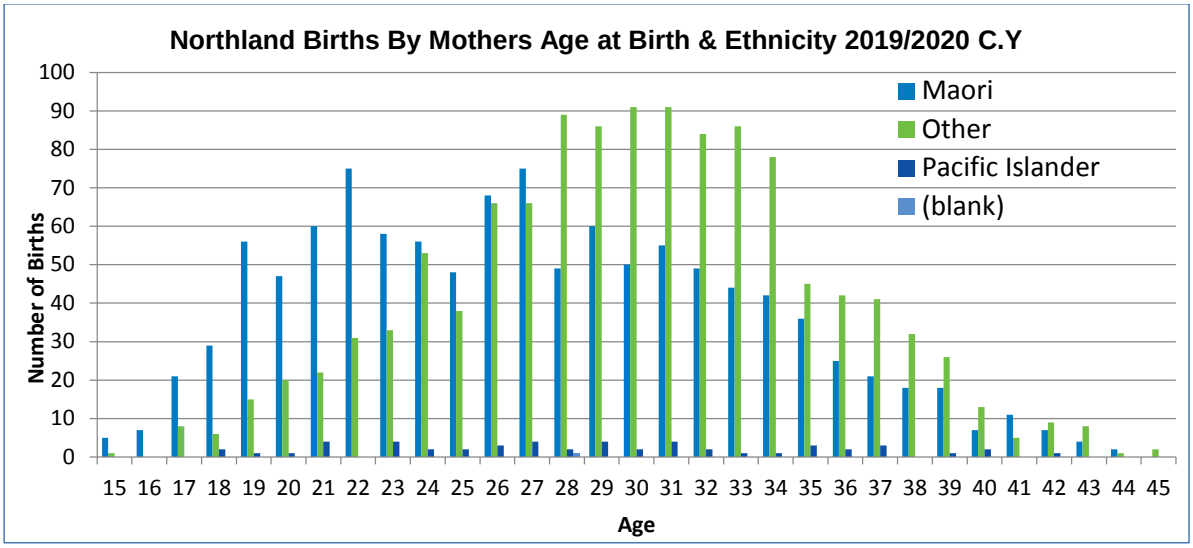
Nationally, each quintile represents 20 percent of the population. The percentages in each quintile will vary for each DHB.

a) If a DHB has more than 20 percent of people within a quintile, it means there are more people in that deprivation group than the national average.
b) If it has less than 20 percent of people within a quintile, it means there are fewer people in that deprivation group than the national average

[3] https://www.health.govt.nz/new-zealand-health-system/my-dhb/northland-dhb/population-northland-dhb

Our Maternity Population

Who are the women birthing within Northland DHB? (all births)



Births for 2020

2568

Age

Māori woman give birth at an earlier age than the rest of the population. Highest numbers are in the following age group

Māori = 22 Y

Non-Māori = 31 Y

Ethnicity %

Māori	**43%**
Pakeha/European	**39%**
Not recorded	**9%**
Asian	**6%**
Other	**1%**
Pacific Id	**2%**

Registration %

Gestational age at booking	
<14	**63%**
14 - 27+6	**26%**
28 - 35+6	**7%**
36+	**4%**

% Body Mass Index

<30	**65%**
30 - 34.9	**20%**
35 - 39.9	**9%**
40+	**6%**

Birth by Facility Type %

Secondary Units = **75%**

Primary Units = **16%**

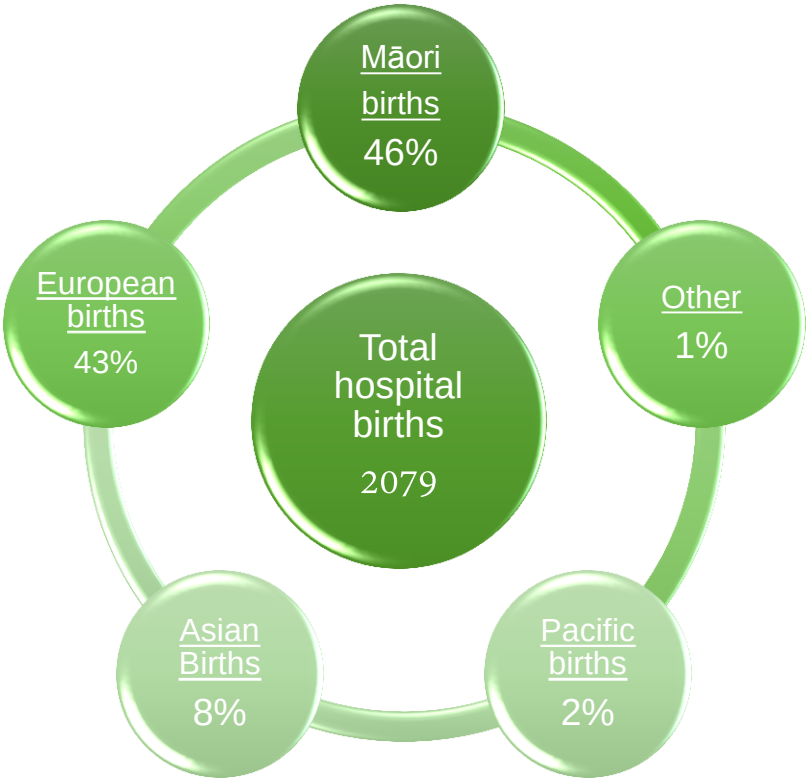
Home = **9%**

NORTHLAND DHB Hospital Births by Smoking Status at Registration (2019 -20)

Current smoker	**22%**
Ex smoker (<12 months abstinent)	**8%**
Ex smoker (>12 months abstinent)	**5%**
Never smoked tobacco	**64%**
Blank	**1%**

* Information above relates to all Northland births (inclusive of homebirths)

Ethnicity of all women giving birth in Northland DHB facilities 2020

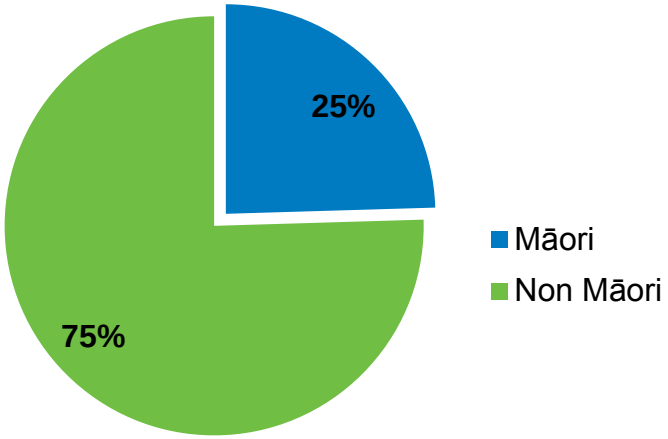


72% of all Māori women live in Decile 9/10 compared to the rest of the population where 31% live in Decile 9/10.

49% of all hospital births are to women who live in Decile 9/10.

Our workforce

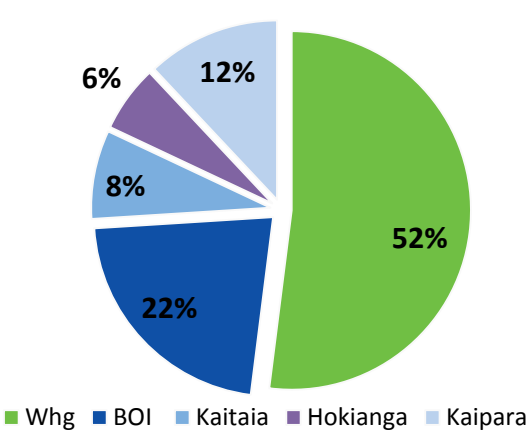
Ethnicity including self-employed LMC workforce



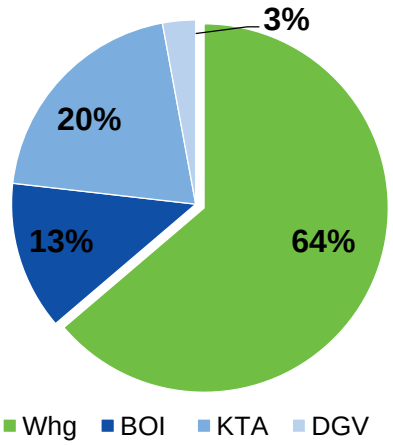
Northland DHB advocates for affirmative action and actively seeks Māori into our workforce to reflect the community we serve. Additionally, and importantly therefore, increasing Māori workforce representation reflects the communities we serve and contributes to our on-going quality improvement responsibilities and goals.

(Northland DHB Maori Workforce Development, 2020)

Location of <u>self-employed</u> LMC workforce

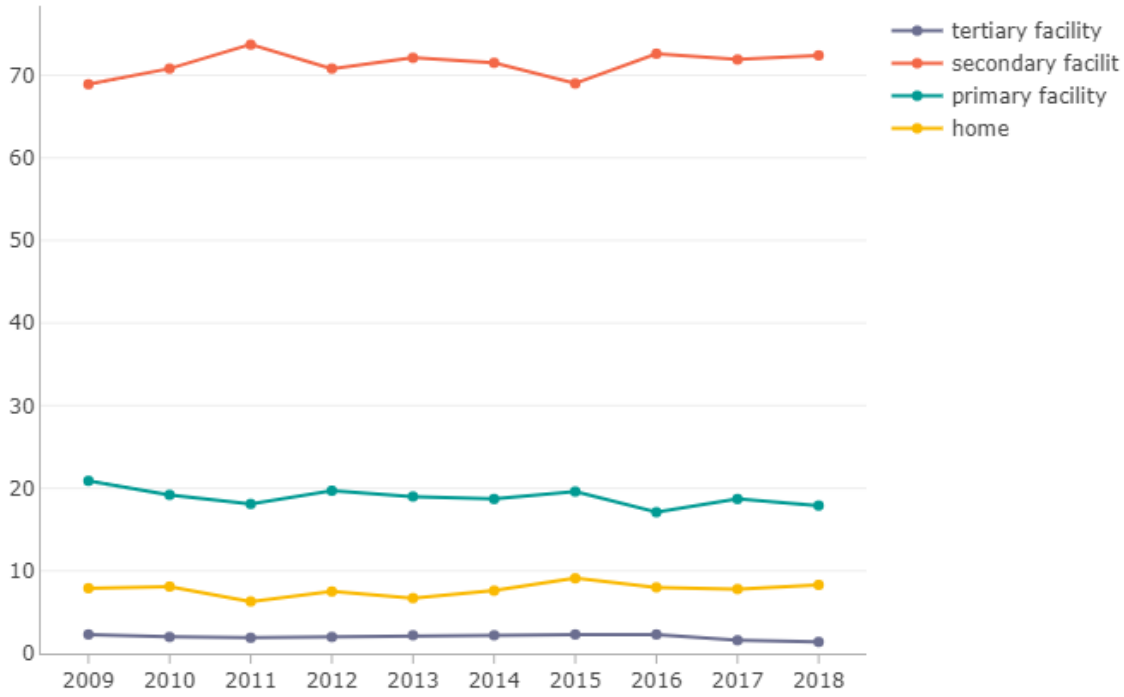


Location of <u>employed</u> midwifery workforce



Our maternity services

Percentage of women giving birth, by place of birth, residing in NORTHLAND DHB, 2009 – 2018



Source: Ministry of Health – Report on Maternity 2020

Births in Northland 2020

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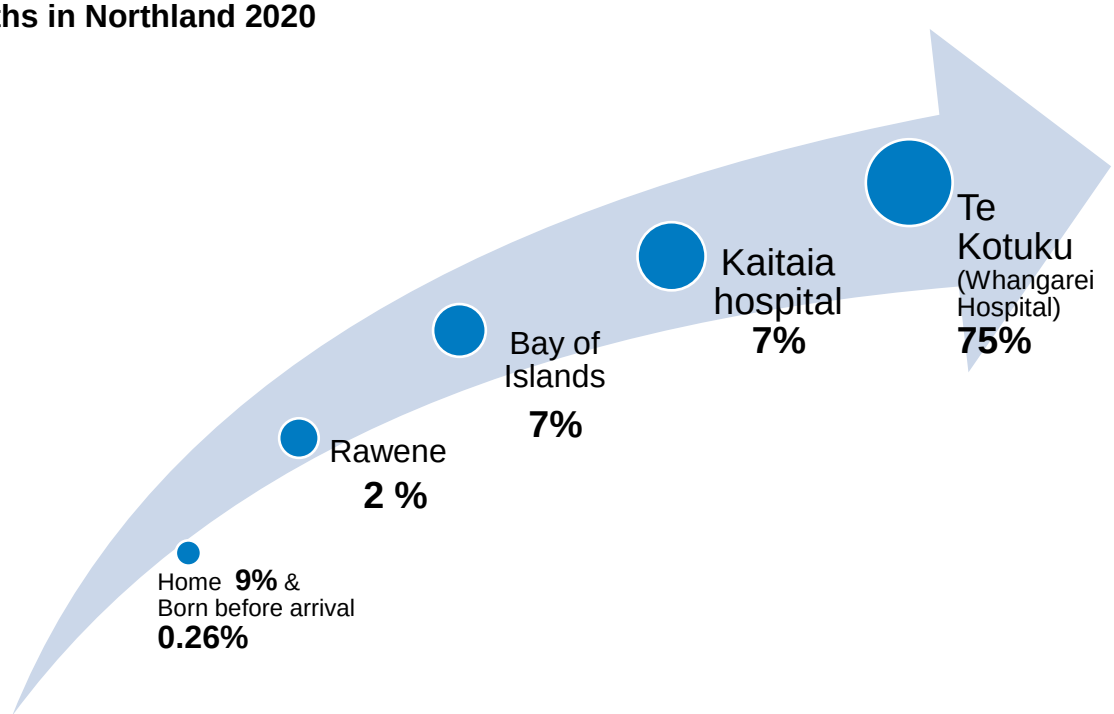

Our Northland DHB Birthing Facilities

Te Kotuku (Whangarei Maternity Unit)

Te Kotuku, the secondary level maternity unit in Whangarei, is the only facility for primary care women residing in Whangarei and Dargaville to give birth. This is one factor, along with population density and the increasing prevalence of co-morbidities that contributes to the disproportionate number of births taking place in Te Kotuku.

In 2020 there were a total of 95 women who reside outside of Whangarei and were transferred in labour to Te Kotuku.

Essentially, these are women who required an enhanced level of care and the subsequent increased acuity of women in Te Kotuku is apparent. Bed utilisation has increased from 50-79 percent at the end of the last fiscal year to 72-100 percent since July 2020.

Midwifery clinical leadership has been increased in 2020 in order to achieve 24 hour cover over seven days. Whilst this provides good support to staff and LMC midwives, we are still committed to implementing the MERAS recommendation that complete midwifery staffing is at the same level 24/7. The Trendcare data is informing the CCDM programme being led by the Safe Staffing Healthy Workplace group and calculations for our 'ideal' FTE are currently in progress.

The quality, education and MQSP personnel based in Te Kotuku travel to Northland's primary units in an endeavour to achieve a region-wide connected maternity service. This has been impacted on over 2020 however, due not only to Covid, but also staff absences.

During 2020 we were able to complete some small building projects which entailed opening some mothballed rooms in Te Kotuku to provide a specific ultrasound room; a meeting room to create an environment where private discussions with women and whānau can occur; a SMO rest room adjacent to birth suite; and four new inpatient beds which allowed for closure of some ‘boarder mother’ beds in the SCBU. It is anticipated that these beds will become transitional care beds in the future.

In addition to an on call roster ensuring full acute care cover, the seven obstetricians who work out of Te Kotuku also provide antenatal clinic services throughout the region. They too are feeling the increased acuity in our Te Kotuku environment.

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Te Kotuku Secondary Maternity Unit

1757 births in 2020

Workforce:

- 1 **DOM**
- 1 **CMM**
- 26 **LMC midwives**
- 59 **Employed midwives**
- 7 **Obstetricians**
- 2 **Registered nurses**
- 1 **MQSP Midwife**
- 1.5 **Midwifery educators**
- 2 **Social Workers**
- 4 **Admin support**
- 1 **Enrolled nurse**
- 1 **Safe sleep coordinator**
- 1 **Lactation consultant**
- 1 **HCA**

Services we provide:

- **18 bed** combined antenatal / postnatal ward
- **5 Room** birth suite
- **2 beds** designated outpatient assessment
- **1** Special Care Baby Unit
- **1** Ultrasound room
- Diabetes (midwifery) service
- Antenatal Clinics
  - Obstetric
  - Medicine in Pregnancy
  - Anaesthetic clinic
  - High risk pregnancy clinic

Bay of Islands Primary Maternity Unit

171 births in 2020

Wall hanging in foyer created by Charlotte Scott, a local midwife

Workforce:

1 **ACMM**

8 **Core midwives**

11 **LMC midwives**

0.5 **FTE Administration**

Services we provide:

- **2** birthing rooms
- **4** postnatal beds
- **Weekly** scan clinic
- **Weekly** obstetric clinic
- **Weekly** lactation consultan clinic

All women domiciled in the Mid-North area are registered with a LMC midwife providing continuity of care.

For women who require the input of secondary level care, midwives share antenatal care with an obstetrician and will, in the main, also attend women in labour in Whangarei Hospital if they are required to give birth there.

There is a stable workforce of both LMC and employed midwives in this area.

Kaitaia Hospital Primary Maternity Unit

154 births in 2020

Workforce:

1 **ACMM**

6 **Core midwives**

4 **LMC midwives**

0.5 **FTE Administration**

Services we provide:

- **Two** Birthing rooms
- **Three** postnatal beds
- **Weekly** scan clinic-14 appointments per week
- **Weekly** obstetric clinic

The Far North has experienced a shortage of community LMC midwives over the past two years. This has resulted in an increasing number of women booked under the DHB 'service of last resort' caseload. Subsequently, there is increased pressure on the employed workforce and there is currently a review of the model of care underway.

Dargaville Primary Maternity Unit

204 women from Dargaville gave birth in Whangarei secondary unit in 2020

Services we provide:

- Antenatal and postnatal midwifery care under the co-ordinated care model
- **1** postnatal bed
- **Weekly** lactation consultant clinic
- Scan services soon to be established
- Antenatal classes

Workforce:

2 **Core midwives**

Women in Dargaville receive their maternity care either under a coordinated model of care by two employed midwives situated in Dargaville or from LMC midwives in Whangarei. If choosing a hospital birth, all women from this area are required to give birth in Whangarei as there are no birthing facilities at Dargaville Hospital.

Te Puawai Ora

Maternal and Child Health Service

Services we provide:

- Newborn hearing screening
- Free LARC (Jadelle) insertion (by appointment or drop in)
- Immunisation
- Anti D
- Childbirth education classes
- Harmony teen child birth education classes
- Community maternity social worker
- SUDI services
- Lactation service
- Tongue tie service

Workforce:

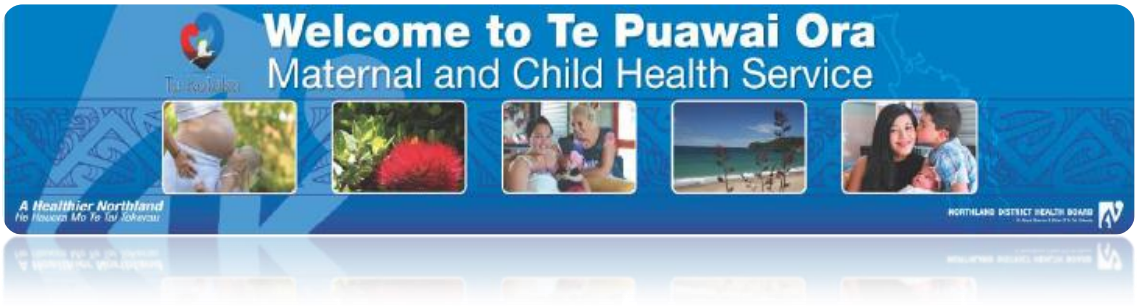
1 **ACMM**

2 **Community midwives**

1 **Social worker**

4 **Lactation consultants**

Te Puawai Ora is the community based maternity facility in Whangarei. The intention behind Te Puawai Ora is to provide a welcoming atmosphere where families can stop in to feed or change their baby and access the many maternity related services that are offered.



44 percent of the women who attended clinic in 2020 to receive the LARC identified as NZ Māori.

Over the year, **21** percent of hapu mama who sought Flu or Boostrix immunisations at Te Puawai Ora, identified as NZ Māori.

22 Childbirth Education Classes were held at Te Puawai Ora for **264** families.

Lactation drop in clinic attendance:

Whangarei **790**

Bay of islands **137**

Dargaville **73**

Since June 2020 **10** babies had their tongue tie released and continued to successfully breastfeed

Percentage of women exclusively breastfeeding on discharge from hospital

Whangarei **91.8**

Bay of Islands **95.1**

Dargaville **89.4**

Kaitaia **95.3**

Immunisation

Te Puawai Ora continues to provide free on the spot immunisation's to pregnant women attending antenatal classes, coffee groups, and antenatal appointments.

Discussions are underway with the DHB outreach team to offer hapu mama the opportunity to be immunised in their home in an effort to reduce barriers. This would also provide an opportunity to offer immunisation to the wider Whānau.

Child birth education classes

The child birth educators currently hold evening sessions running over a 6 week period and weekend sessions are also offered. Classes have also commenced in Dargaville once every 3 months to ensure easier access for women who live in Kaipara.

A range workshops such as The 4th Trimester, The Brain Wave Trust ("growing great brains"), sleeping and settling, infant 1st aid, baby massage, budgeting are held. Groups average 20 parents per session including fathers and grandparents.

A multiple birth group is also run at Te Puawai Ora once a once a month and is facilitated by a lactation consultant. The group averages 6-12 sets of twins and triplets as well as antenatal women.

Community midwives

The DHB community midwife service in Whangarei operates under a coordinated care model providing antenatal and postnatal care. It is utilised by women who are unable to register with a LMC midwife or for those women who are unbooked at the time they give birth.

Every effort is made to find a LMC for each woman who contacts the community midwife service during pregnancy so they will receive continuity of care. An effort is made with unbooked women to identify any barriers they may have faced in registering with a midwife. This information is valuable in the development of our wider maternity service.

"Taking the class gave me confidence in being a young māmā and provided me with assurance when I had doubts about my ability. An immeasurable amount of manaakitanga was given to us hapū māmā".

2020, Teen class attendee.

Harmony teen childbirth education classes

The need to develop these classes was recognised due to there being a significant number of pregnant young women under the age of 20 yet there was no education that catered for pregnant rangatahi of Northland. These classes have been running for the past 12 years and are modified based on feedback from those attending.

Transport is arranged to bring each of the young woman and their whānau, partner or support team to the classes. A healthy lunch is made and served during the lunch break. The classes are co-facilitated by Te Ora Hou, a Māori youth development group, as well as a DHB midwife and childbirth educator. There is a range of services available to the young parents and their whānau including social work support. The aim is for all class participants' to have support services wrapped around them, to awhi them and to encourage engagement. There is collaboration with the facilitators of Hapu Wananga and the young women will often attend these classes as well.

Lactation service

Northland DHB has taken pride to consistently lead the country with exclusive breastfeeding rates on discharge from hospital. We are however concerned about the declining rates which have become apparent. This may reflect the introduction of GAP to explain the sudden increase in formula usage; hence the abrupt drop in exclusive breastfeeding rates at discharge. A current audit is underway to confirm reasons why exclusive rates are dropping, including the accuracy of data entry.

As well as providing direct support to women while in hospital our lactation consultants also provide:

- regular education to midwives
- free drop in lactation clinics in Dargaville, Kawakawa as well as Whangarei
- hand expressing kits to all women whose babies have a higher chance of requiring supplementary feeds immediately following birth

Northland DHB is grateful to the Countdown Kids Hospital Appeal for funding which has provided a large number of loan breast pumps.

Diabetes

The diabetes in pregnancy service continues to see an increase in referrals especially for women who have existing type 2 diabetes.

The medical in pregnancy team consists of a diabetes midwife, clinical nurse specialist prescribers, a dietician, a kaiawhina and three medical in pregnancy physicians. We have a full regional service with women usually seen in their local hospital if at all possible.

In total there were 147 women referred to the service in 2020 with Māori represented 2:1 in the statistics compared with other ethnicities - Māori 49 percent, NZ European 25 percent, Indian 10 percent, Pacific 6 percent and other ethnicities including Asian 13 percent.

There were 124 referrals for gestational diabetes; four women with type 1 diabetes; and 19 women with type 2 diabetes.

Following the success of a diabetes midwife working out of the antenatal clinic in Whangarei, the diabetes and maternity services, along with the Bay of Islands Hospital team, are a putting together a proposal for another specialist diabetes midwife to work with women in the Mid North.

Education

The following education sessions were held during 2020. The program was greatly impacted on by COVID-19 when all education ceased for a period of time.

Name of Course	
NZRC Neonatal life support (8hrs)	IMAC immunisation workshop (8hrs)
Maternal & neonatal life support (4hrs)	Breastfeeding workshop (8hrs)
Midwifery emergency skills refresher (4hrs)	BFHI Breastfeeding update (4hrs) *
Combined MESR/resuscitation (8hrs)	Nursing maternity refresher (4hrs) *
Suturing workshop (4hrs)	Nurses study day (8hrs) *
CTG MDT workshop (8hrs)	Neonatal Perinatal Pathology (8hrs)
COVID-19/PPE sessions (1hr)	S.T.A.B.L.E (8hrs)
IMAC immunisation update (3hrs)	LARC (Jadelle) training (4hrs)
PPH session with theatre nurses	Epidural Workshop (4hrs)

*Indicates education also in primary maternity units

Our Outcomes – Maternity Clinical Indicators

The New Zealand Maternity Clinical Indicators provide information on interventions and outcomes associated with maternity care for mothers and babies. There are twenty indicators – eight for standard primiparae*; seven for all women giving birth; one relating to the time of registration with a LMC; and four are applicable to babies.

Maternity Clinical Indicator data is available from 2009 which provides an opportunity for us to track our outcomes and to compare them with other DHBs. Analysis of the data enables us to identify trends and areas of concern, then implement changes within our local maternity service where able.

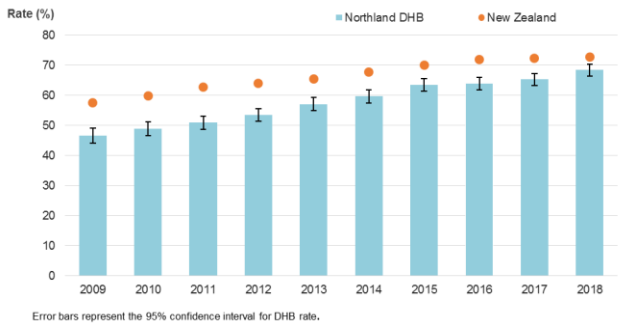
As well as overall rates for each DHB, each indicator is also presented by ethnicity. Given that our Pacific, Indian and Asian populations are small in Northland, we are required to exercise caution when interpreting one off results for these mothers and babies.

The data presented in this report is based on 2018 outcomes which is the most recent available from the Ministry of Health. It is pleasing to see some steady improvement in several areas as depicted in the review of each Clinical Indicator below.

* *Standard primiparae are defined as women between 20-34 years of age having their first single baby at term (from 37 weeks). The baby is in a head down position and there have been no complications during the pregnancy. It is assumed that these women, without risk factors, will all have relatively similar outcomes irrespective of in which DHB they reside*

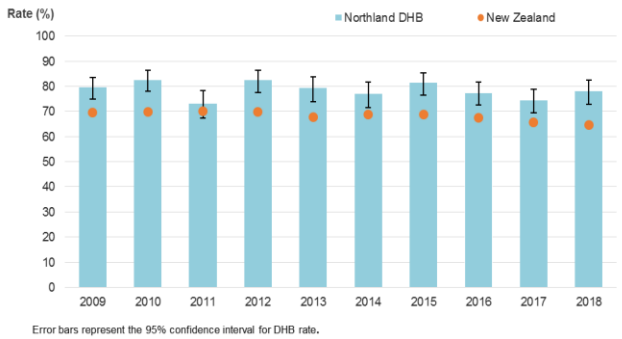
Signage in front of Whangarei hospital as an example of our efforts to improve early registration with a LMC midwife

Indicator 1: *Registration with a Lead Maternity Carer (LMC) in the first trimester of pregnancy*	**Northland** 86.4%	**NZ** 72.7%



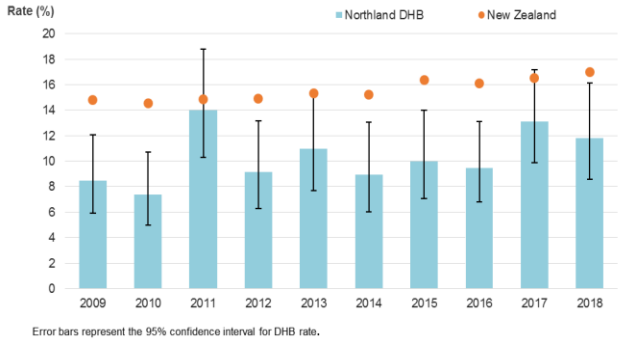
There is a gradual improvement in the overall number of women in the Northland population registering with a LMC in the first trimester of pregnancy. This is bringing Northland closer to the national average, especially for Maori women. There will remain on on-going focus on this as there is still monthly and geographical variation throughout our region.

Indicator 2: *Standard primipara who have a spontaneous vaginal birth at a maternity facility*	**Northland** 86.4%	**NZ** 72.7%



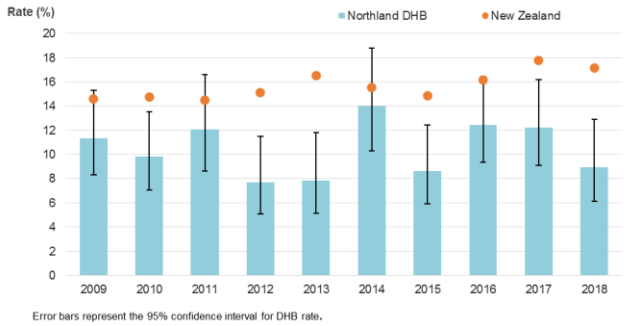
Northland continues to achieve higher than average vaginal birth rates amongst standard primiparae across all ethnicities including Pasifika women who had lower rates in 2017 reporting.

Indicator 3: *Standard primipara who undergo an instrumental vaginal birth*	**Northland** 11.8 %	**NZ** 17.0%



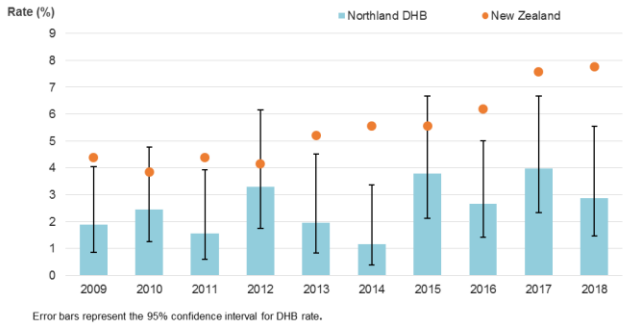
Apart from our small Pasifika birthing population, Northland consistently remains below the national rate for this indicator.

Indicator 4: *Standard primipara who undergo caesarean section*	**Northland** 9.0 %	**NZ** 17.2%



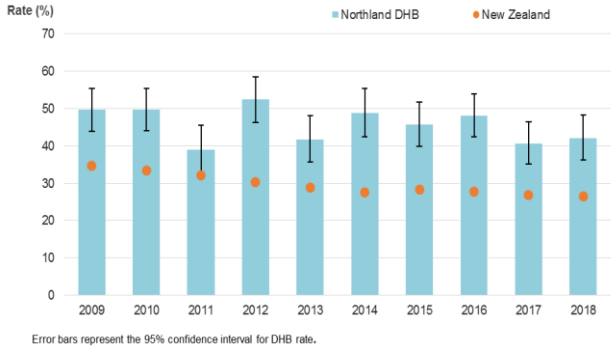
The consistent lower than national average for caesarean sections across all ethnicities in Northland corresponds with higher rates of vaginal births in our region.

***Indicator 5**: Standard primipara who undergo induction of labour*	**Northland** 2.9%	**NZ** 7.8%



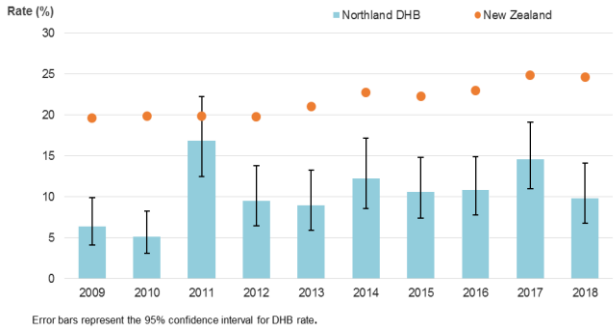
The national increase in inductions of labour in NZ is not reflected in the Northland 2018 data however our overall rate of inductions in all birthing women has increased by 10 percent over the past two years. We suspect the introduction of GAP may be contributing to this and also the high rate of diabetes in our population.

Indicator 6: *Standard primipara with an intact lower genital tract with vaginal birth*	**Northland** 42.1%	**NZ** 26.5%



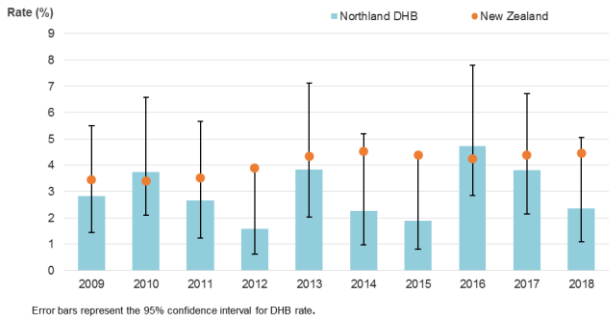
Despite a decreasing rate in this outcome for Maori and Asian women, and Pacific women sitting below the national average, our overall rates remain well above the national rates. Our low instrumental birth rate contributes to this.

Indicator 7: *Standard primipara undergoing episiotomy and no 3rd- or 4th-degree perineal tear with vaginal birth*	**Northland** 9.8%	**NZ** 24.6%



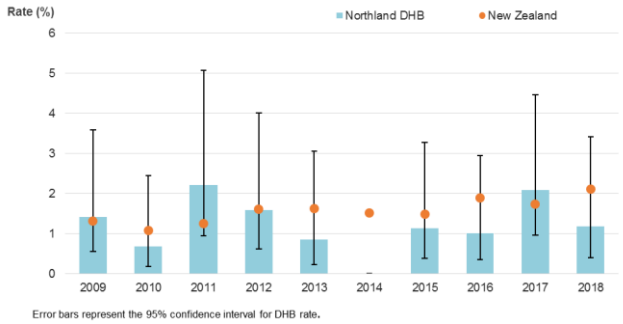
Despite a decrease in Northland outcomes for this indicator, our rates remain favourable compared to the national rate apart from our small Pasifika population who also have higher rates of instrumental births.

Indicator 8: Standard primipara sustaining a 3rd- or 4th-degree perineal tear and no episiotomy with vaginal birth	**Northland** 2.4%	**NZ** 4.5%



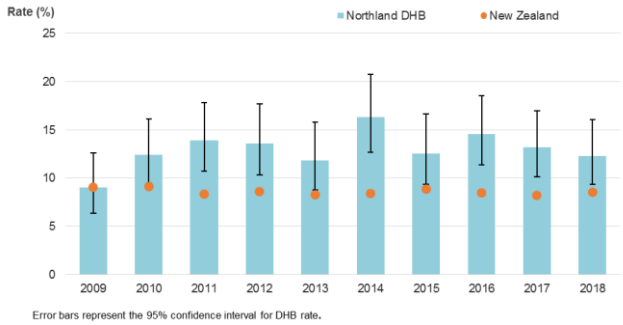
Northland has experienced a decreasing rate of severe perineal trauma over the three years 2016-2018. Māori is the only ethnicity which equates with the national average and the reasons for this are not clear.

Indicator 9: *Standard primipara undergoing episiotomy and sustaining a 3rd- or 4th-degree perineal tear with vaginal birth*	**Northland** 1.2%	**NZ** 2.1%



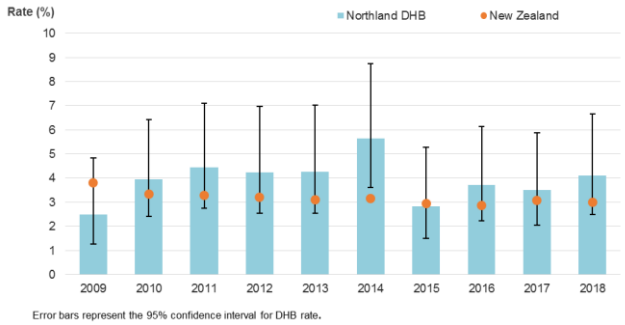
Although the percentage of both European and Māori women in Northland are slightly above the national average the overall rate is favourable in comparison with other DHBs. The numbers are small and no definite conclusions can be drawn as this outcome does not appear to equate with instrumental assisted births.

Indicator 10: *Woman having a general anaesthetic for caesarean section*	**Northland** 12.3%	**NZ** 8.5%



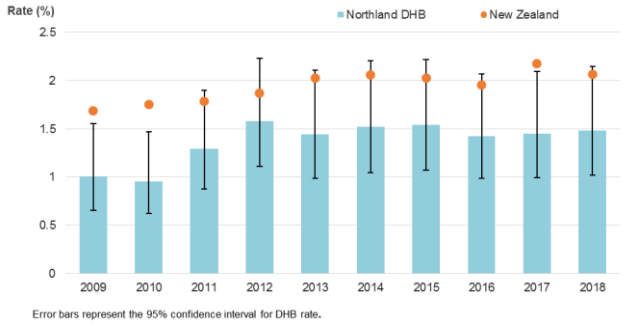
Since 2010 Northland has been a consistent outlier for this clinical indicator. Explanations provided in the past relate to Northland's overall low caesarean section and epidural in labour rates - no further insight has been gained. Northland rates have decreased over 2016-2018 and Māori women in 2018 had rates aligned to national rates for the first time since 2009. Similar improvement is not apparent in other ethnicities.

Indicator 11: *Woman requiring a blood transfusion with caesarean section*	**Northland** 4.1%	**NZ** 3.0%



While the rate for Northland Māori women requiring a blood transfusion has increased, there has been a decrease in rate for European women. Efforts to improve antenatal haemoglobin levels are supported by the availability of iron infusions at all DHB facilities in Northland.

Indicator 12: *Woman requiring a blood transfusion with vaginal birth*	**Northland** 1.5%	**NZ** 2.1%

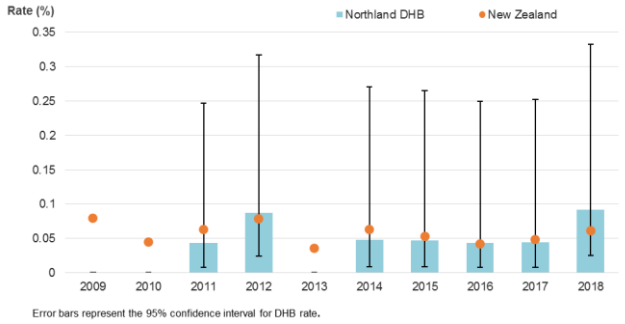


Northland has consistently remained below national rates for this indicator and the rate remains stable. In the past there has been a strong focus on assessing the use of the postpartum guideline against all events of PPH in excess of 1500 mls. This guideline is thus well socialised.

Indicator 13: *Woman diagnosed with eclampsia during birth admission*	**Northland** 0.0%	**NZ** 0.03%

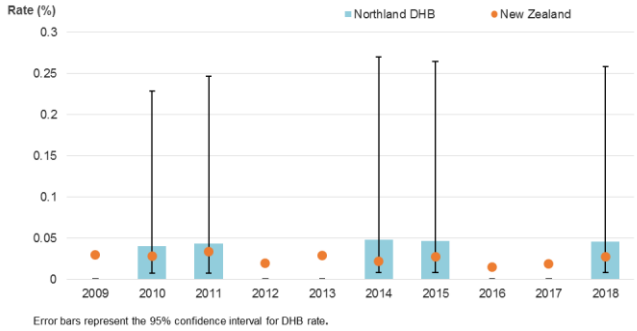
There were no cases of eclampsia for the years 2016-2018.

Indicator 14: *Woman having an abdominal hysterectomy within 6 weeks after birth*	**Northland** 0.09%	**NZ** 0.06%



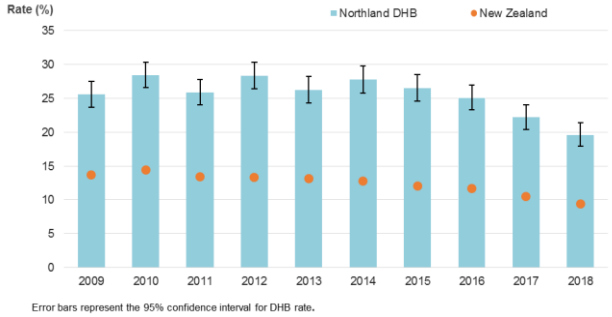
Following four years of stable rates within the expected low number of women requiring this emergency procedure, 2018 reveals a return to the rate of 2012. These cases are routinely given a SAC classification and referred to the DHB Reportable Events Committee. Ultimately, each of these events was considered necessary following other surgical attempts to control excessive blood loss.

Indicator 15: *Woman admitted to ICU and requiring over 24 hours of mechanical ventilation during admission any time during the pregnancy or postnatal period*	**Northland** 0.05%	**NZ** 0.03%



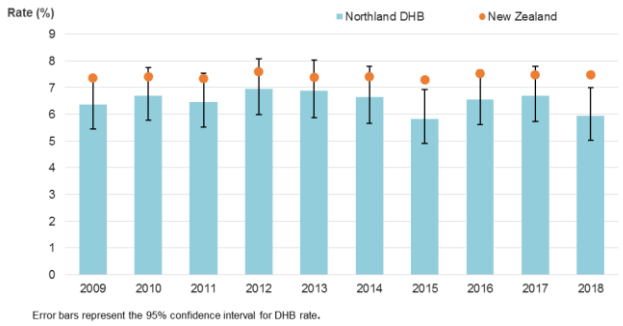
Although numbers are very small, it is apparent over the years that Maori women are more likely to require admission to ICU for mechanical ventilation.

Indicator 16: *Numerator for indicator 16: Woman identified as smokers at 2 weeks after birth*	**Northland** 19.6%	**NZ** 9.4%



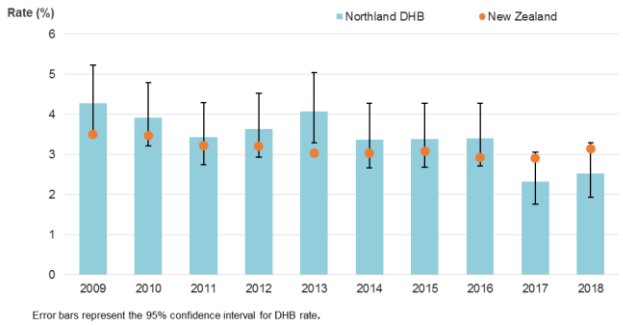
The rate of Northland Māori and European women smoking at 2 weeks postpartum is in line with national downward trends although both ethnicities remain above national rates. The difference in rates between ethnicities in Northland is significant (Māori 30.7 percent; European 6.4 percent). Of concern is an apparent increase of smokers in our small Pasifika population

Indicator 17: *Live-born baby under 37 weeks' gestation*	**Northland** 5.9%	**NZ** 7.5%



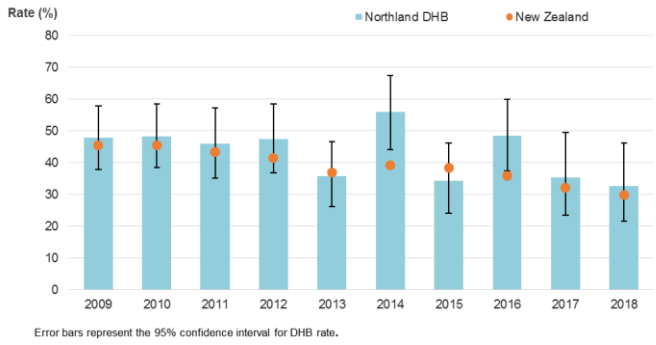
The 2018 rate of preterm birth returned to the 2015 rate which is the lowest levels since 2009. Māori and European rates are below national rates however Pasifika rates are above (small numbers). This could be attributed to an increase in smoking amongst this population however the same conclusion cannot be drawn for other ethnicities

Indicator 18: *Live-born baby at 37–42 weeks' gestation with birth weight under the 10th centile for their gestation*	**Northland** 2.5%	**NZ** 3.1%



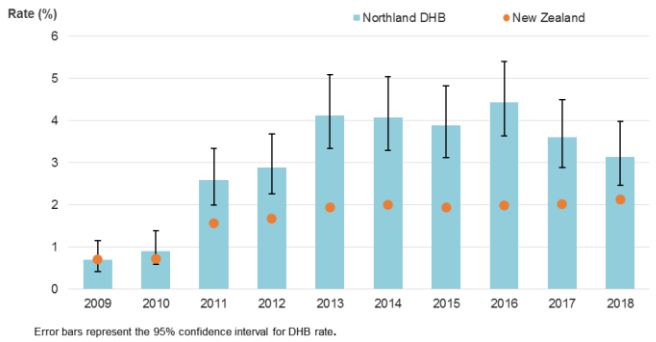
Northland has maintained a lower rate for small for gestational age babies born between 37-42 weeks *based on the use of Intergrowth-21st.* This reveals that Indian women in Northland have rates closest to the national rate of small babies at term. This result may well be influenced by genetics and will need to be compared with customised growth charts when possible.

Indicator 19: *Live-born baby at 40–42 weeks' gestation with birth weight under the 10th centile for their gestation*	**Northland** 32.7%	**NZ** 29.9%



The rate of small babies born at 40-42 weeks in Northland is steadily declining and is the lowest since 2009. This decline is apparent in our Maori and European populations however rates in our small Indian population are significantly higher than the national rate. DHBs of similar size portray a similar outcome.

Indicator 20: *Live-born baby at 37+ weeks' gestation requiring over 4 hours of respiratory support*	**Northland** 3.1%	**NZ** 2.1%



Northland has been a longstanding outlier for this indicator. A full audit was undertaken in 2019 whereby the clinical record of each baby admitted to SCBU for respiratory support was reviewed. The audit did not reveal any contributory factors influencing this clinical indicator.

Source: https://www.health.govt.nz/publication/new-zealand-maternity-clinical-indicators-2018

Clinical Indicators reveal Māori women have higher rates of smoking; third and fourth degree perineal tears in the absence of an episiotomy; and the need for blood transfusion following a caesarean section

Perinatal Mortality

Northland DHB continues to have higher rates of perinatal deaths and in particular, stillbirth rates. This is an on-going area of deep concern.

On reflection of the 25 perinatal deaths which occurred in 2020:

- Ethnicity – 13 Māori, 12 NZ European
- Domicile - 15 mothers resided in rural areas, 10 in Whangarei
- There were six stillborn babies born at term (37 weeks or more); two of these babies were small for gestational age
- A further four babies at earlier gestation were small for gestational age
- Four women received no or minimal antenatal care
- Eight women had a medical termination of pregnancy
- Nine deaths were considered to be potentially avoidable for reasons such as undiagnosed SGA, sub-optimal antenatal engagement, rurality impacting on timeliness of access to emergency care, lack of recognition of severity of condition.

A comprehensive multidisciplinary review of all perinatal deaths over the past five years will be undertaken this year.

Maternity Quality Safety Programme (MQSP)

MQSP has been the key feature of efforts to improve the quality of the maternity service in Northland since the introduction of MQSP by the Ministry of Health in 2012. The shared input of consumers of the maternity service with midwifery and medical health professionals has contributed to a focus on maternity outcomes inclusive of both clinical outcomes and consumer satisfaction aspects. Facets of the service requiring improvement have thus been identified and, where possible, addressed and national recommendations have been implemented. MQSP activities in 2020 have been somewhat thwarted, not only by the impact of Covid-19, but also by a reduction in capacity within the midwifery leadership team. The MQSP leader role has been filled by midwives in temporary roles however a permanent appointment has recently been made.

The Maternity Clinical Governance Committee (MCGC) provides oversight of MQSP. The Terms of Reference of the committee is currently under review. It is anticipated that the number of health professionals on the group will decrease to make way for increased consumer representation and that overall Māori membership will increase to reflect the birthing population of Northland. In the meantime, the MCGC has become more aligned to the clinical governance framework of the Health Quality Safety Commission. This requires ongoing development.

In its governance role, matters of equity will drive the committee over the coming year utilising the Northland DHB Māori Equity Tool. Work has commenced on this with the support of Te Poutokamanawa, the DHB Māori Health Directorate.

The aim of the Equity Tool is to provide a practical guide and checklist to developing health services within Te Tai Tokerau where whānau, hapu, iwi and Māori communities have a leading role in achieving the vision that whānau determined of: ***'Healthy Whānau, Happy Whānau, Our Voices Heard'.*** It places Māori whānau at the centre of planning, implementation and evaluation. The aim is that Māori whānau are supported to thrive in the fullness of health and wellbeing as defined by them within Te Ao Māori and society as a whole.

(Northland DHB Equity Tool, 2020)

Tena Koutou Katoa,

Ko Te Wairua Smith taku ingoa, he uri tenei nō roto o te whārua o Utakura, i raro i te Maunga o Whakarongorua ki roto o te hapu o Ngati Toro. E mihi ana kia koutou katoa.

I am a mum of five beautiful tamariki under the age of 10 and have experienced the Northland DHB maternity service first hand with all my babies. I am now fortunate enough to be a consumer rep on the Maternity Clinical Goverance commitee and happy to be able to contribute on another level. As a new member it can be quite hard adjusting to the type of language spoken at the meetings and it can take awhile to understand some of the comversations!

As a Maori wahine and mama I feel the importance to focus on equity and the many cultural issues we face. Therefore I am fully supportive of the moves that Northland DHB is doing to put a much greater emphasis on the needs of wahine Maori and their whanau as a collective. It is said its takes a village to raise a child and this village starts at conception.

I am still new to this role but look forward to the journey and most importanly the changes the lie ahead.

Nga mihi
Te Wairua Smith

Te Wairua and Eli Smith and their tamariki

National maternity standards

Standard 1

Maternity services *provide safe, high-quality services that are nationally consistent and achieve optimal health outcomes for mothers and babies*

The purpose of the Maternity Standards is to provide guidance for the provision of equitable, safe and high-quality maternity services throughout New Zealand.

- Perinatal Mortality and Morbidity (M&M) meetings are held monthly and are well attended by midwives, obstetricians and paediatricians. Zoom capability has been established to ensure rural midwives can more easily access these meetings. A report for each case discussed is provided to the Medical Executive Leadership Team and shared with all employed and self-employed midwives, obstetricians and paediatricians.
- The Director of Midwifery is a member of the DHB Reportable Events Committee where all SAC 1 and 2 events are reviewed. The outcomes of the maternity reviews are shared with clinicians at M&M meetings as well as the Maternity Clinical Governance Committee. Recommendations are followed up.
- There has now been a successful roll out of the Maternity Early Warning System (MEWS) in Whangarei Hospital. While MEWs has been used in Te Kotuku for a considerable length of time, the wider hospital use has commenced recently. Primary Units will begin the use of MEWS for antenatal and postnatal women who are being transferred to the secondary unit in Whangarei or for those women who require closer observation postnatally.
- A project is currently underway to introduce the Newborn Early Warning System (NEWS) in all DHB facilities region-wide.
- National guidelines are utilised as they become available.
- The Growth Assessment Programme is now embedded within the Northland maternity service.

Standard 2

Maternity services ensure a women-centred approach that acknowledges pregnancy and childbirth as normal life events

- Our high normal birth rate and low caesarean section rate amongst standard primipara in Northland DHB go some way to indicate the promotion of normal birth by our maternity clinicians and acceptance of normal birth in our population.

- Most women register with a LMC midwife at the beginning of their pregnancy and their midwife will usually continue to provide care in conjunction with the secondary service if complications present.
- Increased access to antenatal education for women throughout Northland has been achieved. Women from Dargaville are no longer required to travel to Whangarei for classes and Ngā wānanga o Hine kōpū occur in all areas.
- The consumer survey for 2020 specifically focussed on the impact of Covid-19 on the hospital experience of women and whānau. A survey was sent to 177 women who gave birth in March, April and May. The response rate was 20 percent and is further outlined later in this report.
- All new staff members are required to complete cultural education as part of their orientation to Northland DHB. The components of this include Honouring Te Tiriti and Engaging with Māori. In addition, cultural education specific to a maternity setting has commenced for staff in Te Kotuku.
- Primary birth units are supported on-site by the DHB education and quality facilitators; regular visits by the Director of Midwifery; inclusion of rural midwives in regional committees and weekly antenatal clinics by an obstetrician. Education which focusses on the care of an unwell baby prior to retrieval by the paediatric service is provided by a SCBU nurse as well as an annual S.T.A.B.L.E. neonatal education workshop held in Northland.

Standard 3

All women have access to a nationally consistent range of maternity services that are funded and provided appropriately to ensure there are no financial barriers for eligible women

- Ultrasound services provided by Northland DHB are provided in Whangarei, Kaitaia and Bay of Islands. A Dargaville scan clinic is soon to be recommenced. Private providers perform the majority of pregnancy ultrasounds in Northland and it is apparent that the requirements for co-payments in these settings contribute to financial barriers for some women. To address this, the DHB pays for individual scans for such women on referral by their LMC. To overcome transport difficulties some women encounter, LMCs are able to utilise the DHB renal transport services in order that antenatal obstetric clinic and scan appointments can be met. A Northland Māori health provider also provides transport in these circumstances.
- The Maternity Referral Guidelines underpin consultation and/or transfer between the primary and secondary maternity services in Northland. Effective communication between clinicians is boosted by 24 hour direct telephone access to the obstetrician and paediatrician on-call. St John's ambulance and helicopter services transport women and babies from home or a primary unit setting to the secondary facility in Whangarei or, if clinically indicated, directly to Auckland. Delays in emergency transport are being addressed by the wider DHB.

- Continuity of care within the secondary service is assisted by daily morning handover meetings by the medical staff, daily meetings attended by the midwife shift leader with SCBU staff and, where possible, continuity of carer by midwives.

Summary of MQSP projects

Progress on last annual plan

Ongoing / On track  Requires additional work  Not commenced 

Project title	On-going review of perinatal mortality	Status 
Rationale	Northland continues to have higher rates compared to other regions in NZ.	
Actions	○ All SAC 1 and SAC 2 reported to DHB Reportable Events Committee ○ Serous Event Analysis on all SAC 1 events, and SAC 2 events where indicated ○ Presentation of all perinatal deaths at M&M meetings ○ Report of all perinatal deaths to MCGC ○ On-going surveillance of cases of missed SGA via GAP auditing processes ○ Continued focus on smoking cessation	
Measures	○ 100 percent utilisation of GAP by all clinicians ○ Continuing increase in rate of first trimester bookings ○ Reduction in smoking rates	
Outcomes	Perinatal mortality rates remain high and require continual focus	
Future	Audit of all perinatal deaths 2016-2020	

Project title	Improve the validity and reliability of maternity health data	Status 
Rationale	Accurate reporting and planning of services is dependent on accurate data	
Actions	○ A process for regular auditing to be established ○ Work with Business Manager to ensure data available on the maternity dashboard will identify outcomes for Maori women	
Measures	○ Maternity dashboard displays outcomes by a wider range of ethnicities	
Outcomes	○ Maternity dashboard currently reveals Maori ethnicity for registration with a midwife in first trimester of pregnancy ○ Limited auditing has occurred	
Future	Ensure women of Indian ethnicity are identified in data collection Further development of maternity dashboard with Business Manager	

Project title	Implement consistent pathways for review of serious neonatal and maternal morbidity	Status 
Rationale	To ensure that all adverse outcomes are reviewed in a timely and consistent manner	
Actions	○ This project will establish a streamlined process which is consistent throughout the maternity service including ▪ Identification of cases for review ▪ Timeliness of review process ▪ Multidisciplinary discussion ▪ Women's perspective ○ Identification of contributory factors and learning outcomes	
Measures	Establish criteria for inclusion Develop a review pathway	
Outcomes	○ De-brief meetings and presentation at M&M meetings currently in place however definitive pathway yet to be fully developed with paediatric staff ○ A process for including the perspective of women and whānau to be established	
Future	This project will be carried forward	

Project title	Consumer participation in the planning of maternity services	Status 
Rationale	The need to ensure the Northland maternity service is meeting the needs of those who access it	
Actions	○ Increase consumer membership of MCGC to more closely align with the ethnicities represented within the birthing population ○ Distribution of annual consumer survey ○ Distribution of specific surveys as required e.g. Covid, diabetes	
Measures	Themes identified in survey responses	
Outcomes	○ At least 40 percent of the committee will comprise consumers ○ 50 percent of overall membership will identify as Maori ○ Incorporate feedback from consumers in the development of maternity services	
Future	Seek input from Te Kahu Wahine and MCGC in preparation and distribution of a survey to Maori women following postnatal discharge	

Project title	Improve the quality of maternity care available to Māori women and whānau	Status
Rationale	To address our obligations under Te Tiriti o Waitangi by providing a service which meets the cultural needs of Maori and ensures equity in maternity health outcomes	
Actions	Support and steadily increase the number of Maori midwives working within the maternity service Provision of cultural education to maternity staff and MCGC	
Measures	Increased satisfaction of Maori women and whanau with their maternity experience as reflected in surveys Increase in the number of Maori women graduating as midwives	
Outcomes	○ Kaupapa Māori antenatal education is taking place throughout Northland incorporating Whaia Te Ora smoking cessation support ○ A collaboration agreement with Te Kahu Wahine representing Northland Maori midwives has been offered by the DHB ○ Collaboration with Auckland University of Technology in the selection of Maori students into the Northland cohort of the midwifery undergraduate programme ○ Commencement of review of Terms of Reference for MCGC	
Future	○ Increase membership of Maori consumers and clinicians on MCGC ○ Utilisation of the DHB Equity Assessment Tool by the Maternity Clinical Governance committee ○ An Honouring Te Tiriti workshop will be provided to members of the Maternity Clinical Governance committee along with medical and midwifery leadership, followed by further education for all staff working in Maternity ○ Survey to be sent to Maori women on discharge from a maternity facility ○ Give presentations at another three secondary schools in Northland to promote midwifery as a career	



Project title	Establish a service for pregnant women who are Rh negative	Status
Rationale	To enable access to anti-D prophylaxis in line with national recommendations	
Actions	Work with DHB laboratory staff to develop processes to enable all Rh negative women to have equitable access to prophylactic Anti-D	
Measures	The number of Rh negative women who receive prophylactic Anti D	
Outcomes	○ Sites for storage of Anti-D in the community have been established throughout Northland in order for LMC midwives to easily obtain supplies ○ An information pamphlet has been prepared for women ○ An education package has been prepared for midwives ○ A guideline has been developed	
Future	Set a date for commencement of service Provide education for all midwives Collect data on the number of doses of Anti D administered	

Project title	Increase engagement by women with LMC midwives in the first trimester of pregnancy	Status
Rationale	Although rates are increasing, Northland's first trimester registrations lag. This potentially impacts on perinatal outcomes	
Actions	○ Maintain focus by monthly reporting at M&M meetings ○ Further attempts to engage with general practice via Hauora Mahitahi, Northland's Primary Health Enterprise ○ Increase opportunities to gain information from unbooked women to identify any barriers to registration in the first trimester of pregnancy	
Measures	Continual region-wide increase in first trimester bookings to align with other DHBs	
Outcomes	There has been a gradual increase in the number of first trimester bookings	
Future	Progress engagement with the Primary Health Enterprise Increase availability of written information on how to contact a midwife in each location	

Project title	Support primary birth units / rural maternity services	Status
Rationale	To provide a primary maternity service ‘close to home’ where normal birth is promoted	
Actions	Maintenance in skills of all staff working in primary facilities to function effectively at the top of their scope of practice Ensure inclusiveness of the primary birth units in the DHB maternity service Review the model of care in Kaitaia Hospital	
Measures	Maintain the number of women giving birth in primary units Reliable capacity and frequency of specialist antenatal clinics and ultrasound services at rural hospitals	
Outcomes	A regular schedule of education and quality sessions delivered on-site Commitment to annual S.T.A.B.L.E education in partnership with the Child Health Service Annual opportunities to undertake LARC insertion training Regular visits by the DOM and attendance of the ACMMs at DHB midwifery leadership meetings Birth numbers remain stable	
Future	Multi-disciplinary training for management of obstetric emergencies Develop a flexible model of care which will adapt to the shortage of LMCs in the Far North and a subsequent increase in the DHB caseload Complete review of model of care in Kaitaia	

Project title	Increase capacity within Te Kotuku to establish a transitional care model	Status
Rationale	To avoid separation of mothers and babies	
Actions	Project will be part of regional transitional care plan and will be a combined paediatric and maternity initiative	
Measures	Development of a model of care for mothers and babies in transitional care	
Outcomes	Physical environment of an additional four beds in two rooms has been completed	
Future	Currently on hold until national guidelines are prepared	

National Maternity Monitoring Group (NMMG) Recommendations

Preterm birth

The rate of preterm births in Northland remains consistently below the national average.

- A Northland DHB midwife joined a regional preterm working group to produce a pamphlet for women who have a preterm birth. This written information complements the conversations clinicians have with women regarding their subsequent pregnancies.
- All babies born prematurely are followed up by paediatricians in clinics close to the locality where the whānau reside.
- The number of Northland women who smoke during pregnancy is decreasing but remains high. Efforts continue to reduce smoking rates. As there are a disproportionate number of Māori women who smoke, the approach Northland DHB is taking incorporates a wellness approach within a Māori world view of protecting whakapapa. Refer Whāia Te Ora report.

Place of Birth

- In 2020, 25 percent of Northland women give birth in a primary care setting – nine percent at home and 16 percent in primary units.
- Core midwives employed in DHB facilities provide excellent support to LMC community midwives by undertaking certain assessments on their behalf as required, providing full labour and birth support to LMC midwives including opportunities for rest during a woman's (long) labour and support to new LMC midwives.
- There is an absence of a primary birth facility in Whangarei and Dargaville.

Equitable Access to Contraception

- As most women in Northland are under the care of a LMC midwife, the provision of contraceptive advice is mainly provided by them.
- Access to long acting reversible contraception (LARC) is available at community level, not only in general practice but also by sexual health clinics run by the DHB, Māori Health Providers, primary birth units and at Te Puawai Ora, the community-based maternity hub in Whangarei.
- Regular training opportunities take place for both junior doctors and midwives.
- Data collection pertaining to LARC insertion is incomplete and will be modified to include ethnicity.

Maternal Mental Health

The Northland DHB maternal and infant mental health (MIMH) service is currently under review and development. A revised clinical pathway is being formulated.

The issues confronting the service relate to the absence of a psychiatrist attached to the service and a scant service being available in the Mid North. The current limited clinician resource is exacerbated by Northland's large rural area and high levels of deprivation amongst the population. A psychologist is acting as the clinical lead.

Acutely unwell women are either treated in Tumanako, the acute mental health facility in Whangarei, or referred to the Mother and Baby Unit in Auckland City Hospital which is preferable as babies are able to stay with their mothers in this setting.

There are two main components to the MIMH service as outlined below.

o Manaaki Kakano

The team currently comprises a clinical psychologist, two social workers, one nurse and an occupational therapist. The team provides a Northland-wide mental health service for pregnant and postpartum women. Three clinicians are based in Whangarei and one in Kaitaia.

Criteria for referral into the service include women who have confirmed pregnancy from 12 weeks gestation or are postpartum with a baby under 12 months old with at least one of the following:

- current significant moderate to severe mental health issues;
- current perception of unborn infant is distorted with strong rejection or fear of infant;
- description of significant difficulty bonding and caring for baby.

Thirty five percent of people enrolled in this service are Māori.

The psychologist continues to run the Outreach Triage Clinic which is held at Te Puawai Ora, the community maternity hub, in Whangarei. This is a valuable service as it not only assists in reducing the stigma of access but also supports and advises midwives and women by linking them with a range of appropriate community services. This is specifically aimed at assessing whether the women referred meet the criteria for care under Manaaki Kakano or He Tupua Waiora and gives direction to Primary Health support options if they do not meet criteria.

The Circle of Security, a parenting group is also run regularly by the perinatal services. This provides an efficient method of supporting more women in a shorter period of time.

- **He Tupua Waiora – Pregnancy & Parental Services (PPS)**

The aim of this aspect of the Maternal Mental Health service is to reduce harm and improve the wellbeing of children by addressing the needs of parents and working to strengthen the whānau environment. This service is specifically focused on parents who have alcohol or substance abuse issues and have a child less than three years old in their care. These clients are often experiencing multiple complexities such as stigma, mental and physical health issues, poverty, custody issues, violence and abuse, criminal charges, housing issues or Oranga Tamariki involvement.

Four clinicians are based in Whangarei and two in Kaitaia.

PPS works differently from other mental health teams in that it has capped caseloads of 12 per clinician. This enables clinicians to carry out assertive follow up with each client which encompasses transport, support and advocacy for women during appointments with various agencies. Examples of such agencies include women's refuge, police, rehabilitation service, Oranga Tamariki, probation service as well as the maternity service. Coordination and establishing relationships is a key function of this team.

Māori comprise 65 percent of the whānau within the PPS service.

The teams are currently looking to establish the provision of Parent-Child Interaction Therapy (PCIT) for their clients. PCIT is an intensive, highly structured parent coaching intervention which has been shown to increase secure attachment and compliant behaviour in toddlers, as well as reducing parenting stress and mental health symptoms in parents of toddlers.

All midwives screen women for mental wellness at booking and there is ongoing assessment during the antenatal and postnatal periods. Despite reduced capacity due to staff shortages, the psychologist provides great support to the midwifery community including the provision of education sessions

Perinatal Maternal Mortality Review Committee (PMMRC) recommendations

In response to the wero in the 2021 PMMRC report, the following information is provided for each recommendation.

Work has been completed and/or in business as usual phase		Work is in progress/underway and nearing completion		There is still a significant amount to achieve before completion	

Recommendation	Progress	Comments
DHBs should demonstrate that they have co-developed and implemented models of care that meet the needs of mothers of Indian ethnicity		Our Indian population is small and there is no current local evidence that women of Indian ethnicity in Northland have higher rates of perinatal mortality in Northland
That all maternity care providers identify women with modifiable risk factors for perinatal related death and work individually and collectively to address these strategies to address modifiable risk factors		○ There is widespread use of GAP by clinicians ○ Obstetric antenatal clinics are held in all localities ○ Information pamphlet available and guideline for repeated presentations of reduced baby movements under development ○ A wellness approach to smoking cessation has been developed
Strategies to improve awareness of antenatal care services and increase access among women who are isolated for social, economic, cultural or language reasons should be developed.		○ Repeated messaging via social media ○ The option of home visiting available to all women receiving midwifery services
DHBs provide free interdisciplinary fetal surveillance education for all clinicians involved in intrapartum care on a triennial basis.		○ DHB clinicians partake in RANZCOG fetal surveillance education programme prior to attending annual MDT CTG workshops ○ CTG workshops are available free of charge to LMC midwives
Pregnant women who are admitted to hospital for medical conditions not related to		Hospital-wide use of MEWS which clearly identifies responsible clinician

Recommendation	Progress	Comments
pregnancy need to have specific referral pathways for perinatal care		
Offer education to all clinicians so they are proficient at screening women, and are aware of local services and pathways for family violence, smoking and alcohol/drug abuse		○ Family violence education available via DHB ○ Regular contact with smoking cessation facilitator at midwives forums ○ Alcohol / drug abuse services available within Maternal Mental Health service
All clinicians involved in the care of pregnant women should undertake regular multidisciplinary training in management of obstetric emergencies.		MDT training not yet implemented
Develop, in consultation with young mothers, acceptable and safe methods for mothers under 20 years of age to access and engage with care in order to achieve equitable health outcomes		Whilst feedback is sought from young women attending antenatal classes there is an identified need to consult with them more formally
DHBs make available appropriate information, including appropriate counselling for parents, families and whānau about birth outcomes prior to 25 weeks gestation to enable shared decision making and planning of active care or palliative care options.		Decisions regarding care at this early gestation is made jointly between paediatric and obstetric SMOs with parents
Ensure that every baby will have access to a safe sleep place on discharge from the hospital or birth unit, or at home,		Refer SUDI report page 63
Enable active observation of mothers and babies who are undertaking skin-to-skin contact in the postnatal inpatient period.		○Use of Ministry of Health guideline which has recently been redistributed to midwives ○Waiting up-dated national guideline
DHB maternity services audit the rates of antenatal corticosteroid administration, including repeat		Completed 2019

Recommendation	Progress	Comments
doses when indicated, to mothers of neonates live born at less than 34 weeks gestation, including auditing whether administration is equitable by ethnicity, DHB of residence, and maternal age.		
Clinicians and LMCs should be encouraged to collect accurate ethnicity details at the time of booking.		This is a mandatory requirement of booking at all DHB facilities
Mothers who experience intrapartum stillbirth, intrapartum deaths of babies at term without obvious congenital abnormality are encouraged to have full investigation, including a post-mortem examination.		Post-mortems actively encouraged - 33 percent of Northland stillborn babies at term in had a post-mortem in 2020
All neonatal encephalopathy (NE) cases need to be considered for a Severity Assessment Code (SAC) rating.		○ A SAC rating is assigned followed by a serious event analysis carried out on all confirmed cases of NE ○ All babies referred for cooling are presented at a M&M meeting
Women with complex medical conditions require a multidisciplinary approach to care, often across more than one DHB. Each woman requiring such care should be assigned a key clinician to facilitate her care.		○ A weekly 'medicine in pregnancy' clinic is held in Te Kotuku as well as regular clinics by a physician at rural hospitals ○ A weekly fetal medicine clinic is held in Te Kotuku ○ The antenatal clinic midwife and a consultant participate in weekly MDT zoom meetings with high risk fetal medicine specialists at National Women's Health ○ The antenatal midwife acts as a conduit between LMCs and National Women's Health for those women requiring consultations in Auckland
Women who are unstable or clinically unwell should be cared		○ MEWs is utilised throughout Whangarei Hospital

Recommendation	Progress	Comments
for in the most appropriate place within each unit in order for close observation to occur. When observations are abnormal, clear documentation, early review by a senior clinician and development of a detailed management plan are required.		○ Clinically unwell women in rural areas are transferred to Whangarei Hospital for care
Termination of pregnancy services should undertake holistic screening for maternal mental health and family violence and provide appropriate support and referral.		All women are offered a referral to counselling services
Women with a previous history of serious affective disorder or other psychoses should be referred in pregnancy for psychiatric assessment and management even if they are well. Regular monitoring and support is recommended for at least three months following delivery.		Refer Maternal Mental Health report page 49
The PMMRC recommends that DHBs with rates of perinatal related mortality and neonatal encephalopathy significantly higher than the national rate review, or continue to review, the higher rates of mortality in their area and identify areas for improvement.		A review of all perinatal related deaths over the past five years will be undertaken in 2021
DHBs should monitor key maternity indicators by ethnic group to identify variations in outcomes. They should then improve areas where there are differences in outcome.		The maternity dashboard will be further developed to enable ethnicity to be visible for all outcomes which will then be included in monthly feedback at M&M meetings

Future Project Plan

Our MQSP plan into the future is attached as Appendix One. The main focus of our work will be on improving the service to Maori women and whanau and this comprises several elements as outlined in the plan. We understand that this work may be further directed by changes within the NZ health system as a result of the Health and Disability Services Review.

We also plan to undertake a full review pertaining to Northland's consistently high perinatal death rate. There are factors outside the maternity service contributing to these high rates such as rurality and deprivation however we are committed to doing all we can by identifying areas where improvements in our service can be made in order to avoid any preventable deaths.

Establishing a more effective process for the review of maternal morbidity as recommended by the Health Quality and Safety Commission will also be a priority. This was unable to be commenced in the last year.

Finally, several projects in the previous project plan submitted in 2019 will be further developed.

Consumer Engagement

The consumer surveys which were undertaken in 2020 are reported below. In 2021, with our strong commitment to equity, it is intended that surveys will focus on specific population groups, in particular Maori and women under the age of 20.

There are currently two consumers on the Maternity Clinical Governance Committee, one of whom is a member of the DHB Consumer Council. Both consumer members have attended national consumer hui arranged by the Ministry of Health. It is proposed that the imminent completion of a review of the Terms of Reference for the MCGC will double the number of consumers to four, as well as increase Maori membership overall.

The methods of engaging with consumers in the future will be guided by the advice of our consumer members. A prior attempt at community engagement did not attract the voice of Maori despite a marae location for the consultation meeting. Currently our main approach is by email and social media.

All MQSP Annual reports are available to the public on the Northland DHB website.

Surveys

a) Covid

A survey was sent to 177 women who gave birth in March, April and May 2020 to specifically identify the impact of Covid 19 on their hospital experience. The response rate was 20 percent with 36 women completing the survey.

- 78 percent of women identified as Pakeha and 36 percent as Maori.
- 49 percent of women reported that this time was difficult or very difficult for them and their whānau.
- 53 percent reported in a positive way that there were also less distractions and demands.
- The main difficulties were emotional stress; fears about being in hospital; visitor restrictions; restrictions on the number of people who were able to be present during labour and birth; feelings of isolation from whānau and support networks
- Breastfeeding support appeared lacking as 52 percent of women reported no or little support with this.

b) Diabetes in pregnancy survey

In late 2019 a survey was sent to all women in Northland who had experienced diabetes during their pregnancy in the preceding year. The aim of the survey was to obtain feedback regarding the accessibility of the diabetes in pregnancy service and gain insight into the quality of information provided to women.

Unfortunately there was only an overall 20 percent return rate to the survey which was sent by both email and text messaging.

Results from women included:

- 85 percent said the **clinics were easy to get to**
- 90 percent said **scans were easy to arrange** and attend
- **Quality of information received**:
  - 65-75 percent of women believed the information they received pertaining to diabetes in pregnancy, blood testing, medications, lifestyle and dietary changes was ‘just right’
  - 60 percent of women received adequate information related to the reasons for induction of labour before the due date
  - 40 percent of women received adequate information regarding the care of baby following birth
- **Suggestions for improvement** in the service included: a more flexible induction of labour policy to allow more individualised care and improvement in the quality of diabetic meals while hospitalised.

Priscilla Ford – Whangarei LMC midwife and Chair of Te Tai Tokerau NZCOM adapted to a new way of working during Covid lockdown.

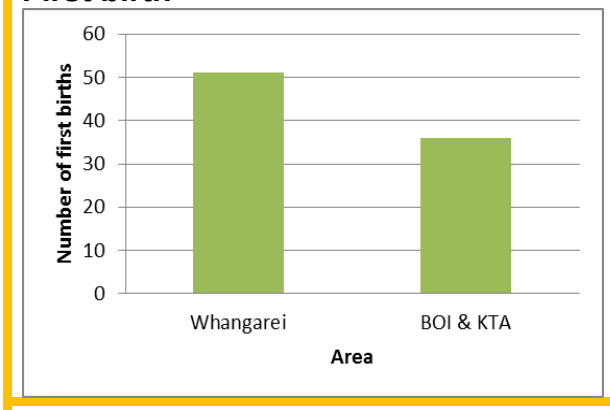
c) *Annual Survey of Women Discharged from Maternity Facilities 2019*

The survey was sent separately to those women discharged from Whangarei and those from rural hospitals (Bay of Islands and Kaitaia hospitals).

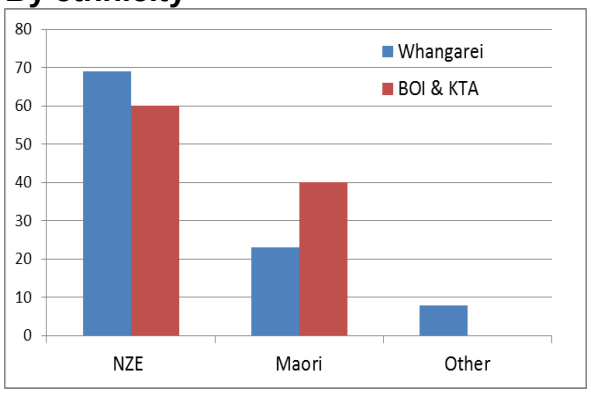
Response rates:

- Whangarei – 33 percent
- Bay of Islands - 73 percent
- Kaitaia – 27 percent

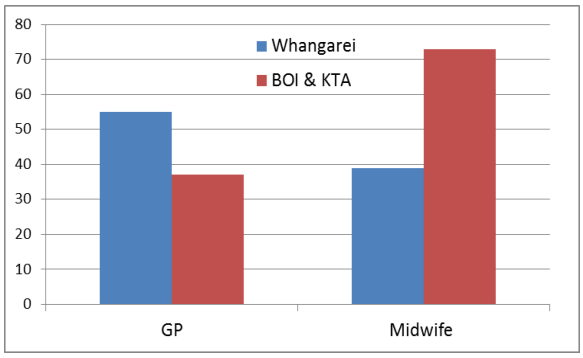
First birth



By ethnicity

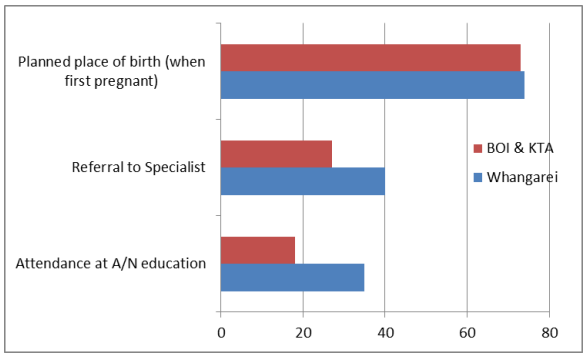


First consultation in pregnancy



Reasons for registering with a midwife later than 12 weeks related mainly to late diagnosis of pregnancy and moving to Northland during the pregnancy.

Other survey response



Overall experience

**For reporting purposes 'very satisfied' and 'somewhat satisfied' have been combined and; 'not very satisfied' and 'not at all satisfied' have been combined. Neutral responses have been omitted. The following table represent responses in percentage.*

	Whangarei Hospital		Rural Hospitals (combined)	
Question				
The quality of the information that was readily available to you	**87**	**8**	**100**	-
The care received from all health professionals before the birth of baby	**89**	**10**	**100**	-
The way in wich you were cared for during the birth of baby	**92**	**6**	**100**	**-**
The care you received during your stay following the birth of baby	**87**	**6**	**100**	**-**
Help and advice with feeding baby	**79**	**7**	**100**	**-**
Respect for cultural requirements	**88**	**1**	**100**	**-**
Advice about baby sleeping patterns	**64**	**10**	**73**	**9**

There was not a geographically balanced return rate to this survey and the numbers were small, however the place of primary units in rural hospitals was confirmed as meeting the needs of the local population. The survey also revealed that in Northland's urban area, women are more likely to attend a general practice for their first antenatal appointment. This is the reverse in rural areas.

We are mindful that for some women, clinical circumstances dictated that they gave birth in Whangarei Hospital and this may have impacted on their overall experience.

Local maternity quality improvement activities

Maternity Early Warning System (MEWS)

The use of MEWS continues within Te Kotuku and was rolled out hospital-wide on 1st February 2021, with all areas now using MEWS for women presenting in all areas of the hospital while hapū or recently birthed. While the use of MEWS is in its infancy in the wider hospital setting, feedback has been encouraging of a smooth transition from using the generic Early Warning System to MEWS. A new escalation pathway was written for hospital wide use of MEWS that reflects the service under which the woman is admitted and identifies the responsible service in the event of deterioration.

In anticipation of hospital wide use, Northland DHB added an on-line learning package adjusted for local escalation pathways. It is expected that all new clinical staff to the DHB will complete the MEWS learning package in the early stages of employment.

Education for midwives on the use of MEWS continues in the mandatory emergency skills refresher day as well as professional development study days (e.g. Complex Māmā). Monthly audits of MEWS in all areas will continue as per the DHB audit.

schedule and follow up of these results will be overseen by the newly established Emergency and Deteriorating Patient committee of which our Maternity Quality Facilitator is a member.

Newborn Observation Chart/Neonatal Early Warning System (NOC/NEWS)

In line with the Accident Compensation Commission programme for the prevention of neonatal encephalopathy, the DHB project team is underway with preparation for the implementation of NOC/NEWS within all DHB birth facilities. The project team consists of participants from paediatrics, maternity, a core midwife representative, as well as representatives from the rural hospitals (Bay of Islands, Kaitaia and Hokianga Health Enterprise Trust) and LMC midwives.

It is anticipated that NOC/NEWS will be in full use by June 30th 2021.

Anti-D prophylaxis

Northland DHB is in the process of updating clinical guidelines for Anti-D prophylaxis in pregnancy. To bring these guidelines up to date with the Royal Australian New Zealand College of Obstetricians and Gynaecologists (RANZCOG) and the New Zealand Blood Service recommendations, the DHB will be offering routine antenatal Anti-D prophylaxis (RAADP) to women at 28 and 34 weeks gestation. Education has been developed in conjunction with the Transfusion Clinical Nurse

specialist from the Whangarei Hospital laboratory and is in the process of being given to all Midwives in Northland.

A review of referrals, processes and the locations of Anti-D immunoglobulin in the community will be reviewed after 6 months to ensure a robust service.

With a DHB wide focus on equity, the roll out of this national initiative was deliberately delayed in order to ensure that all women had equitable access irrespective of where they live. A number of Anti D storage sites have been recruited. These include the rural hospitals, local GPs and pharmacies. A DHB referral system has also been set up to ensure equitable access, even if LMC midwives choose not to provide this service.

Growth Assessment Programme (GAP)

This programme is designed to improve the detection of babies who are small for gestational age (SGA), or have fetal growth restriction (FGR) during pregnancy. It was developed in the United Kingdom by the Perinatal Institute *(https://www.perinatal.org.uk/GAP/Programme)* and has been adapted for New Zealand. GAP has been associated with a significant reduction in stillbirth and the Accident Compensation Commission is supporting the implementation of GAP as one of four strategies to reduce the incidence of Neonatal Encephalopathy (NE), as SGA is also a risk factor for NE.

The programme has been implemented in the Northland DHB since the 1st of July 2020.

The GAP programme is based on three main elements:

1. Training and accreditation of all staff involved in clinical care
2. Adoption of evidence-based protocols and guidelines
3. Rolling audit and benchmarking of performance

Northland DHB has been supporting pregnant women through funded co-payment for scans. This was initiated from the recognised need to increase equity in relation to our high perinatal mortality rates.

Extensive multidisciplinary training for all maternity clinicians has occurred involving face to face and online workshops since September 2019. Workshops have been held in each area of Northland including Dargaville, Bay of Islands and Kaitaia where both local LMC midwives and core midwives were trained in the use of GAP.

Since April 2020 monthly zoom GAP workshops are being facilitated by the New Zealand GAP lead educators in addition to continuing education provided by our local GAP champion.

A schedule of growth scans is recommended for women who are at increased risk of SGA or who have had SGA diagnosed. This has placed increased demand on our ultrasound capacity in Northland and has had a financial impact on our population, already burdened with high levels of deprivation.

The DHB has committed to every pregnant woman having a GROW chart which plots the measured growth of the uterus on a personalised chart. At birth every baby then has a customised birth weight centile based on the GROW chart.

A baseline audit of 500 babies was carried out in September 2020 to check the rate of the detection of SGA prior to the introduction of GAP.

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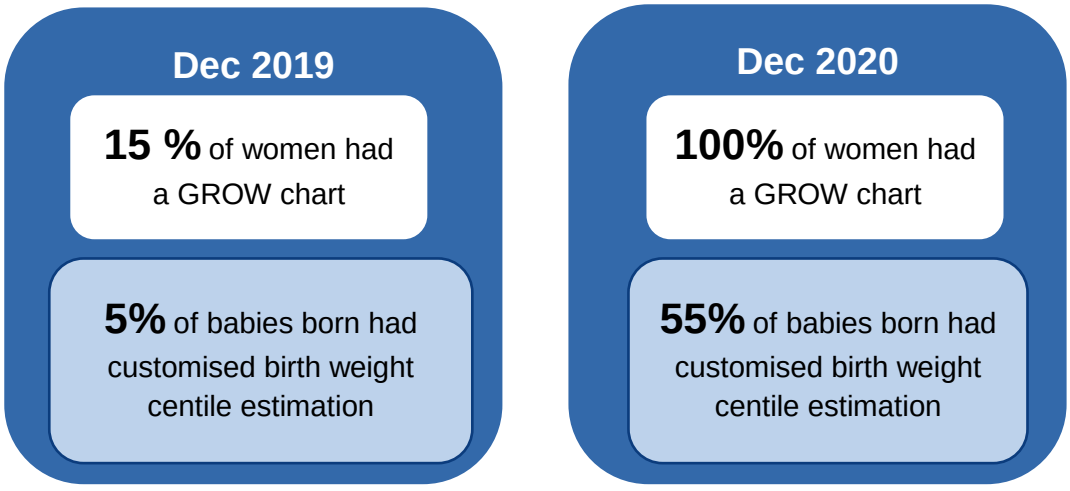
Comparison of baseline and current SGA detection rates

Baseline SGA detection	Last quarter SGA detection	Increase in detection from baseline
24.6 percent	**40.4 percent**	**61 percent**



We are currently conducting our first missed case audit to identify the factors that may limit the detection of SGA in Northland. The aim of this is to improve our service to better meet the needs of our birthing population and further improve our detection of SGA. As referred to previously, one area that has already been identified as a challenge for our service is availability of ultrasound scanning, especially in the regions.

Te Mahuri – Level 3 Forum

Manaakitia te māhuri he tupuna kei roto

Nothing is more important than giving new life. Nurture and take care of the future that grows within, for one day they will stand as the ancestors of tomorrow

With Te Whare Ora Tangata forum no longer running, Te Māhuri (Child Health Connection Service) forum has incorporated referrals from LMCs for hapū māmā who antenatal services struggle to connect with. The forums are held four weekly and include DHB and Community Maternal and Child Health Services. The aim is to attempt to support the connection of hapu mama to ongoing primary health care for her and her pēpi. The forum follows hapū māmā on their journey through pregnancy until pēpi is approximately six to eight weeks to ensure connection with key providers is established before discharging from the forum.

This has proved successful as hapū māmā get the support they need and referrals for supporting their pēpi are proactive and seamless to WCTO providers and general practice. Providers are also able to identify other services which may be involved with the whānau to then work together and share information.

SUDI

SUDI prevention 2020, like many other programmes, experienced some major disruptions due to COVID 19. Level 4 saw the closing of our community safe sleep hubs and the cancelling of our Hine Kōpu wānanga. Urgent review of the safe sleep SUDI programme commenced and new ways to implement our safe sleep pepi programme were devised.

A SUDI prevention contingency plan was developed and communicated out to all maternity units and maternity leadership teams, SUDI forum leaders, safe sleep distributers / champions and LMC midwives. There were many instances of hapu mama who returned to Northland for the lockdown.

The main changes which were required for this period included the development of safe sleep education messaging for social media and safe sleep devices being couriered directly to hapu mama with educational material including contact numbers for available local support teams.

Since then, a SUDI prevention presentation was given at the Te Tai Tokerau Early Childcare Centres and Te Kohanga Reo conference in Whangarei. This was well received with more than 30 doll sized wahakura given out for childcare centres to use in their play areas.

We have been reviewing the SUDI prevention programme and how it is implemented in different settings. Over the last 2 years we have had a major focus on community however in 2021 it is our intention to focus on our maternity and paediatric services

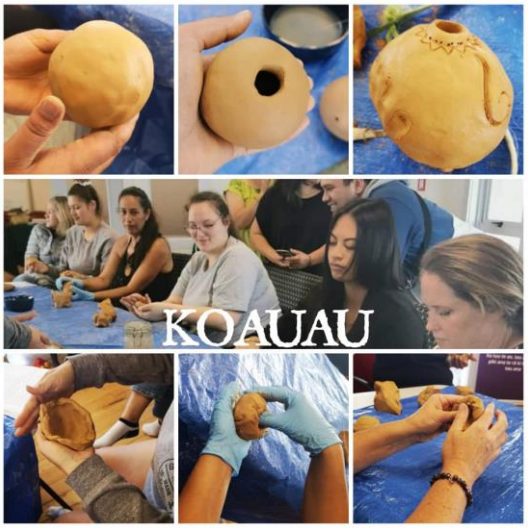
The wahakura weaving programme recommenced through our Whaia Te Ora Wānanga after a short disruption with the retirement of experienced weavers. Northland DHB met the Ministry of Health target of the distribution 510 safe sleep devices in 2019/20 with 513 being distributed throughout our region.

To ensure safe sleep training is up to date and continuing to gain momentum, four safe sleep practice and assessment training sessions across Northland were held in 2020.

Antenatal education – Hine Kopu

The kaupapa Māori antenatal programme for hapu mama and whānau in Northland is provided as a component of a continuum of care under Nga Tātai Ihorangi – The First 2000 Days.

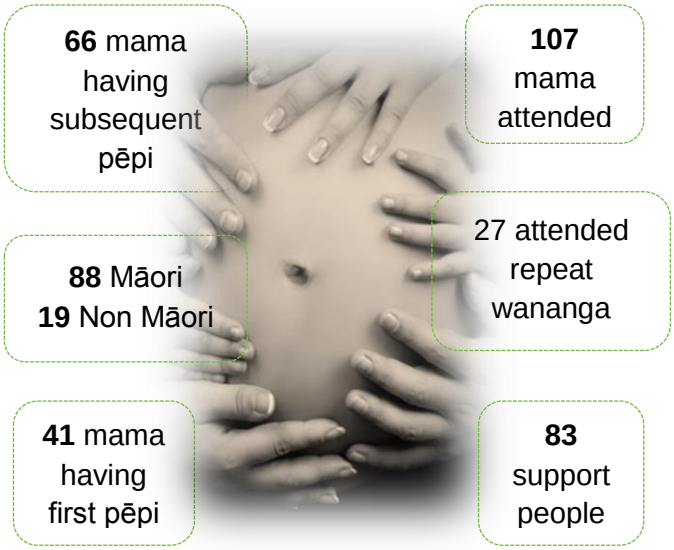
Nga Wānanga o Hine Kōpū provides an opportunity to deliver antenatal knowledge in a Māori centric framework. The approach draws on matauranga Māori as the validation to create an empowering journey for whānau. The sharing of knowledge, experience and learning in a wānanga context encourages whānau to make better informed choices and reaffirm belonging. (Ngā Wānanga o Hine Kōpū: A Training Resource, 2018)



The framework on which wananga are facilitated is based on the six key components of the Maori creation story and this is aligned to the growth and development of the baby, spanning conception, birth and childhood. Each component describes a significant event that occurred and impacted on the evolution of the universe.

As well as hapu mama, wananga are attended by whānau, kaumātua and kuia and all who have a vested interest in the protection and preservation of ngā uri whakaheke – future generations. We celebrate all who choose to engage in wānanga and treat them like the taonga they are. Whānau are encouraged to share their stories and traditional whanau birthing practices and to celebrate these rich traditions.

Attendees of Wananga in 2020



Nga Wānanga o Hine Kōpū is delivered by Māori Health Providers within Te Tai Tokerau region. Northland DHB acts as an *enabler* in the overall coordination of the programme delivery and the training programme for poutuara (facilitators). Wananga were held on 13 occasions in 2020 - in Dargaville, Kawakawa, Whangarei, Hokianga and Kaitaia. A further three wananga were cancelled due to Covid-19. More than 20 wananga are scheduled in 2021 including the inclusion of Kaikohe.

Whaia Te Ora - Pursuit of wellness

Te Tai Tokerau has the 2nd highest maternal smoking rate in the country

- 87 percent of women who smoke are Māori
- We currently have a 5 percent quit rate for hapu mama
- Maternal smoking is a significant contributor to poor outcomes for mother and infant.
- Pēpi who have been smoke-exposed are 32 times more likely to

be affected by SUDI than a pēpi not exposed

- Smoking is a modifiable risk factor, and therefore every effort must be made to support whānau reduction of smoking before, during and after pregnancy.

In 2020 a “Whāia Te Ora” wellness pilot was launched as a tool to help address smoking in pregnancy. This programme is part of our successful kaupapa Māori antenatal wananga for hapu mama and whānau in Te Tai Tokerau under the umbrella of Nga Tātai Ihorangi – The First 2000 Days

The framework for the Whaia Te Ora wananga has been developed using the same creation narrative of hapu wananga with the point of difference being the focus on wellness and substance-free pregnancies (smoking cessation in particular). The wananga explore wellbeing for hapu mama and her whanau which is an intentional approach that is strength based, aspirational and whānau centred.

Strength based practice involves utilising personal strengths rather than focussing on those actions / behaviours perceived as negative. We believe this ultimately contributes to personal empowerment contributing to long term beneficial changes. The programme is whānau centred because it utilises and builds on the collective strength of family as the core support for hapu mama and builds upon the instrinsic knowledge of indigenous peoples.

In addition to our existing incentive vouchers for hapu mama, we have added an ‘all of whānau’ incentive package for those who choose to become smoke free. Inhalators continue to be offered to all hapu mama who smoke as and additional tool to support their smoke free journey.

There are 4 wananga scheduled for 2021 in Whangarei. We are currently reviewing the opportunity for further wananga in the future.

Ngā Tātai Ihorangi
Kia tupu ora ai ngā uri whakatupu
That the generations yet to come will grow and flourish

Appendix one

Northland DHB Maternity Services - Annual Plan 2021 - 2023

Initiative/priority		Rationale	Action	Expected Outcome	Measure	Timeframes
1	Improve maternity services, outcomes and experience for Maori women and whanau	Northland has a high population of Maori and approximately half of the birthing population identifies as Maori	1. MDT Te Tiriti education for members of Governance Committee, obstetric and senior midwifery teams	Enhanced understanding and commitment to Te Tiriti by senior staff in positions of influence	Te Tiriti workshop held	June 2021
			2. Increase the number of Maori staff working in the maternity service	The ethnicity of the workforce will become more reflective of the population	a) Presentations on midwifery as a career to students at three secondary schools b) Participation of DHB in selection of students into the midwifery education programme c) Those responsible for employment of new staff aware of affirmative action approach to employment of new staff	a) September 2021 b) November 2021 c) April 2021
			2. Refine cultural education attended by	Increased appreciation by all staff of cultural factors	d) 100% attendance at education sessions	d) Dec 2021

Initiative/priority		Rationale	Action	Expected Outcome	Measure	Timeframes
			all staff	influencing the maternity experience for Māori		
			4. Activate collaborative agreement with Te Kahu Wahine	Enhanced opportunities for the DHB to receive feedback on the maternity service by Maori midwifery workforce	Establishment of a regular meeting schedule with members of Te Kahu Wahine	May 2021
			5. Increase Maori representation on MCGC	a) Participation by Maori in development of maternity services b) Utilisation of DHB Maori Equity Tool in assessing maternity services c) Governance Committee will contribute fully in efforts to obtain Maori consumer feedback and subsequently advise in planning services	a) Aim to reach 50 percent Maori membership of MCGC b) Commencement of process in use of DHB Equity Tool c) Survey approved by Governance committee distributed to Maori women discharged from maternity facilities will demonstrate satisfaction with their experience of maternity service	a) June 2021 b) July 2021 c) Survey distributed by October 2021
			6.	Equity in outcomes will be influenced	The number of Maori women who smoke during their pregnancy will decrease	Decreasing rates of smoking during pregnancy evident over next three years
2	Conduct a review of	Northland continues	a) Establish a MDT to conduct the review	a) Avoidability and contributory factors will	a) Completion of review a) Distribution of results	a) March 2022 b) April 2022

	Initiative/priority	Rationale	Action	Expected Outcome	Measure	Timeframes
	all perinatal deaths over past five years	to have higher rates of stillbirth	b) Agree on tool and method to conduct review c) Incorporate input of individual LMCs into review process	be identified b) Results will be shared with all maternity clinicians and Governance committee c) Recommendations will be identified and agreed Required changes will be implemented	b) Agreement of key recommendations Evidence of planning for changes in service provision	c) April 2022
			2. On-going review of use of GAP and audit of missed SGA babies	The number of missed SGA babies will reduce	Audits will be conducted as per Perinatal Institute guidance	May 2022
3	Implement a consistent pathway for review of serious maternal and neonatal morbidity	Severe morbidity can have an ongoing detrimental implications for women / parents as well as staff who were involved in the event	A MDT project team will be established to define a clear pathway for timely review of cases separate from DHB reviews resulting from SAC ratings	Development of a process to capture identification of cases for review which will commence with the offer of a de-brief meeting as soon as possible after the event and the inclusion of the voice of the mother/parents in the review process Contributory factors and learning outcomes will be identified	Inclusion criteria and agreed pathway developed	June 2022
4	Improve timeliness of	The Northland rates	1. Reinvigorate the	The rate of registration	Clinical Indicators and	December

Initiative/priority	Rationale	Action	Expected Outcome	Measure	Timeframes
women entering the maternity service early in pregnancy	of registration with a LMC lag behind national rates. The ability to influence pregnancy outcomes is therefore reduced	opportunities to seek feedback from women who have late, minimal or no engagement with maternity services during pregnancy	with a LMC in pregnancy will continually improve 1a Identification of barriers to engagement 1b. Plan services to overcome barriers where indicated	local data will reveal improved rates of early engagement 1a Develop a system whereby feedback can be obtained b. Necessary changes in service implemented	2023 1a. Tool developed by July 2021 b. February 2022
		2a Each locality in Northland to update information available to women on the importance of early registration including contact details of midwives 2b. Ensure information is available in settings where pregnant women visit	2a Development of a template for information pamphlet able to be used in all localities	2a. Information pamphlet available and updated 2b. Widespread presence of information in community – GP surgeries, Ultrasound and laboratory facilities, pharmacies, hospitals	2. August 2021
		3. Engage with Mahitahi	Develop a navigation	'Aunties' in general	3. December

	Initiative/priority	Rationale	Action	Expected Outcome	Measure	Timeframes
			Hauora to improve interface with LMCs for those women who attend general practice for pregnancy confirmation	project in collaboration with Mahitahi Hauora	practice guide those women who need assistance to register with a LMC	2020
5	Further develop and monitor patient deterioration strategies region-wide	Meet national requirements and respond appropriately to identified deterioration in mothers and babies	1. On-going monitoring of MEWS in Whangarei Hospital	Appropriate use of MEWS for all pregnant or recently pregnant women in Whangarei Hospital	Occurrence of regular audits as defined by HQSC	On-going
			2. Establish the use of MEWS in primary units for women at risk of deterioration	Introduction of MEWS into primary units with clear criteria of when to use	Use of MEWS in primary units for women prior to transfer or requiring enhanced levels of observation	May 2021
			3. Complete NEWS implementation region-wide including localised education for all midwives	All babies in Northland will be monitored with additional support of NEWS	Successful roll-out of NEWS in all facilities	July 2021
6	Multidisciplinary education of all health practitioners potentially involved in the management of maternity emergencies take	Members from a variety of disciplines are called upon to respond to maternity emergencies in both primary and secondary settings.	A MDT will be established to consider all available options available and to then implement training which will take place on-site in Whangarei,	Confidence experienced by clinicians in an efficient approach to maternity emergencies will be evident following training	a) Team established b) Agreement of format of training will be reached following consideration of all options c) Training days will have taken place in locations throughout Northland	a) October 2021 b) December 2021 c) December 2023

	Initiative/priority	Rationale	Action	Expected Outcome	Measure	Timeframes
	place	Effective teamwork is known to positively impact on successful management of these situations	Kaitaia and Bay of Islands Hospitals		involving all people potentially involved in maternity emergencies	
7	Improvement in the quality of data related to maternity outcomes	Service development and addressing inequity is reliant on reliable data	1.Involve Business Manager in a plan to implement a revised maternity dashboard to include ethnicity for all outcomes	Increased reliability and accessibility of comprehensive data	Reach an agreed plan following consultation with all clinicians	June 2021
			2.Establish a method for regular audits of data input		Appointment of a designated person to conduct regular audits of data entry	July 2021
			3.Review current forms which record specified interventions and/or service delivery e.g. LARC insertion; attendance at antenatal education; administration of antenatal iron infusions, to include ethnicity and age		Amend recording methods currently in use	November 2021
8	Establish diabetes	In response to	1. Identify and support	Women and midwives in	Completion of	December

Initiative/priority	Rationale	Action	Expected Outcome	Measure	Timeframes
midwife positions at rural hospitals	increasing rates of diabetes in pregnancy in the Northland population. A midwife diabetes position has been incorporated into the secondary service in Whangarei. In order to provide an equitable service for all women this same level of service must be available region-wide. A midwife in Bay of Islands has completed education and awaiting the establishment of a designated position	an employed midwife at Kaitaia Hospital who has an interest in completing postgraduate education specialising in diabetes in pregnancy	Bay of Islands and Kaitaia areas will receive heightened levels of support in receiving/ providing appropriate care for pregnant women with diabetes	postgraduate by a Kaitaia midwife	2022
		2. Work with operations manager to allocate funding to support this position		Establishment of position in Bay of Islands	July 2021