2023 Annual Maternity Report

Health New Zealand
Te Whatu Ora
Te Pae Hauora o Ruahine o Tararua
MidCentral

Acknowledgments

It is with genuine appreciation that we thank our workforce, consumers, Lead Maternity Carers (LMCs) and wider health care partners and communities.

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Thank you also to all the whānau and staff who kindly let us use their images to illustrate our report.

Cover page photo:
Pepi Asher | Born May 2023 with māma Sarah

Senior Leadership *Foreword*

Nau mai haere mai, welcome to the 2023 Maternity Quality and Safety Report from Te Pae Hauora o Ruahine o Tararua | MidCentral.

The MidCentral maternity team continues to strive for improvements in the quality of care for the wāhine and whānau of our rohe. Between 2018 and 2020, we observed significant improvements in labour and birth outcomes, driven by our understanding of outcomes and a cultural shift within the multidisciplinary team. However, the last two years have shown an increase in caesarean sections.

We believe that recent changes in outcomes can be partly attributed to workforce challenges in both midwifery and obstetrics. Like many other Health New Zealand | Te Whatu Ora (Health NZ) districts, the MidCentral maternity team faces difficulties in recruiting a full complement of midwifery and obstetric staff. We have continued to recruit both nationally and internationally, offering supportive packages and retention initiatives. We also have many strategies in play to improve the culture across our multidisciplinary team such as professional supervision for our midwifery and nursing staff, team social events, and shared learning opportunities.

In 2023, we prioritised enhancing primary birthing options for whānau. We have worked hard to recruit to a full complement of staff at Te Papaioea Birthing Centre, which will have a midwife on site 24/7 from early 2024. We extend our gratitude to the community and midwives who have continued to advocate for this valuable birthing option for wāhine without additional care needs. We are also partnering with our iwi partners in Horowhenua to achieve sustainable use for Kōhungahunga Maternity Unit located within the Horowhenua Health Centre.

Throughout the year, significant work has been done on the First 1000 Days Strategy, demonstrating our commitment to enhancing the health and wellbeing of pēpi and whānau during the early years of life. The overarching strategy, to be released early in 2024, aims to focus efforts across the MidCentral rohe to improve outcomes for pēpi and whānau consistently through ten locality strategies. The First 1000 Days Strategy will be fundamental to how MidCentral links and supports our community to drive improvements in wrap-around services that are whānau-centred, collaborative and culturally responsive.

The Maternity Quality and Safety Programme plays a pivotal role in highlighting the profile of the maternity services that wāhine and whānau receive, ensuring that every pēpi has the best possible start in life. Through the efforts of our local multidisciplinary teams, we have made significant strides in identifying and implementing improvements in maternity services that directly benefit wāhine and whānau. These teams, led by dedicated midwifery and medical professionals, work hand-in-hand with maternity consumers to drive meaningful changes and improve outcomes for all. This report provides comprehensive updates on our current projects and highlights the collaborative efforts that underpin our success. It is a testament to the hard work and passion of everyone involved in this programme.

However, the work we are most proud of is the daily care we provide to those who come through the doors of our units. That is what motivates us. Thank you to our teams for your collegial support of each other, for laughing and crying together, and for your resilience in this ever-changing system. It is a privilege to work alongside you all.

Jennifer Green
Associate Director of Midwifery

Per Kempe
Medical Lead, Obstetrics & Gynaecology

Robyn Williamson
Acting Operations Executive

Twins Kalei and Alaya, the first pēpi of 2023 at Palmerston North Hospital, with parents Keana and Kane.

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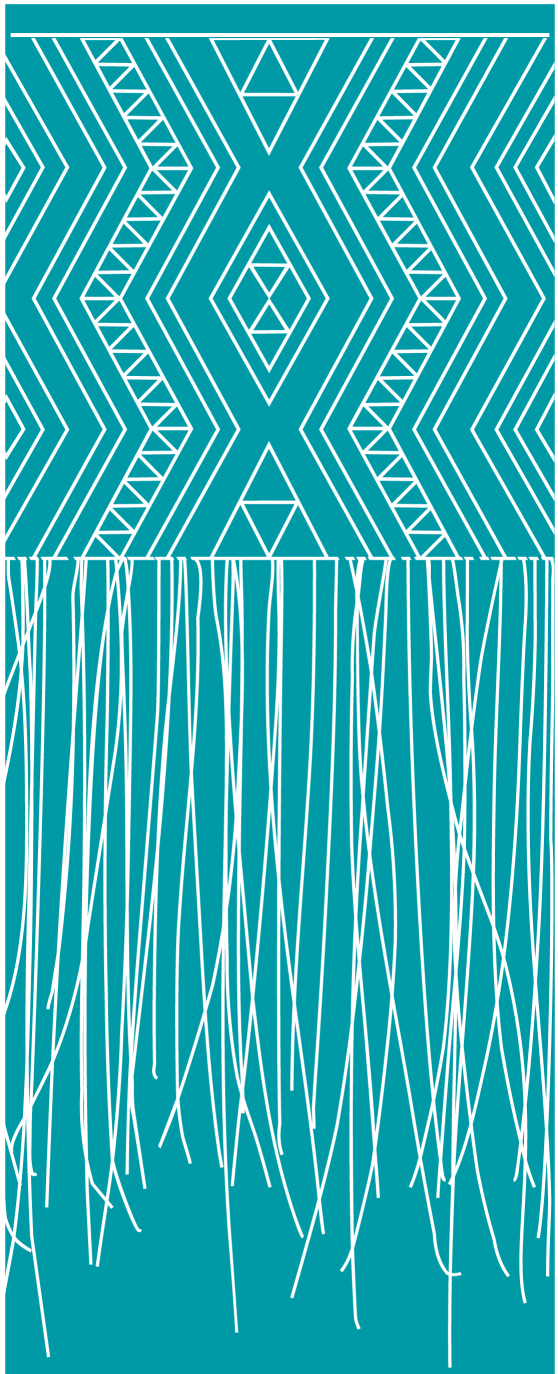


Our Population

MidCentral sits within the central region health division of Health NZ. We provide health and wellbeing services to an estimated 191,100[a] people who reside across five local authority districts. These include Horowhenua, Palmerston North City, Manawatū, Tararua and the Ōtaki ward of Kāpiti Coast.

Our area has a larger Māori population compared to the national average, with eight iwi exercising kaitiakitanga across the district. MidCentral also has a growing refugee population with both Palmerston North City and Levin being centres for refugee resettlement.

Across our rohe, there are large disparities in both health and resources. More than 40,000 people or 26 per cent of our population live in areas of high socioeconomic deprivation (NZDep2018 quintile 5[b]).

Regional age breakdown [1]

19% 0-14 years

20% 15-29 years

18% 30-44 years

43% 45+ years

Regional ethnic breakdown [1]

22% Māori

4% Pacific

9% Asian

65% NZ European/ Other

Prevalence of hazardous drinking in past year [4]

22.4%
Compared to national average of 25.7%

Current smokers [3]

8.3%

Current vapers [3]

11.9%

Regional socioeconomic deprivation profile for pēpi born in 2023 [2]

7% Quintile 1 (Least Deprived)

15% Quintile 2

21% Quintile 3

19% Quintile 4

38% Quintile 5 (Most Deprived)

Understanding the communities we serve

68,000 Wāhine

32,000 Tamariki

38,000 Rangatahi

1,915 Births

96.8% registered with a maternity carer

[a] Unless otherwise referenced, population data is sourced from subnational population estimates for DHB by Statistics NZ based from the 2018 Census results.

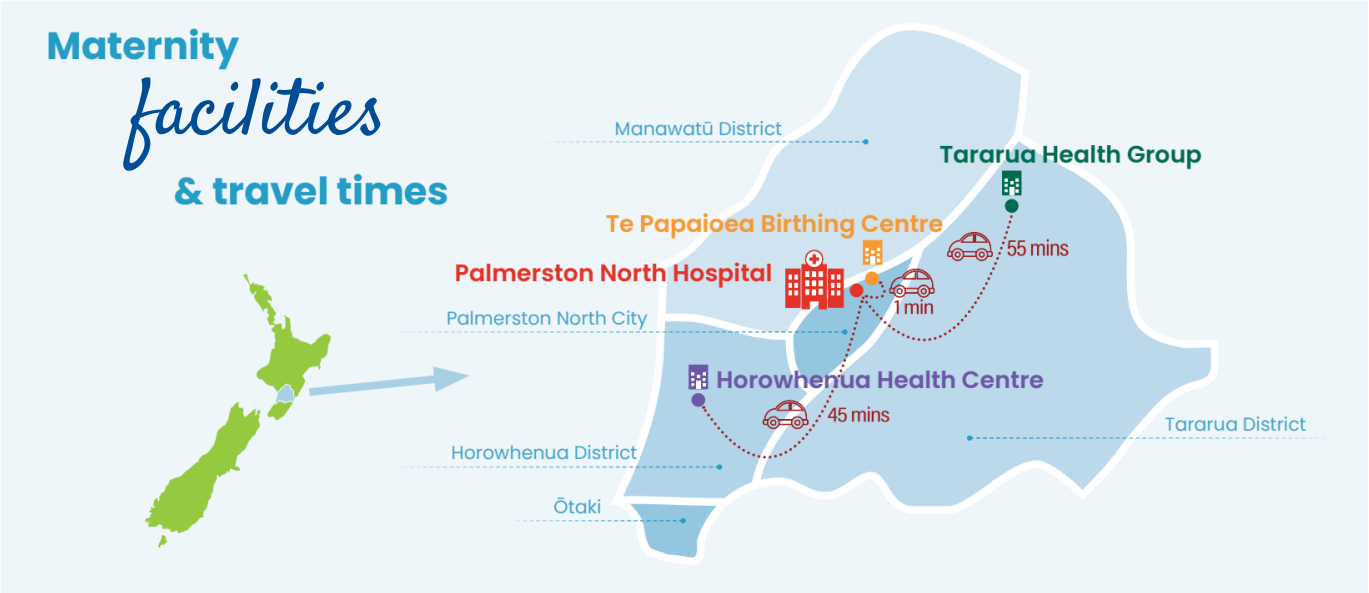
[b] New Zealand Index of Deprivation (NZDep) is an area-based measure of socioeconomic deprivation. It measures the level of deprivation for people in each small area, based on nine Census variables. Quintile 5 represents people living in the most deprived 20 percent of these areas.

[1] Ministry of Health. 2023. Statistics NZ Population Projections (2018 base). Census 2018 Deprivation Index

[2] National Collections Maternity. 2023. Qlik app.

[3] Ministry of Health. 2023. Annual Data Explorer 2022-2023. New Zealand Health Survey [Data File]. https://minhealthnz.shinyapps.io/nz-health-survey-2022-23-annual-data-explorer

[4] Ministry of Health. 2021. Regional Data Explorer 2017-2020. New Zealand Health Survey [Data File]. https://minhealthnz.shinyapps.io/nz-health-survey-2017-20-regional-update



Sarah hapū with pepi Asher born May 2023 with husband Ra and daughter Mamaya

Birthing Statistics

the wāhine we serve

YEAR 2022

2095 Māmā

29 With an average age of

824 First time māmā

1185 Māmā had previous pēpi

484	1091	85	82	118	149
Māori	NZ European	Indian	Pacific	Asian	Other

**Total figure includes homebirths in the rohe, but breakdown of statistics (ethnicity/parity) unavailable for these births.*

2120 total pēpi born

25 sets of twins

86 Pēpi born in Kōhungahunga Maternity Unit – Horowhenua

1809 Pēpi born in Palmerston North Hospital

86 Pēpi born in Te Papaioea Birthing Unit

25 Pēpi born in Dannevirke Community Hospital

28 Pēpi born in transit

86 Pēpi born at home

66%	24%	27%	8%
Vaginal Births	Induction of Labour	Caesarean Section Births	Assisted Vaginal Births

Average births per day **5.5**

With most births occuring on a morning shift

42%	9%	6.8%	11.2%
BMI over 30	BMI over 40	Diabetics	Smokers

YEAR 2023

1915 Māmā

29 With an average age of

759 First time māmā

1157 Māmā had previous pēpi

551	938	129	103	128	132
Māori	NZ European	Indian	Pacific	Asian	Other

**Total figure includes homebirths in the rohe, but breakdown of statistics (ethnicity/parity) unavailable for these births.*

1940 total pēpi born

24 sets of twins

78 Pēpi born in Kōhungahunga Maternity Unit – Horowhenua

1678 Pēpi born in Palmerston North Hospital

132 Pēpi born in Te Papaioea Birthing Unit

27 Pēpi born in Dannevirke Community Hospital

26 Pēpi born in transit

63 Pēpi born at home

65%	30%	30%	5%
Vaginal Births	Induction of Labour	Caesarean Section Births	Assisted Vaginal Births

Average births per day **5.3**

With most births occuring on a morning shift

43%	11%	10%	10%
BMI over 30	BMI over 40	Diabetics	Smokers

Our Maternity Facilities

MidCentral maternity facilities are comprised of a secondary maternity service located at Palmerston North Hospital and primary units in Horowhenua and Palmerston North. MidCentral also has a partnership with Tararua Health Group enabling the provision of a further primary birthing facility in Dannevirke.

Palmerston North Hospital

Hine te Iwaiwa - Birthing Suite

Hine te Iwaiwa provides secondary maternity care services for wāhine and whānau who experience complications that require additional support from the secondary care team, including obstetricians, paediatricians, and other specialist services. Hine te Iwaiwa | Birthing Suite also provides primary services for wāhine and their whānau who wish to birth there.

Facilities

8	Birthing rooms
1	Maimai Aroha suite (for those whānau experiencing stillbirth or neonatal death)
1	Three-bed assessment room

Te Aotūroa - Maternity Ward

Located on level two of the Women's Health Unit, this 20-bed ward provides care for wāhine with complications in pregnancy who require inpatient care, and also postnatal inpatient care for wāhine and pēpi under primary or secondary care.

A range of health professional teams including other hospital specialist services, paediatricians, social workers, acute pain service, physiotherapy, dietitians and maternal mental health services are available to provide input to the care on both wards, ensuring comprehensive and holistic care is provided.

Due to current midwifery shortages, registered nurses have been employed into midwifery positions and provide the majority of post natal care.

Facilities

20	Beds
4	Double rooms
12	Single rooms
1	Whānau room

Staffing: Across Birthing and Maternity

(Actual FTE 79.28 vs budgeted FTE 94.89)

3	Clinical midwife managers
24	Midwives
38	Active Lead Maternity Carers (LMCs) with access agreements with MidCentral
1	Specialist Nurse – Maternity
24	Nurses
4	Lactation consultants
4	Ward clerks
10	Health care assistants
7	Casual maternity care assistants
5	Obstetricians
8	Obstetric registrars
7	Senior house officers and house officers

Combined Inpatients Statistics

1809	Total births 2022
1658	Total births 2023
2.6 days	Average length of stay 2022
2.9 days	Average length of stay 2023
58	Transfers in from primary units
2419	Assessments through Antenatal Day Unit

Te Whare Poipoi - Neonatal Unit

Located adjacent to Hine te Iwaiwa, Te Whare Poipoi provides Level 2A neonatal intensive and special care to preterm and unwell term pēpi.

Facilities

5	High dependency level beds
12	Specialty care beds
4	Parentcraft rooms
1	Clinic room

Staff (29.49 employed FTE vs 32.16 budgeted FTE)

1	Charge nurse
2	Senior nurses
35	Registered nurses
1	Enrolled nurse
1	Lactation consultant
1	Administrator
4	Health care assistants

Statistics

441	Number of admissions 2022
384	Number of admissions 2023
124	Number of clinic assessments 2023
15.3 days	Average length of stay

Te Whare Tangata – Gynaecology Assessment Unit

Operating within our Women's Health Clinic, the Gynaecology Assessment Unit runs weekdays, from 8am to 4.30pm seeing wāhine with urgent gynaecological problems or complications in early pregnancy. This allows them to be diverted away from the Emergency Department. Presentations include but are not limited to miscarriages, ectopic pregnancies, hyperemesis, acute pelvic pain, dysfunctional uterine bleeding and problematic pessaries. Referrals come from both LMCs and GPs and the unit also provides follow-up care from wāhine who have previously come to the Emergency Department.

Facilities

1	Consultation room

With the ability to flex Gynaecology Clinic rooms as needed

Staff

1	Registered nurse
1	Shared administrator

Primary Care Team – Encompassing Kōhungahunga Maternity Unit, Te Papaioea Birthing Centre and MidCentral Community Midwives

Two of our midwives work across both primary units and our Community Midwifery Team can flex across areas to support continuity of service delivery.

Kōhungahunga Maternity Unit

Kōhungahunga Maternity Unit is onsite at Horowhenua Health Centre in Levin, and is approximately 50 km south of Palmerston North. The unit is staffed by an experienced midwife over each eight-hour duty, seven days per week, who work cohesively with local LMCs in supporting wāhine to birth locally. The unit also accepts postnatal transfers for wāhine to gain access to midwifery care to further support their matrescence, close to home.

A weekly obstetric-led Antenatal Clinic is held on the premises and offers outpatient appointments to wāhine to ensure ease of access with attendance, without the need to travel to Palmerston North for their specialist appointment.

Facilities

1	Dedicated birthing room with birthing pool
3	Postnatal rooms with queen beds and private ensuites

Staff (Total FTE contracted 5.69 vs budgeted FTE 6.5)

8	Permanent midwives
7	Casual midwives
5	LMCs who actively birth at Kohungahunga

Statistics

86	Total births 2022
78	Total births 2023
1.08 days	Average length of stay

Te Papaioea Birthing Centre

Te Papaioea Birthing Centre is a midwifery-led primary birthing facility offering a calm environment and accessible birthing space to low risk wāhine of our rohe. Recruitment of midwives continued over 2023 which enabled the centre to increase its staffed hours from five days a week in 2022, to six days a week in 2023. We have an ongoing commitment to become fully staffed 24 hours a day, seven days a week by the first quarter of 2024. Plans to recruit five Health Care Assistants to support our employed midwives occurred late in 2023 with a commencement date of January 2024.

Te Papaioea Birthing Centre is utilised by community groups on a regular basis. The Milk Café is a weekly two hour drop-in breastfeeding support session Wednesday 10am–12pm, facilitated by a Lactation Consultant. Whāngai Ora Milk Bank is located onsite, providing a pasteurised human donor milk service to whānau and pēpi. Keeping Babies Safe Pēpi Haumaru Nurse Coordinator utilises space at the unit by arranging distribution of wahakura, and the MidCentral Audiology Department holds a weekly hearing screening clinic, offered to recently born pēpi.

Te Papaioea Birthing Centre also acts a base to the Midwifery and Nursing Professional Support Coordinator, Specialty Clinical Nurse (Perinatal Mental Health) and the team of MidCentral Community Midwives.

Facilities

7	Rooms currently dedicated for birthing and postnatal stays, each room containing a large bath
1	Dedicated assessment room
2	Clinic rooms
3	Dedicated offices

Staff (Total FTE contracted 5.44 vs budgeted FTE 13.6)

8	Permanent midwives
2	Casual midwives
22	LMCs who actively birth at Te Papaioea

Statistics

86	Total births 2022
132	Total births 2023
0.97 days	Average length of stay

Te Rauru - Antenatal Clinic

In 2023 Te Rauru moved to its new permanent location on the ground floor at Te Papaioea Birthing Centre. The new facility has four spacious consulting rooms, including one room with cardiotocography (CTG) and scanning facilities. There is one other multi use room utilised by the Clinic Midwife, Diabetes Midwife and other multidisciplinary specialities.

We have implemented of a weekly hapū māmā vaccination service held onsite at Te Rauru Antenatal Clinic, offering wahine hapū advice and immunisation against illness such as whooping cough, influenza and COVID-19.

The Antenatal Clinics, Te Rauru and satellite clinics in Feilding, Dannevirke and Horowhenua saw wāhine for 2,934 appointments in 2023 for a variety of obstetric and medical complications.

Statistics

2934	Appointments 2023

Staff (Total FTE contracted 1.8 vs budgeted FTE 2.6)

1	Midwife
1	Casual nurse
1	Clerical administrator

Dannevirke Maternity Unit

This primary birthing facility is owned and operated by the Tararua Health Group out of Dannevirke Hospital. It provides a maternity hub for wāhine of Tararua District. Tararua Health Group employ the midwives, using the facility as their base. An obstetric-led antenatal clinic, ultrasound services, hearing screening clinic, childbirth educators and lactation consultants also use the premises to help serve the need of the surrounding community.

Facilities

1	Room dedicated to birthing
1	Clinic room
1	Room dedicated to postnatal stays
1	Assessment room that is flexed to needs

Statistics

25	Total births 2022
27	Total births 2023

Staff

5	Case loading midwives

MidCentral Community Midwives

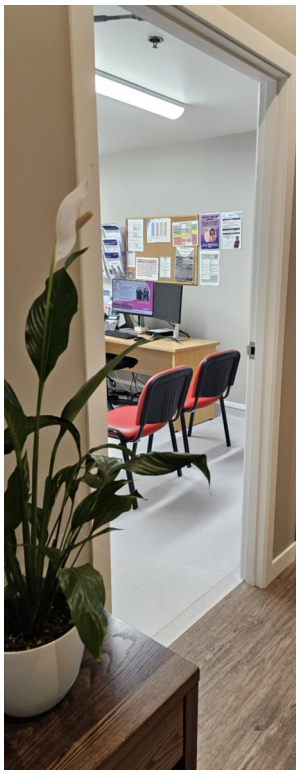
Our team of MidCentral Community Midwives provide antenatal and postnatal care to wāhine hapū with complex care requirements or whom are in a position of being unable to find a LMC midwife. The team has four midwives holding 3.0 FTE who work seven days a week, 8.00 am to 4.30 pm. They are located at Te Papaioea Birthing Centre and hold onsite antenatal clinics and provide whānau with in-home postnatal visits until pēpi is six weeks of age.

Many wāhine begin their care with our community midwives early in their first trimester by visiting Te Papaioea Birthing Centre. Early engagement in maternity services enables midwives to explain the maternity system and to support whānau to access findyourmidwife.co.nz and find a LMC midwife. It provides the opportunity to undertake a booking visit, identify any obstetric or medical complexities, and ensure timely referrals are sent to specialist services. Additionally, it invites early conversations to support decision making around first trimester screening, immunisations and smoking cessation support services.

MidCentral Community Midwives continue to see an increasing number of wāhine hapū experiencing social complexities including lack of access to transport and low levels of health literacy, which act as barriers to early engagement in pregnancy care. Home visiting supports the midwifery team to introduce the service and to understanding the barriers. Referrals to the Kaiaraara Tu Ora | Specialist Midwife Māori, along with ongoing wraparound services such as Family Start or iwi based whānau ora services, are offered once engagement occurs.

Community midwives Michaela and Rachel weaving wakakura

Te Rauru | Antenatal Clinic



Te Rauru Antenatal Clinic holds space on the ground floor of the Te Papaioea Birthing Centre and is staffed by a midwife, nurse and receptionist. Obstetricians see wāhine throughout the week in Palmerston North and run satellite clinics weekly in Feilding and Levin and fortnightly in Dannevirke.

Due to continual high volumes of referrals, we have faced significant challenges in accommodating all wāhine referred for consultation in a timely manner. A working group was established to develop and implement effective solutions. The group looked at the nature of referrals and sort advice and feedback from wāhine, LMCs and our Obstetric team. A standardised consultation letter was developed to provide standard advice covering seven low risk categories instead of in-person obstetric consultation. This initiative should see a reduction of approximately 30 per cent of in person appointments, affording valuable consultations to be prioritised and wait times minimised. In the letter wāhine are offered a face-to-face appointment if preferred.

In 2023, a drop-in hapū māmā vaccination clinic was implemented at Te Rauru and Kōhungahunga Antenatal Clinic sites, providing COVID-19, whooping cough/pertussis, and seasonal influenza immunisations. These clinics administered a total of 432 vaccinations to hapū māmā throughout the year.

Diabetes Service

The Antenatal Diabetes Clinic is run by a multidisciplinary team comprising of diabetes physicians, diabetes specialist dietitians, diabetes nurse specialists, nurse practitioners, and a diabetes specialty midwife. From mid-2023 it has been run from Te Rauru | Antenatal Clinic.

Our clinic sees all wāhine referred to their service for type 1 diabetes, type 2 diabetes, and gestational diabetes. The Diabetes and Endocrinology Service also offers multidisciplinary pre-conception clinics to wāhine with known type 1 or type 2 diabetes prior to pregnancy, to provide support with optimising modifiable risk factors and supporting safe pregnancy planning. Referrals to this service are mainly received from primary care.

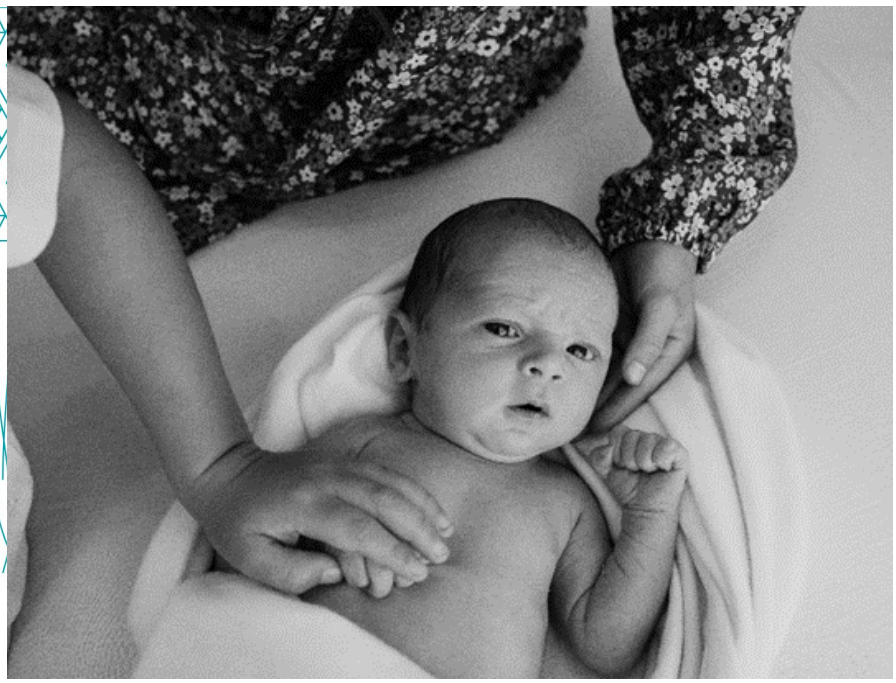
In 2023, 196 wāhine were referred to Diabetes Antenatal Clinic: 16 with type 1 diabetes, 28 with type 2 diabetes, and 153 with gestational diabetes.

Some wāhine with gestational diabetes can lower their glucose levels with nutritious eating and exercise, but most wāhine with gestational diabetes also require treatment with diabetes medicines (81 per cent required metformin and/or insulin) to safely lower glucose levels. Education is given to all hapū māmā about antenatal expressing of colostrum to help their pēpi adjust to life after birth. Advice is also provided to wāhine on how to reduce risk of developing type 2 diabetes later in life.

While wāhine with diabetes in pregnancy have a higher rate of caesarean sections and their pēpi are more likely to be admitted to Te Whare Poipoi | Neonatal Unit, most wāhine retain their LMC midwife for their pregnancy, labour and birth, and postpartum journey.

Following birth, the midwifery and nursing staff use the NOC/NEWS tool to identify and monitor at-risk pēpi. Early initiation of breastfeeding is a priority to help stabilise the blood sugars of pēpi. Together we are successful in keeping 70 per cent of pēpi born to māmā with either pre-existing or gestational diabetes with their māmā, with only 30 per cent of these pēpi admitted to Te Whare Poipoi for additional care.

In May 2023, the diabetes in pregnancy multidisciplinary team facilitated a study day for maternity staff to increase their knowledge on diabetes in pregnancy. The day covered a wide range of topics including obstetric care, management options, neonatal impacts, recent research findings and practice updates. This was attended by 22 midwives and nurses and is planned to be repeated next year.



Pepi Max born March 2023


Midwife

1

Our Workforce

Workforce

MidCentral has not been isolated from the challenges as those seen nationally and internationally. We have implemented specific measures to address recruitment, retention and safe staffing.

Recruitment

Midwifery has been showcased at the annual MidCentral Careers Day, where high school students from around the region were invited to explore careers in health. Students interested in midwifery training have further opportunities through Gateway programme placements. These students participate in both classroom teaching and practical experiences, observing staff in their daily work in Te Aotūroa | Maternity Ward and the community midwifery team.

International recruitment efforts have continued through our own initiatives and with the support of Health NZ's midwifery recruitment team. Additionally, we have focused on building and maintaining strong relationships with current midwifery students. Our Clinical Coach plays a crucial role in this, providing support throughout their education and being a contact point between the students and MidCentral. This supportive relationship extends into the Midwifery First Year of Practice (MFYP) programme, ensuring that new graduates have the guidance they need to transition smoothly into their professional roles.

Retention

MidCentral was able to achieve the continuation of the existing arrangement for a retention payment to employed midwives. This payment is part of a wider midwifery workforce retention action plan.

Our Midwifery Professional Support Programme remains active, with a senior midwife employed 0.4 full time equivalent (FTE) to coordinate the programme and to conduct support sessions for midwives who self-refer to this service. Since October 2022, this programme has been extended to include nursing staff within the service.

In 2023, the Midwifery Professional Support Programme developed a Rapid Response resource document for staff involved in critical incidents. Such incidents can deeply affect healthcare professionals' mental health, leading to burnout and high turnover. The document ensures timely crisis intervention and support for affected staff, with immediate aftercare and next-day follow-up. This support is crucial for maintaining staff wellness and resilience, which are key to staff retention and job satisfaction.

In our ongoing efforts to support professional development, four staff members attended professional supervision training. This initiative aimed to strengthen the provision of professional supervision within our maternity team, ensuring that our staff receive the support they need.
Our service continues to support staff by offering flexible rostering arrangements and streamlined processes for adjusting FTE. These measures help maintain staff wellness and resilience. It is very pleasing to note that the total midwifery FTE has stabilised, and we are looking forward to an exciting period of growth and rebuilding.

Safe Staffing

The Maternity Care Capacity Demand Management (CCDM) working group was established in March 2023. Embodying union partnership, the meetings are co-chaired by the Associate Director of Midwifery and the MERAS national co-leader. The group includes representatives from MERAS, NZNO, the CCDM Coordinator, and senior midwifery and nursing staff. The primary focus has been on ensuring the accuracy and completion of shift-by-shift acuity data. This data provides a crucial role in ensuring that staffing levels meet the needs of both patients and healthcare providers. Accurate staffing helps prevent overwhelming workloads and emotional strain among healthcare workers, leading to improved job satisfaction and retention. The most recent FTE calculations using Trendcare data were completed in 2021, and the group aims to have a year-long data set ready for new calculations by the end of 2024.

We have continued to support the rostering of registered nurses with advanced skills in emergency care and high dependency settings in Hine te Iwaiwa | Birthing Suite, to support safe care in complex medical situations and to improve patient outcomes. Low midwifery numbers have continued to require registered midwives to be prioritised to work in Hine te Iwaiwa rather than working across Hine te Iwaiwa and Te Aotūroa. Due to ongoing vacancy in our senior midwifery team, the responsibilities for coordinating Hine te Iwaiwa and Te Aotūroa are assigned to an experienced staff member when a clinical midwife manager (CMM) is not present.

With a reduced midwifery presence in Te Aotūroa, we have employed a CMM for the Monday to Friday morning shifts to provide senior midwifery oversight. This ensures consistent leadership and support during these crucial hours, enhancing the ward's efficiency and care quality. A Specialty Clinical Nurse was also utilised to upskill nurses in maternity care and support them with enhanced education.

Employee Engagement

Our participation in the national Pulse survey for Health NZ has provided valuable insights into our staff culture, organisational support, and safety practices. The feedback from our kaimahi has been invaluable in shaping our approach to these critical areas.

At MidCentral, we prioritise safety and professional growth through several key initiatives. One of our cornerstone programmes is the "Speaking up for Safety" initiative, which allows staff to anonymously report safety concerns through the intranet. This programme empowers all employees to voice their concerns without fear of retribution, fostering a culture of transparency and safety.

Professional meetings for our nursing workforce, led by the Associate Director of Nursing for Te Uru Pā Harakeke, provide a platform for discussing professional issues and connecting with the wider organisational nursing team. These forums are essential for fostering a sense of community and shared purpose among our nursing staff.

LMC and Stakeholder Engagement

Throughout 2023, we faced challenges in maintaining high levels of engagement with Lead Maternity Carer (LMC) colleagues at access holder meetings, as attendance significantly declined. Despite our efforts to re-establish these meetings, success has been limited. As a result, creating regular forums for the service to meet with LMC colleagues remains an area for development.

To keep LMCs informed, we circulate the regular maternity newsletter to all midwifery, nursing, obstetric staff, and LMCs. This newsletter provides updates, feedback, and service-specific information, ensuring everyone stays connected and informed.

We have seen a high level of interest and engagement from our wider colleagues, including LMCs and other stakeholders such as Muaūpoko Tribal Authority, Raukawa, Community Birth Services, Barnardos and Parent's Centre. Focused meetings have been held to promote primary birthing and increase occupancy at both Te Papaioea Birthing Centre and Kōhungahunga Maternity Unit, signifying our collaborative efforts.

Additionally, there is strong engagement from LMCs in the monthly Perinatal Mortality meetings. These meetings are crucial for discussing and addressing perinatal mortality, ensuring continuous improvement in our services.

^ Te Rauru opening and blessing March 2023

> Charge Nurse Melissa with pepi in Te Whare Poipoi

Kaiaraara Tū Ora | Specialist Midwife Māori

Kō Tapuae-o-Uenuku te Maunga,
Kō Kurahaupō te Waka,
Kō Te Hora te Marae,
Kō Te Hoiere te Awa,
Kō Ngaī Tara, Rangitāne ki Wairau te iwi
Kō Ngāti Kuia, Ngāti Apa ki te rā tō te Hapu,
Kō Julie Renwick tōku ingoa

As Kaiaraara Tu Ora my aim is to facilitate and support seamless pathways for whānau through hospital services, and back out to the community. The desire is to achieve meaningful engagement of whānau Māori to improve outcomes for hapū māmā and whānau.

The benefit of my role is my ability to afford whānau, and kaimahi Māori my time. Whānau are encouraged to share their whakaaro and kōrero into their care plans. To manaakitanga kaimahi and whānau with the intention to achieve mauri ora. I engage with networks and agencies in the community and have memberships to specific organisations to keep my knowledge and education relevant. I also attend various multidisciplinary teams to invest a cultural lens within our mahi space and I am working towards ensuring our workflows and guidelines include a Māori lens.

We have been successful with supporting traditional Māori birth practises into operating theatres, such as karanga, karakia and oriori. Feedback from whānau has been overwhelmingly positive. One māmā, who was very fearful about her elective caesarean due to historical whānau trauma, shared that these practices embodied her mana motuhake. They embraced her mātauranga Māori by acknowledging her personal rangahau, allowing me to kaitiaki this whānau on their journey.

Within Māori culture, interactions tend to be verbal or kanohi ki te kanohi, something our feedback system is not designed to capture. Looking forward to 2024, I am exploring other ways of capturing vital feedback from whānau Māori that embraces verbal communication methods rather than written.

An observation I have made from within my role is that there continues to remain mistrust for whānau entering our system, and a mistrust of the system towards whānau Māori. It takes a lot of courage for Māori to practice mana motuhake in a non-Māori environment, for both kaimahi and whānau. With a focus towards mātauranga Māori, there needs to be more progression within our system to encompass and understand this, both within our care models and with whānau Māori interactions.

Institutional racism is an ongoing battle that we continue to address. Whether it affects staff or consumers, it is something that is regularly recognised. Although we have mandatory education, such as Te Tiriti o Waitangi and Te Kākano, it is ultimately up to the attendees to incorporate this knowledge into their practice. This is where there are discrepancies in 'what they know or learn', and 'what they do'. For a portion of 2023 we had no kaimahi Māori sitting within our top management level, which resulted in leaning heavily on the Pae Ora Paiaka Whaiora Hauora Māori team, for support.

The aim for this role is to continue to work alongside whānau Māori, practicing the principle of whakawhanake | development from a decolonising perspective. By supporting kaimahi Māori and Lead Maternity Carers, we strive to provide care that upholds mana. Additionally, we aim to broaden knowledge and understanding of our core values: tika | integrity, pono | respect and aroha | compassion.

Education

In 2023, we focused on clinical skills and cultural education for our maternity staff. Supported by our Midwife Educator, Midwife Clinical Coach, and Specialty Clinical Nurse, we have made strides in delivering comprehensive and engaging education to ensure our staff are well-prepared to provide exceptional care.

Midwifery Emergency Skills Refresher (MESR)

We held eight Midwifery Emergency Skills Refresher (MESR) days in 2023. With content prescribed by Te Tatau o te Whare Kahu | Midwifery Council, this one-day course covers newborn life support, adult life support, as well as a range of obstetric emergencies. This is mandatory education for all midwives, ensuring they are up to date for their annual practising certificate. The content is presented in a mix of lecture style, hands-on skills, and informal teaching.

Newborn Life Support (NLS)

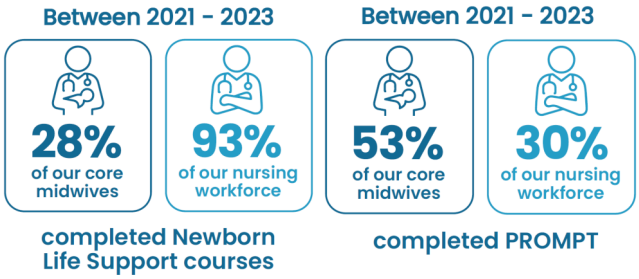
Newborn Life Support Immediate and Advanced courses have a syllabus prescribed by Whakahoura Aotearoa | New Zealand Resuscitation Council. NLS Immediate is for clinicians who manage the early stages of resuscitation events in the newborn, while NLS Advanced is for advanced rescuers who are expected to manage and supervise resuscitation events. This is multi-disciplinary, scenario-based training day, facilitated by a team of instructors with midwifery and neonatal nursing backgrounds.

In 2023, five NLS Advanced courses and three NLS Immediate were held. These were attended by anaesthetic, obstetric, neonatal, and maternity staff. NLS is mandatory education for all our staff working in neonatal and maternity spaces.

Practical Obstetric Multi-Professional Training (PROMPT)

Maternity staff are encouraged to attend PROMPT, a multi-disciplinary scenario-based education day held in their work environment. Professionals from obstetrics, midwifery, anaesthetics, and nursing attend, fostering teamwork and communication.

Four PROMPT days were held in 2023, with attendees reporting they "*have more confidence in emergency situations*" and that the day is "*educational and a judgement-free environment*" with a "*focus on the team and our systems, not on individual performance*".



Maternity Nurses Skills Day

In 2023, we introduced the Maternity Nurses Skills Day to support our growing nursing workforce. The course revisited foundations of physiological changes during and after pregnancy, the newborn's transition to extrauterine life, and linked these to daily postnatal checks of māmā and pēpi. It also included obstetric and neonatal emergencies, breastfeeding and maternal mental health. The diverse and relevant content facilitated discussions in a safe environment. All maternity nurses attended. For 2024, we plan to explore specific areas of maternity care such as wound care, bladder care, and cultural support for whānau.

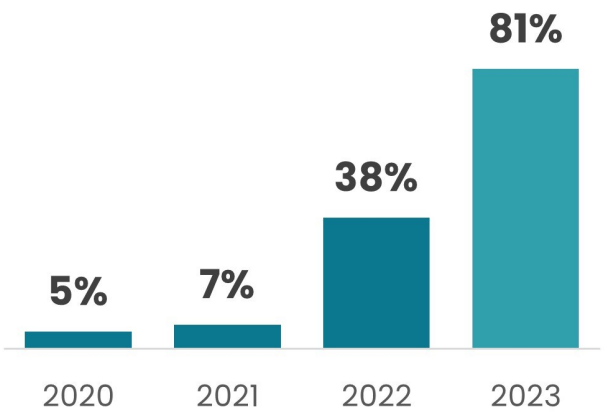
Fetal Surveillance Education Programme (FSEP)

The Fetal Surveillance Education Programme (FSEP) is facilitated by the Royal Australian and New Zealand College of Obstetricians and Gynaecologists (RANZCOG). The day focuses on improving clinicians' knowledge of fetal and utero -placental physiology in interpreting fetal heart rate patterns. Held annually, it is attended by midwives (core and LMC) and our obstetric team. We also collaborate regionally to maximise educational opportunities for our staff. Employed midwives must to attend every two years, with 93 per cent per cent compliance in 2023. The focus for the next year is to ensure new staff and those working in primary facilities complete the course. Obstetric registrars and consultants are also expected to stay up current with FSEP training.

Cultural Education

Cultural education has been a priority in 2023. All employed maternity staff are to complete a two-day Te Tiriti o Waitangi, equity, and health workshop, ideally upon employment. This covers determinants of good health/Te Whare Tapa Whā, the colonisation process and its impacts, and Te Tiriti responses in the health sector. Following this, staff are required to attend Te Kākano, which can be completed as a full-day course or four separate sessions. Te Kākano covers an introduction to Te Reo Māori, including greetings, phrases, and tikanga practices. Thirteen maternity nurses and midwives attended the full-day course in 2023.

Workforce (midwifery and nursing) that have completed Te Tiriti o Waitangi



Homebirth workshop, 2023

Obstetric doctors in the Royal Australian and New Zealand Obstetrics and Gynaecology (RANZCOG) training programme also participate in cultural education delivered in conjunction with The University of Otago. An obstetric-specific course focuses on instilling confidence in applying Hauora Māori competencies, with a particular emphasis on the Hui Process and Meihana Model.

Mokopuna Ora, a collective in the MidCentral rohe, supports whānau health and wellbeing through culturally responsive initiatives. They create spaces for health professionals to engage in kaupapa Māori approaches, learning alongside whānau in weaving wahakura. In 2023, five wahakura wānanga were held, where health professionals and whānau came together over a weekend to weave wahakura. Nine staff members from MidCentral attended these sessions. Health practitioners appreciated the opportunity to work with whānau and weavers, in an informal setting where information could be shared, and community connections fostered.

Other Education

Alongside our core programmes, we offered specialist courses such as a perineum and suturing workshop, diabetes in pregnancy education day, and breastfeeding study days. Additionally, a homebirth workshop facilitated by Claire Eccleston supported confidence in homebirth and was attended by 26 participants including midwives, student midwives, childbirth educators, and doulas.

As we look forward to 2024, we remain dedicated to expanding and improving our training programmes to meet the evolving needs of our workforce and community.

Lactation Services and Initiatives

Our lactation service aims to help parents reach their feeding goals and equip staff with the skills to protect, promote and support breastfeeding.

Lactation consultants are available seven days a week and are based in three different areas.

Maternity Ward

Lactation consultants based in Te Aotūroa | Maternity Ward not only support wāhine and pēpi across the service but also are available for wāhine admitted to other wards of the hospital or those staying at Te Papaioea Birthing Centre. Their specialised skill assists those whānau with additional feeding challenges, ideally with midwifery/nursing staff present, so they too can upskill and learn techniques to help those under their care in the future.

Child Health

A dedicated lactation consultant works within Child Health, with a focus on supporting staff and māmā of unwell or premature pēpi in Te Whare Poipoi | Neonatal Unit, the Children's Ward, Children's Assessment Unit and the Paediatric Homecare Team. This role enables consistent specialised lactation support to our most vulnerable pēpi.

Community

Prior to April 2023, community lactation support was provided by Community Birth Services (CBS). After CBS ended their contract, an interim plan was developed to ensure continual community breastfeeding support while new models were explored. This presented an opportunity to work in consultation with stakeholders and consumers to better align community breastfeeding support with the needs of the community and priorities within Te Pae Tata. Additionally, community engagement from MidCentral's Tūngia Te Ururua Pregnancy and Birthing Report (2021) indicated a need to explore new models. An interim community lactation service completed home visits and held clinics at Te Papaioea Birthing Centre, West End Plunket Rooms, and at Kōhungahunga Maternity Unit. Two lactation consultants were given a temporary FTE increase to cover this and two further lactation consultants were used as contactors. In 2023, the interim service saw an average of 59 referrals per month and received positive feedback.

Ally with BFHI coordinator and Lactation Consultant Michelle
Photo credit: A Light Beheld

In November 2023, Pae Ora gifted a Te Reo name to the Lactation Consultants – Puna Rauhī Whāngai Ūkaipō. We were honoured to receive this ātaahua name and a ceremony was held to present this to the lactation consultants during the Palmerston North Hospital Baby Friendly Hospital Initiative (BFHI) audit.

Milk Café, drop in feeding support hosted by a lactation consultant at Te Papaioea Birthing Centre each Wednesday 10am—12pm

The Baby Friendly Hospital Initiative (BFHI)

Alongside clinical duties, our lactation consultants ensure that we have evidence-based pēpi feeding policies and maintain quality improvement strategies such as auditing and reporting statistical trends. Areas of focus have included,

Rates and indications for donor milk.

Ethnicity trends and exclusive breastfeeding rates for Māori and Indian māmā.

Nipple shield use within the hospital.

BFHI is a key quality improvement tool that supports pēpi, māmā and whānau to achieve their feeding goals. Through BFHI, MidCentral has built a solid foundation that protects, promotes, and supports breastfeeding in our rohe. This work is aligned to the National Breastfeeding Strategy, Outcome 4: All maternity facilities achieve and maintain BFHI accreditation.

Te Papaioea Birthing Centre achieved BFHI accreditation in November 2023, followed by Palmerston North Hospital in March 2024. The New Zealand Breastfeeding Alliance (NZBA) provided positive feedback, highlighting our exclusive breastfeeding rate of 81.8 per cent at discharge in 2023, a significant increase from 67.4 per cent in 2019 and well above the national average of 77.1 per cent. A major contributor to our success is the pasteurised donor milk provided to our pēpi by Whāngai Ora Milk Bank.

Our breastfeeding rates at discharge from hospital, two weeks, six weeks and three months continue to sit above the national average. However, there are large ethnic differences which we continue to monitor. For example, our exclusive breastfeeding rate at discharge for Māori māmā sits at 82.71 per cent, while Indian māmā have a much lower rate of 67.7 per cent. To bridge these gaps, our staff education days include a significant focus on cultural awareness.

Education

For BFHI recertification all staff who interact with whānau in the maternity space must undergo breastfeeding education. Staff education requirements differ according to their specific role to ensure that all staff are adequately prepared to support māmā. Staff who provide direct breastfeeding support such as midwives and nurses require at least four hours of ongoing education annually. Other health professionals receive role specific in-person training.

In 2023, core midwives and maternity nurses completed a total 611 breastfeeding education hours (including 45 hours of Māori specific and 135 hours of clinical breastfeeding education).

Breastfeeding study day topics for 2023 have included:

- The non-latching pēpi
- Flange fit
- The new mastitis spectrum
- Evidence based management of delayed lactogenesis II
- Cultural responsiveness when supporting whānau Māori and breastfeeding
- Cultural support for Colombian and Venezuelan whānau
- Cultural considerations relating to donor milk
- Feeding reflexes and positioning for optimal feeding development

MidCentral also partnered with Raukawa Whānau Ora who received funding from Te Aka Whai Ora to train two Māori lactation consultants. Only one role was able to be filled, and we continue to support them to complete their 500 clinical hours needed before qualification.


Midwife
Daphne
Midwife

2

The Maternity *Quality and Safety* Programme (MQSP)

Quality and Safety Structure

The New Zealand Maternity Standards provide a robust framework for delivering high-quality, consistent maternity care. These standards, along with the Maternity Action Plan and the Kahu Taurima programme, ensure equitable access to comprehensive care for all māmā and pēpi and align with the overarching goals of the Government's Child and Youth Wellbeing Strategy. By integrating these, we aim to continuously improve maternal and infant health outcomes, ensuring that all wāhine receive the support they need during pregnancy and childbirth.

Our quality assurance framework is supported by multiple committees, forums, and roles dedicated to quality, risk management, and safety. Innovation, continuous improvement, and excellence are key areas of focus. MidCentral's quality assurance activities include measuring, reporting, and improving our unit's care and outcomes against key performance indicators and clinical indicators. We ensure controlled documents are current and manage certification and audit processes. We maintain a strong focus on optimising patient safety, particularly when reviewing adverse events and debriefing with wāhine and whānau.

A central aspect of our work in quality and safety is the continuous audit of labour and birth events and outcomes, enabling us to report on up-to-date data. This audit uses a reporting mechanism in BadgerNet, our clinical information system, combined with the manual auditing of all notes to produce a comprehensive spreadsheet used in various quality activities. We use of the Ten Group Classification System (Robson Groups) as recommended by the World Health Organization and have been a leader in New Zealand for reporting our data in this manner.

MidCentral is committed to the national MQSP which, as well as working on local and national quality improvements, provides a mechanism to monitor maternity services and brings together voices of consumers and the wider maternity sector.

Groups

Te Uru Pā Harakeke Governance Group

This group provides business leadership for the directorate, overseeing service provision and strategic workforce planning. The group oversees risk management across the service and works to achieve financial accountability and responsibility. They provide a quality lens over all elements of service provision and report to the organisation leadership team.

Women's Health Quality and Safety Group

The group meets bi-monthly, alternating with the Gynaecology Health Quality and Safety Group, both aiming to ensure safe, effective, and sustainable health services for wāhine. They promote a culturally responsive workforce and implements He Korowai Oranga. Multidisciplinary members, including our consumer liaison, oversee quality initiatives and integrate consumer voices into service planning and delivery. The group also acts as MQSP governance.

Perinatal Case Review Meetings

Facilitated by the Perinatal Midwife, these monthly meetings involve a multidisciplinary team reviewing cases with poor outcomes to provides learning opportunities and insights for whānau, including recommendations for future pregnancies. Two to three cases are presented each month. In 2024, quieter months will include additional education from the pathologist and learnings from SAC 1 and 2 cases.

Guidelines Group

This monthly forum, led by MQSP coordinators, reviews and updates our controlled documents. Attended by midwives and obstetricians, it ensures a multidisciplinary review before wider consultation. The forum uses the Health Equity Assessment (HEAT) tool to prioritize equity. In 2023, over 50 documents were revised, created or made obsolete.

Consumer Liaison

Tēnā koutou katoa,
Ko Deb Walker tōku ingoa,
He tangata tiriti au.
E noho ana au, me tōku whānau, ki Rongotea ināianei.

Hello! My name is Deb Walker, and I am tangata tiriti. I live in Rongotea with my whānau.

I am privileged to represent the voices of consumers throughout the region. My focus is on advocating for whānau-centred care, ensuring that every māmā and pēpi start their journey together under optimal conditions. In my capacity, I support Te Uru Pā Harakeke in developing environments, policies, and procedures that effectively serve our whānau through informed consumer feedback.

Since assuming this role in October 2023, I have built relationships with consumers, childbirth educators, and community organisations such as Mokopuna Ora and THINK Hauora. I have also collaborated closely with Well Child Providers, RIMA Support, He Whare Manaaki Tangata in Horowhenua, rural support services, and social services. During this time, I have familiarised myself with existing feedback mechanisms and forged strong partnerships with colleagues.

I have actively gathered consumer feedback through various channels, including surveying, referrals and conversations with whānau both immediately post-birth and after discharge. Looking ahead to 2024, I plan to conduct focus groups to delve deeper into specific aspects of maternity care. This will help us address the unique needs and preferences of our community, enhance the quality of care provided, and foster a supportive environment for all.

The ongoing relationships with both consumers and professionals who have welcomed me are deeply valued and sincere appreciation goes to those who have shared their experiences with me.

One of my key focuses has been exploring how our service engages with wāhine under 20 years of age. I will often visit younger māmā in Te Aōturua | Maternity Ward, offering a friendly, non-clinical presence for them to discuss their experiences. I have also built relationships with He Whare Manaaki Tangata in Horowhenua. This facility accommodates 35 students at poipoia | school and 30 children at arohanui | kindergarten, with separate but closely collaborating areas. In addition to whakawhanaungatanga we discussed the various services available to help support them and their whānau.

I plan to continue to discuss maternity experiences with the students and feedback insights to enhance culturally responsive care, improve outcomes, and increase engagement. An introductory meeting with Whakatipuria, another teen

Deb with her tamariki

parent unit that is based in Palmerston North, is scheduled for February 2024.

Wider consumer feedback has indicated overall satisfaction among wāhine regarding breastfeeding support and the Mahi Tahi programme, which encourages support persons to remain with and help māma and pēpi. There has also been good feedback on the information provided during newborn metabolic and hearing screening. Additionally, feedback concerning Te Papaioea Birthing Centre and Kōhungahunga Birthing Unit has been overwhelmingly positive among whānau who have utilised these facilities.

Areas identified for improvement include enhancing our current maternity experience survey to increase engagement, publicising the options for feedback on the maternity service, optimising the Whānau Room in Te Aōturoa, and raising awareness about appropriate birth locations and available community services.

Annual Report Day 2021-2022

An annual report day was organised to reflect and celebrate the past two years of hard work in the maternity sector. Fifty-five key stakeholders, including midwifery, obstetric and nursing staff, LMCs, childbirth educators, kaimahi from iwi providers, and other primary health leaders from Manawatū, attended the event.

The day began with a pōwhiri facilitated by Pae Ora Paiaka Whaiora, Pou Tikanga Fiona Hunter, Pou Tikanga Matua Huataki Whareaitu and Pou Tikanga Matua Reweti Arapere. The morning sessions featured authors of the 2021-2022 Annual Maternity Report discussing services, such as Baby Friendly Hospital Initiative (BFHI), Maternal Mental Health, Pēpi Haumaru – Safe Sleep, and the Te Whatu Ora Violence Intervention Programme. Presentations were also given by Associate Director of Midwifery Jennifer Green on workforce and staffing, and Medical Lead Dr Per Kempe on the continuous audit of labour and birth.

Dr Kasey Tawhara, Ngati Raukawa ki te tonga, Te Arawa, Ngati Ruanui, Ngati Porou, Obstetrician and Gynaecologist with Te Whatu Ora Lakes; and Norma Campbell, Executive Director of Midwifery and Maternity for Te Whatu Ora Waitaha and Te Tai o Poutini reviewed and critiqued the report, providing valuable insights and challenges for the future. The second half focused on creating a shared vision for the maternity service and included team-building exercises for staff and stakeholders working with Te Uru Pā Harakeke.

Associate Director of Midwifery—Jen Green

Implementation of National Guidelines

Diagnosis and Treatment of Hypertension and Pre-eclampsia in Pregnancy in Aotearoa New Zealand

Diagnosis and Treatment of Hypertension and Pre-eclampsia in Pregnancy in Aotearoa New Zealand Released nationally in October 2022 and locally implemented in January 2023, the implementation led to two significant practice changes. First, the adoption of pre-made magnesium sulfate bags eliminated the need for manually preparing the bolus and infusion, reducing time and potential medication errors. Second, the creation of a hypertension emergency grab-box, which includes medications, consumables and how-to guides for hypertensive emergencies. This has streamlined the process and saves valuable time in emergency situations.

Referral Guidelines

The updated Guidelines for Consultation with Obstetric and Related Medical Services (Referral Guidelines) were well socialised both nationally and regionally. Previously, MidCentral had a local implementation guideline. A focus group of obstetricians and midwives decided to refer to the national document rather than updating the local version, ensuring consistency and clarity.

Additionally, we updated how obstetric referrals were entered into our patient management system, WebPAS. Previously referral reasons in WebPAS were set to mirror the codes within the Referral Guidelines. However, WebPAS only allowed the selection of one reason which was problematic as wāhine often had multiple or changing reasons for referral, leading to a misleading data set. The process has now been simplified, improving administrative efficiency and data accuracy.

National Consensus Guideline for Treatment of Postpartum Haemorrhage

A multidisciplinary group, including midwifery, obstetrics, and anaesthetics professionals, reviewed the national guideline to ensure effective local implementation. Two distinct workflows were developed.

1. **Primary Birthing Centres:** focusing on early identification and management of PPH, ensuring that staff are trained and equipped to handle such emergencies promptly.
2. **Secondary Services:** includes more advanced interventions and coordination with other departments, such as blood bank and intensive care unit, to manage severe cases of PPH.

By creating these tailored workflows, the working group aims to ensure that all healthcare providers, regardless of their setting, could effectively manage PPH according to the updated national guidelines. This approach helps standardise care and improve outcomes for wāhine experiencing PPH. The finalisation of these workflows is planned for 2024, following consultation with our pharmacist as well as the wider midwifery and obstetric teams.

Small for Gestational Age / Fetal Growth Restriction Guidelines

The implementation of this guideline within the MidCentral region has made notable progress. They have been socialised among midwives, obstetricians, and sonographers. Across the region, practitioners seem to be aware of and generally following ultrasound scanning recommendations. Other recommendations have been incorporated into MidCentral guidelines and protocols as they are updated. The use of GROW charts and the definitions of fetal growth restriction (FGR), small for gestational age (SGA) and slowing growth are already in place, reflecting a strong foundation in routine practices and awareness among midwives. Other routine practices include promoting healthy weight, exercise, folic acid intake, smoking and drug cessation, and aspirin for those at risk.

Neonatal recommendations are not as well implemented but remain on our action plan. Standard practice includes calculating a birthweight centile for all pēpi, but we are not yet fully assessing neonates suspected of FGR according to the guidelines, which recommend z-scoring and considering all maternal risk factors. Establishing standardised care pathways with our paediatric team will be crucial to ensure reviews for pēpi under the third centile and that first-line neonatal investigations are conducted.

FGR babies are monitored using the Newborn Observation Chart/Newborn Early Warning Score (NOC/NEWS), and screening for hypoglycaemia occurs in all pēpi under the tenth centile. However, we are likely not capturing pēpi that meet the FGR diagnosis but are above the tenth customised centile, as no additional monitoring is conducted unless directed by the clinician. Future work needs to consider how to ensure this isn't missed, possibly through modifications within the NOC/NEWS chart. Barriers to neonatal management include the lack of national integration within NOC/NEWS paper chart and subsequently the electronic chart within BadgerNet. We have raised these issues at the national NOC/NEWS working group and BadgerNet forums. Given the complexity of these tools as standalone systems, incorporating the recommendations needs to be intuitive to ensure ease of use for practitioners.

Discussion document: National guidelines for newborn pulse oximetry screening

Although pulse oximetry screening wasn't published as a national guideline in 2023, we explored its clinical benefits and began planning for implementation. Our approach aimed to ensure equitable access to screening, including pēpi born at primary facilities and at home. The project is scheduled to commence in 2024.

Regional Collaboration

The MQSP Coordinators have focused on regional collaboration with other MQSP Coordinators from the Central Region. Quarterly workshops were hosted by each region and served as an opportunity to collaborate on projects. Two projects resulting from these workshops were the Pēpe Ora website and a documentary project with a focus on homebirth.

The Pēpe Ora website had already been created in the Wairarapa and Capital Coast and Hutt Valley rohe, after being conceptualised in the Wairarapa in 2017. The website hosts information for a wide range of services available to wāhine hapū and whānau in their rohe. The site is created around Te Whare Tapa Whā, with services categorised under the titles *Taha Wairua*, *Taha Tinana*, Taha *Hinengaro* and *Taha Whānau*. In 2024, MidCentral plans to work on gathering this information for our rohe to enable a MidCentral Pēpe Ora website.

The homebirth documentary was spearheaded by Capital Coast and Hutt Valley who saw an opportunity to create a meaningful documentary promoting home as a safe place to give birth for low risk wāhine hapū and whānau. MidCentral supported this endeavour as a regional project.

Equitable Access to Ultrasounds

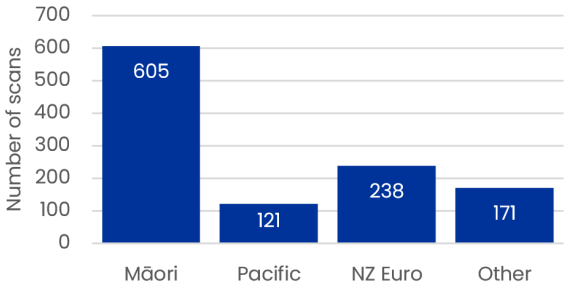
In 2023, MidCentral continued to address the significant barriers to accessing maternity ultrasounds, particularly for hapū māmā who are Māori, Pacific, or hold a community services card. Recognising the financial burden posed by co-payments, an interim subsidy programme was introduced until a nationally consistent approach was found. This allowed eligible hapū māmā to access free scanning at Pacific Radiology from 22 May 2023 and Broadway Radiology from 1 June 2023.

The need for this subsidy arose due to the introduction of copayments by local private providers in 2021, which created a significant barrier for many hapū māmā. This financial burden, coupled with increased demand for scans, particularly following the introduction of the GAP programme and Small for Gestational Age/Fetal Growth Restriction Guidelines, exacerbated inequities in access to essential maternity care.

Subsidising ultrasound copayments represented a substantial investment aimed at mitigating the financial barriers identified by local lead maternity carers (LMCs), midwives, and obstetricians. The Clinical Services Plan for Radiology, which aims to improve access and quality of radiology services, also highlighted that financial barriers to accessing maternal ultrasounds pose a preventable risk to the health outcomes of māma and pēpi. Addressing preventable inequity is a key theme in Te Pae Tata, to be tackled nationally through the Kahu Taurima programme.

Despite these efforts, challenges remain. Limited capacity from sonographers and private providers' unwillingness to scan individuals from outside the region continue to hinder access. To alleviate these issues, information was circulated to all midwives and obstetricians about alternative ultrasound providers bordering the district. Additionally, clinicians were advised to avoid non-essential dating scans to ensure availability for those with clinical needs.

Scans with co-payments subsidised by MidCentral in 2023 broken down by ethnicity



The First 1000 Days Strategy

The development of the First 1000 Days Strategy has been a collaborative effort, demonstrating our commitment to enhancing the health and wellbeing of pēpi and whānau in our rohe. Set for publication in early 2024, this strategy marks a significant step towards ensuring every child in our community has the best start in life.

Community Engagement and Insight Gathering

Our journey began with extensive community engagement, recognising that the voices and experiences of whānau are crucial in shaping effective and responsive services. Since 2020, MidCentral has conducted numerous consultations and workshops across the rohe, involving a diverse range of stakeholders, including parents, caregivers, healthcare providers, and community leaders. These engagements have deepened our understanding of whānau experiences during the first 1000 days. This process produced two insightful reports, Tūngia te Ururua 2021 (Horowhenua, Ōtaki, and Tararua) and Tūngia te Ururua 2022 (Manawatū and Te Papaioea), which have provided a solid foundation for developing an evidence-based and community-driven strategy.

Developing Locality Strategies

In 2023, we focused on developing a district-wide strategy featuring tailored locality strategies. Recognising that each community has its own unique needs and priorities, we worked closely with local stakeholders to draft strategies that reflect these specific contexts. These draft strategies were finalised and endorsed, ensuring they reflect the specific needs and aspirations of each community. The insights and recommendations from Tūngia te Ururua 2021 and Tūngia te Ururua 2022 were thematically analysed and integrated into a comprehensive strategy document, which will guide our efforts to improve outcomes for pēpi and whānau. This approach ensures that our overall strategy is both comprehensive and inclusive.

Prioritising Key Areas

The strategy development process also involved identifying and prioritising key areas that would have the most significant impact on the health and wellbeing of pēpi and whānau.

1. **Collaborative Networks:** Encouraging services to work together to provide seamless and coordinated care.
2. **Whānau-Centric Services:** Ensuring that services are centred around the needs and aspirations of whānau.
3. **Wrap-Around Care:** Providing comprehensive support to address all aspects of wellbeing.
4. **Culturally Responsive Care:** Ensuring services are respectful and effective for all cultural groups, particularly Māori and Pacific.
5. **Knowledge of Services:** Enhancing awareness and accessibility of available services.

Innovative Initiatives and Strategic Shifts

Throughout 2023, we also encouraged the development of innovative initiatives to address the unique needs of our region. By fostering a culture of innovation and collaboration, we aimed to create connected services capable of providing the best start in life for every pēpi born into the MidCentral rohe.

As we look forward to the formal publication of the First 1000 Days Strategy in early 2024, we remain committed to our vision of a healthier future for our pēpi and whānau. This strategy is not just a document; it is a testament to the power of community engagement, collaboration, and a shared commitment to improving the lives of our youngest and most vulnerable members.

We are excited about the journey ahead and the positive impact this strategy will have on the health and wellbeing of pēpi and whānau in our rohe. Together, we can ensure that every child has the strongest start to life, supported by a network of caring and connected services.

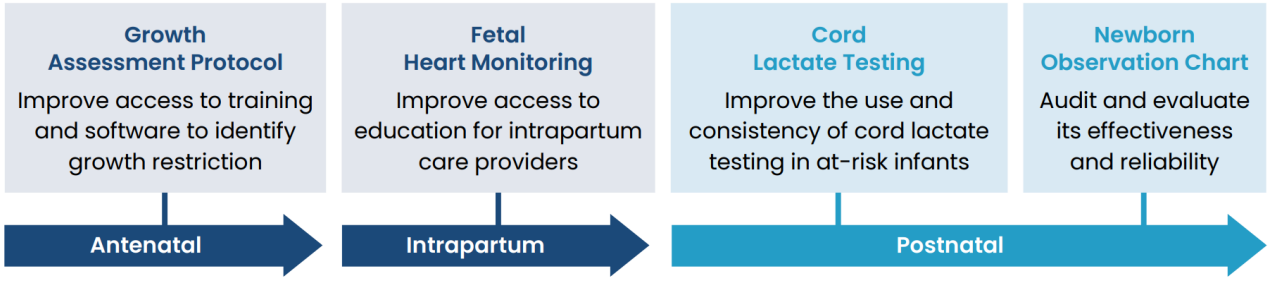
Neonatal Encephalopathy Taskforce Projects

Neonatal Encephalopathy (NE) is a syndrome characterised by abnormal neurological function in newborns during the first few days of life in pēpi born from 35 weeks' gestation.

The condition often results from insufficient oxygen to the pēpi at some point during pregnancy or birth. Long term effects can include severe intellectual impairment, cerebral palsy, hearing and visual impairments and epilepsy. Immediate medical attention is crucial for proper management and treatment to reduce brain damage, improve survival, and decrease future disability.

In 2015, ACC (Accident Compensation Corporation) convened a multidisciplinary taskforce with the aim of reducing the incidence and impact of NE. This was disestablished June 2023.

The taskforce's prevention programme was focused on four priority areas:



Te Whare Poipoi kaimahi

Growth Assessment Protocol

Business as Usual

The Growth Assessment Protocol (GAP) is an internationally recognised programme designed to enhance safety in maternity care and improve pregnancy outcomes. Its primary focus is on improving antenatal recognition of pregnancies at risk due to fetal growth restriction.

There are four main elements to this programme:

- Training and accreditation of all staff involved in clinical care.
- Adoption of evidence-based care pathways and risk assessment algorithms.
- Implantation of customised GROW (Gestation Related Optimal Weight) chart and audit.
- Rolling audit and benchmarking of performance.

Our GAP Lead collaborates with the National GAP team to support local practice of the GAP programme and completes quarterly audits.

In December 2023 we changed from GROW 1.5 to 2.0 software which provides greater functionality. One of the main advantages we have found is that the chart is now centralised on the GROW web-based system and accessible via interfacing with BadgerNet, our maternity clinical information system. Chart centralisation allows us to see fundal heights and ultrasounds plotted by users in other clinical information systems. GROW 2.0 also allows us to plot twins.

Until the change to GROW 2.0, all pregnancies had a GROW chart completed that sat within the BadgerNet clinical record. After the change the number of pregnancies with GROW charts decreased slightly due to mandatory consent fields that needed completion prior to chart generation. There were many system issues encountered with the transition that affected accessibility of charts and centiles which have subsequently been resolved.

In 2023,

- 14.5 per cent of pēpi born in MidCentral facilities were small for gestational age (SGA) and under the tenth centile. This has increased from 13.4 per cent in 2022 but remains close to the national average of 14.3 per cent.
- 6 per cent of pēpi were under the third centile.
- 55 per cent of SGA pregnancies were referred for obstetric consultation (compared to 47 per cent in 2022). This is higher than the national average of 45 per cent.
- We has a 44 per cent antenatal detection rate for SGA (an increase from 35.4 per cent in 2022).
- Our false positive detection rate of 6.6 per cent sits slightly above the national average of 5.2 per cent.
- While our detection rates for SGA babies are improving, we still experience a significantly higher false positive referral rate of 20 per cent, compared to the national average of 8 per cent. This high percentage is likely due to incorrect data entry by clinicians when answering risk assessment questions at the time of birth.

Fetal Heart Rate Monitoring

Business as Usual

Each year MidCentral hosts The Royal Australian and New Zealand College of Obstetricians and Gynaecologists (RANZCOG) Fetal Surveillance Education Programme (FSEP). FSEP is focussed on improving practitioners' knowledge of fetal and utero-placental physiology in interpreting fetal heart rate patterns. It continues to be a priority that all staff midwives and obstetricians regularly attend and is thus viewed as mandatory education. We have also ensured free access for all maternity care providers within the community.

FSEP training

"Elizabeth and I had a bit of a journey last year. I was admitted to Palmerston North Maternity Ward after it was discovered that she had stopped growing at around 28 weeks. I stayed with the amazing team on maternity for three and half weeks under their constant monitoring until it was decided I should have a c section. Elizabeth was born on 7 November weighing 1.5kg. We then transferred to the amazing neonates team care for another four weeks before finally being discharged home. My family is just so grateful to the wonderful teams for all the care we received from them."

— Hannah Wood

Cord Lactate Testing

Business as Usual

Paired cord gas sampling is a practical and objective measurement of the condition of pepi at birth by taking venous and arterial blood from the umbilical cord. Arterial cord blood provides information on the acid-base of the neonate, indicating how well the pepi was oxygenated during labour and delivery. Venous cord blood reflects both maternal acid-base status and placental function. While the predictive value of cord blood for long term outcomes is limited, it can indicate perinatal asphyxia and aid neonatal care decisions.

Current RANZCOG FSEP guidelines recommend paired cord gas or lactate analysis at delivery either routinely or where any of the following are present[1]:

- Apgar score less than four at one minute of age.
- Apgar score less than seven at five minutes of age.
- Fetal scalp sampling performed in labour.
- Operative delivery untaken for fetal compromise.

At present, the practice at Palmerston North Hospital is to collect paired cord gases based on the risk factors listed and routinely for all caesarean sections.

To ensure that lactate testing for newborns is conducted as recommended, we analysed data from our continuous data audit for the years 2022 and 2023. Our focus was on pēpi born at Palmerston North Hospital with Apgar scores under seven at five minutes of age or those who underwent operative delivery due to fetal distress. Among these pēpi, 96.5 per cent had cord gases taken, marking a significant improvement from 2022. However, continual improvement is needed in sampling technique, as only 74 per cent of pēpi had an interpretable result due to insufficient sampling.

[1] The Royal Australian and New Zealand College of Obstetricians and Gynaecologists. 2019. Intrapartum Fetal Surveillance, Clinical Guideline, Fourth Edition. Retrieved from https://ranzcog.edu.au/wp-content/uploads/2022/05/Intrapartum-Fetal-Surveillance.pdf

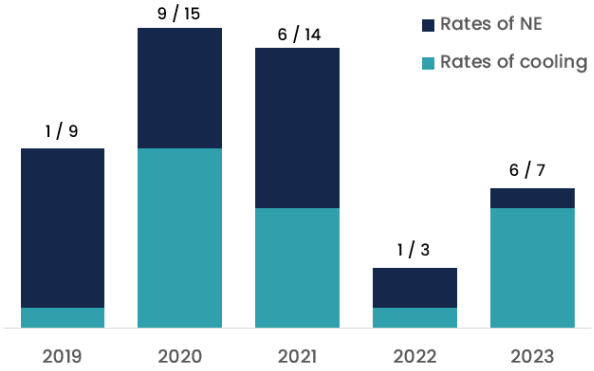
Our Management of NE

Business as Usual

To help in active identification MidCentral has a regional guideline for therapeutic hypothermia in cases of NE. Infants with NE risk factors are monitored closely as the risk assessment and management plan outlined in the NOC/NEWS chart. These pēpi undergo more frequent observations and neurological examinations using Modified Sarnat scoring. If multiple risk factors are identified or if there are signs of abnormal neurology the pepi is transferred to neonates for further monitoring, and cooling considered.

Therapeutic cooling is commenced at Palmerston North Hospital, but pēpi are then transferred to a tertiary centre, predominately Wellington Regional Neonatal Intensive Care Unit, so that they can receive higher levels of support such as BRAINZ monitoring.

Rates of cooling and NE for pēpi born at MidCentral Facilities

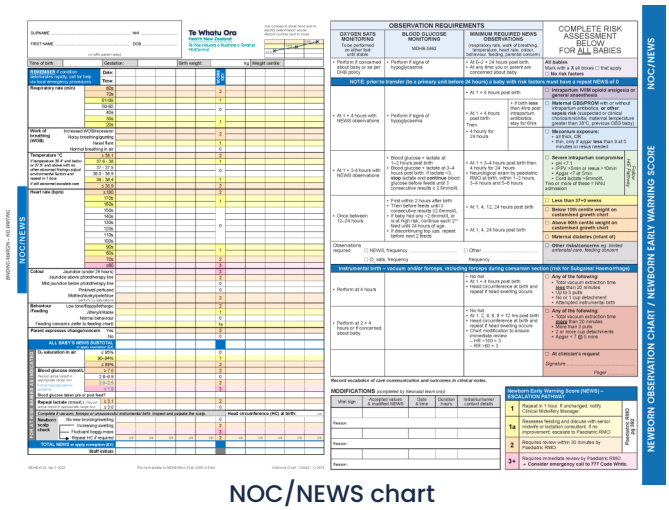


Newborn Observation Chart (NOC) and Newborn Early Warning Score (NEWS)

Business as Usual

The national NOC/NEWS was introduced at MidCentral mid-2021 and has become standard practice for all newborns within Palmerston North Hospital and the primary facilities.

NOC/NEWS provides a standardised observation system for newborns, especially those with risk factors such as sepsis, meconium aspiration and fetal distress at birth. The chart is used for the monitoring and recording of vital signs and assessments which facilitates swift identification of issues and when to escalate care.



NOC/NEWS chart

An average of 37 per cent of pēpi trigger an escalation of care, an annual increase of 3.4 per cent. Escalations range from repeating the set of observations in one hour to immediate paediatric review and transfer to the neonatal unit. Staff are consistently good with clinical documentation of these episodes, with approximately 80 per cent of episodes being appropriately documented.

We have seen significant improvements in most aspects of chart usage during 2023. Initial risk assessments occur for a greater proportion of newborns, 73 per cent, compared to 66 per cent in 2022. More newborns are receiving appropriate frequency of monitoring (56 per cent in 2023 versus 43 per cent in 2022). Despite these positive increases, further improvement remains a priority and chart usage will be continued to be monitored with monthly auditing.

New staff are provided with an online education module as well as individualised support on orientation to ensure they gain familiarity with the chart. Ongoing education is also incorporated in annual education days such as Midwifery Emergency Skills Refresher and our Maternity Nurses Skills Day.

Our next steps for NOC/NEWS into transition to an electronic version embedded within BadgerNet.

Primary Maternity Care

In Progress

MidCentral continues to provide whānau centred primary maternity services and birthing facilities, with three primary birthing facilities located across our rohe. Our primary birthing units are midwife led and wāhine hapū have access to purpose-built pools for waterbirth. We offer a 48 hour postnatal stay following birth of pēpi to aid in early matrescence. All our units are Baby Friendly Hospital Initiative (BFHI) accredited and support the establishment of breastfeeding.

In efforts to improve access to primary birthing and promote our units we have worked to increase their visibility. Te Papaioea Birthing Centre and Kōhungahunga Maternity Unit already had established Facebook pages, and we were keen to expand on this and further reach out to our priority populations of younger māmā, as well as Māori and Pacific wāhine. Development of an Instagram account specific to Te Papaioea Birthing Centre was identified and implemented to reach this demographic. A project to further develop our social media platform progression into 2024 was initiated by our MQSP Coordinator, Consumer Liaison and Midwife Manager – Primary.

Our social media presence also provided opportunities to increase early engagement in the first trimester. We aimed to ensure that our priority populations engage early and register with an LMC. We began developing robust content specifically aimed at consumers, covering all aspects of maternity and child health. We continue to explore innovative ideas to facilitate more services for whānau from our primary birthing units.

Te Papaioea Birthing Centre and Kōhungahunga Maternity Unit are popular destinations for childbirth educator groups. Parents Centre and Barnardos frequently bring their classes to Te Papaioea Birthing Centre to present it as a labour and birth option. Likewise, Barnardos antenatal classes often visit Kōhungahunga Maternity Unit.

Over the year there has also been a focus on the development of a "maternity hub" type space that allows whānau to access multiple services. Besides offering labour, birthing and postnatal support, Te Papaioea Birthing Centre now offers additional services such as hearing screening for pēpi, lactation support, pēpi haumaru safe sleep with distribution of wahakura and pepi pods, hapū māmā vaccinations, The Milk Café feeding support group and Whangai Ora donor milk bank. Our Speciality Clinical Nurse for perinatal mental health is based at the unit as are our team of community midwives who hold midwife-led antenatal clinics onsite.

Midwife Jo at Te Papaioea Birthing Centre

Tylea and Tony with their new pepi Braxton

Hearing Screener Catherine with pēpi

Midwife Naumai

Due to significant midwifery workforce shortages a national recruitment drive for midwives was launched. In September 2023, Te Papaioea Birthing Centre was able to extend its midwifery staffed hours from five days a week (24 hours a day from Monday 7am to Friday 5pm) to six days a week (24 hours a day from Monday 7am to Saturday 5pm). Recruitment of healthcare assistants to support midwives occurred late in the year, with the aim of staffing Te Papaioea with a midwife and healthcare assistant 24 hours a day seven days a week in the first quarter of 2024. This was achieved 20 January 2024.

Consumers are encouraged to feedback about the care they have received or experience while visiting our facilities. Consumer feedback is highly valued, and feedback forms are widely available in our units or an online option for feedback is also offered to whānau. Regular social media posts encouraging feedback are also utilised.

Hannah and Brent with their new pepi Emma

"After viewing this centre and then the hospital, I instantly knew I wanted to birth here. We arrived at midnight on a Sunday, and it was just us, my midwife Koera and second midwife Nikki. The rooms were so peaceful, dimly lit and overall, a lovely environment. I felt at ease and mentally 'ready' when I arrived. Labouring in the bath was the best for me, heaps of room and the warm water really helped my body to relax into labour. I birthed our son in the water, and it was great experience. We stayed a day and a half, the support and care on hand was great and we were left to enjoy our own space as a new family without any interruptions, unless we buzzed for some help and guidance! I look forward to birthing here again." - Natasha

Homebirth workshop 2023

In 2023, we have made efforts to promote home births through various initiatives and collaborations. We have actively monitored home birth rates within our region in partnership with the Manawatū Home Birth Association, sharing these statistics monthly on our main MidCentral social media accounts to help normalise home births as a viable option for low risk wāhine. In March 2023, MQSP funded Claire Eccleston to facilitate a comprehensive home birth workshop that delved into current research, practical considerations, emergency management, and how to support smooth transfers from home to hospital, all aimed at building practitioner confidence in home births. Additionally, in September 2023, our Associate Director of Midwifery met with local childbirth educators to further discuss and strategise the promotion of home births. These initiatives reflect our commitment to providing diverse birthing options and supporting whānau in making informed choices.

Equitable Access to Contraception

Business as Usual

Most long-acting reversible contraction (LARC) insertions and removals are undertaken in primary health services, making them more accessible to a broader population. There are nine clinics across the main centres of the Manawatū rohe that provide LARC services. These clinics cover a wide geographical range, including Feilding, Dannevirke, Palmerston North, Horowhenua, and Ōtaki. Additionally, some insertions are performed while wāhine are inpatients at Palmerston North Hospital.

Our commitment to equity is integrated into the funding claim process, requiring clinics to report key data fields such as age, ethnicity, community services card holder status, and type of LARC. This data helps identify and address disparities, ensuring that all wāhine, regardless of their background or financial status, have access to these essential health services.

Within primary health services, 32.5 per cent of all LARC were provided to wāhine Māori, and 4.8 per cent to wāhine Pacific. Additionally, 41 per cent of insertions were for wāhine under 25 years of age.

The main LARC inserted and removed are copper intrauterine devices (Choice), Levonorgestrel intrauterine systems (Mirena), and subdermal contraception (Jaydess or Jadelle). Funding priority is given to those with community services cards, ethnicity groups of Māori and Pacific, and those living in social deprivation index quintile five.

In 2023, 154 wāhine received a LARC of their choice after birth. This figure is a lower than expected considering 1915 māmā birthed at MidCentral facilities. Most LARC insertions occur at Palmerston North Hospital by the obstetric team. Additionally, one core midwife working in our primary team is trained in subdermal contraception insertion and primarily receives referrals from the community midwifery team.

Our goals for 2024 include increasing awareness to wāhine hāpu of contraception options available to them after birth. One strategy is to create a poster to have available in Te Rauru | Antenatal Clinic, Antenatal Day Unit, Te Whare Tangata | Gynaecology Assessment Unit and LMC offices. This would give wāhine more time to consider their options and make informed decisions before hospital admission. Medical and midwifery staff can then insert the chosen contraception during their post-natal stay. Another strategy is to train more midwives in subdermal contraception insertion, particularly those working in the primary facilities and rural localities. Once trained, a weekly clinic could be held alongside the hāpu māmā vaccination clinic, reducing barriers for māmā wanting a LARC.

2023 Statistics

Insertions

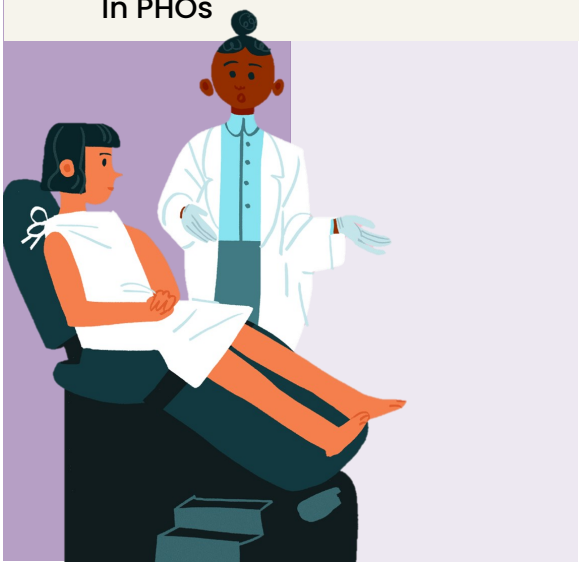
737
In PHOs

377
At MidCentral
154 as inpatients, the remainder by sexual health

Removals

400
In PHOs

MidCentral
No data available



Sepsis

Business as Usual

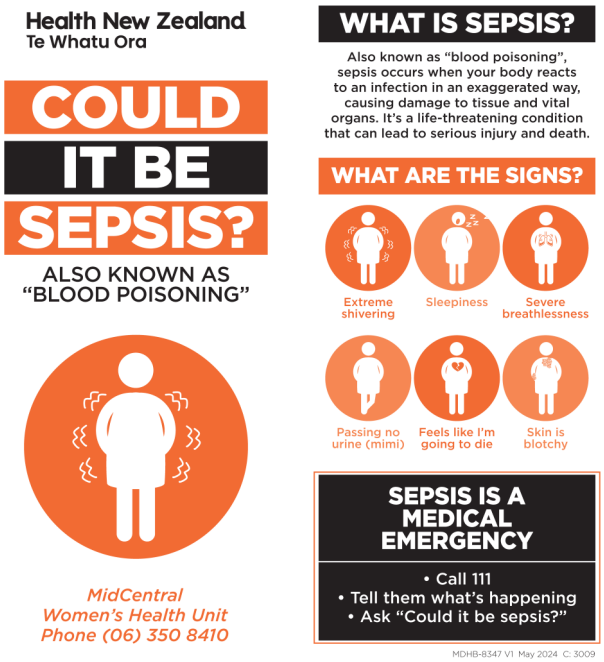
Sepsis is the leading cause for maternal morbidity and mortality worldwide. During pregnancy and the puerperium, wāhine hapū are particularly susceptible to a rapid deterioration in condition if they develop an infection. Each hour that antibiotic treatment is delayed creates a measurable increase in the risk of maternal mortality.

To enable sepsis to be identified and acted upon in a timely manner, MidCentral rolled out the nationally recognised Sepsis Six bundle in 2021. This included a clinical guideline based on the pathway created by the Sepsis Trust NZ. The bundle aimed to educate clinicians on the signs and symptoms of sepsis and the pathways clinicians must follow to identify acutely deteriorating patients and provide prompt medical care. A patient information leaflet was also developed to educate wāhine hapū and whānau about the signs and symptoms of sepsis, to encourage earlier presentation when unwell. This is available for all LMC midwives, childbirth antenatal education classes, obstetric clinics, and in the postnatal period in the Well Child books.

These resources work in conjunction with the sepsis kits developed by MQSP as an easy to access, complete kit containing everything needed to treat sepsis. The kit is designed to be used in the first hour from identifying sepsis. They are located on Hine te Iwaiwa | Birthing Suite, Te Aotūroa | Maternity Ward, Te Papaioea Birthing Centre, Kōhungahunga Birthing Centre and Tararua Health Group in Dannevirke.

The Sepsis Six project is regularly audited. In 2023, 50 maternal sepsis screening and action tool forms were commenced with 46 of these identifying either a red or amber flag and continuing the sepsis pathway. The audit showed that 25 of the completed forms identified a red flag symptom, but only seven of these cases had the full Sepsis Six pathway completed within the ‘golden hour’. Another five red-flag cases had the full pathway completed, but outside of the ‘golden hour’. The pathway was only partially completed for the remaining 13 cases (52 per cent). The most common omissions were failure to give gentamicin, measure urine output and consider intravenous fluid resuscitation. This is where the training efforts will be focussed in 2024 for all maternity clinicians.

Sepsis training is integrated into our Midwifery Emergency Skills Refresher and PROMPT education days. We often receive feedback from staff who were previously unaware at the speed in which a patient can deteriorate and the importance of the first hour of identifying and acting upon sepsis. In 2023, the PROMPT course featured a lecture and two realistic sepsis scenarios, designed to help multi-disciplinary teams practice early recognition and emergency response. For 2024, the goal is to incorporate this training into a regular Maternity Nursing Skills Day, ensuring that the nursing staff are also educated on early sepsis recognition and the importance of rapid treatment. We will also continue to focus on the importance of completing all steps within the pathway within the ‘golden hour’.



Information card for wāhine and whānau

Maternal Mental Health

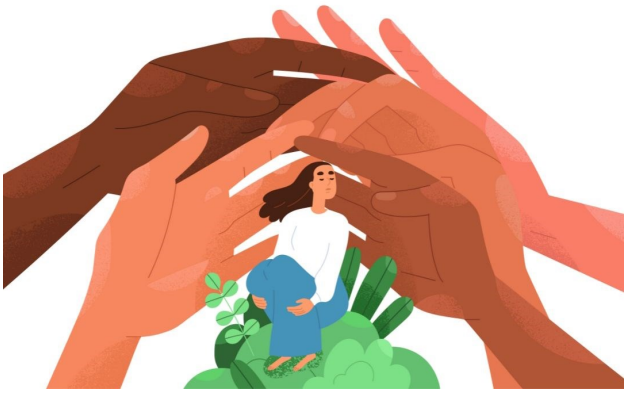
In Progress

To enhance the accessibility of maternal mental health services for those with mild to moderate concerns, THINK Hauora (our regions primary health organisation) and MidCentral co-designed a collaborative approach late 2021. In February 2022, a centralised referral pathway for primary and secondary services was implemented. This dual service approach, based on the philosophy that "every door is the right door," enabled joint triage and ensured referrals were directed to the most suitable provider.

Referrals are categorised as urgent and non-urgent and are brought to triage meetings held twice a week, with representation from MidCentral (Maternal Mental Health and Māori Mental Health Services) and THINK Hauora. In 2023, Specialist Primary Mental Health and Addiction Services joined triage meetings, offering the advantage of providing advice on medications and support for GP's and other primary providers.

The new pathways have bought their own challenges, notably when referrers lack clarity of the scope of maternal mental health. This has led to referrals for unrelated issues, including infant mental health or behavioural concerns like sleep disturbances. However, any referrals that are deemed not suitable are redirected to services better matched to address the individuals need. Occasionally referrals are also received for wāhine residing out of region. In these instances, they are forwarded to the appropriate services closer to the wāhine for their consideration.

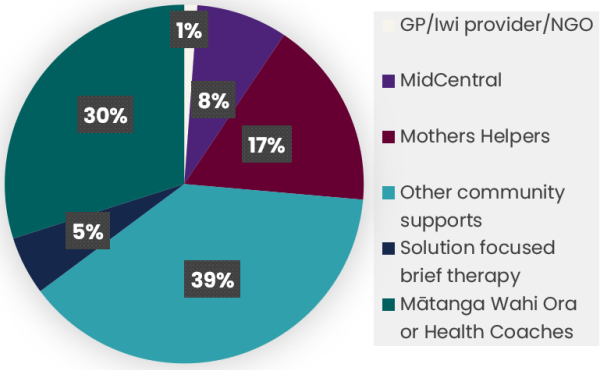
Indicators show that the pathways implementation has enhanced outcomes for the community, as demonstrated by continued rising referral numbers. There were 232 referrals in 2023 compared to 152 in 2022. Interagency collaboration has allowed for greater flexibility in service delivery resulting in no waitlists. All referrals were triaged and provided with some type of support/treatment/therapy through primary, community, NGO or secondary providers.



Referrals are mainly directed to community providers and to Mātanga Whai Ora | health improvement practitioners, employed by THINK Hauora's Te Ara Rau Access and Choice Programme. Mātanga Whai Ora can provide multiple brief intervention sessions and can link wāhine into health coaches or packages of care for free counselling sessions or group programmes. The movement of a midwife into a dedicated Maternal Mātanga Whai Ora role has enhanced care provision.

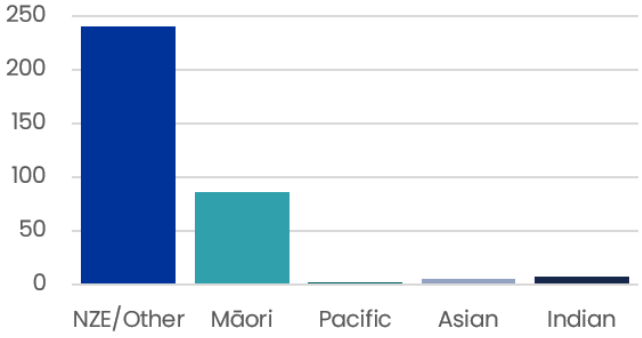
A smaller portion of referrals get directed to secondary services at MidCentral, where our Maternal Mental Health Specialty Clinical Nurse provides support. Tailored packages of care are designed for wrap around support. These can include using a support worker in the home to help establish a routine and to support the māmā and pēpi dyad. Our nurse coordinates with psychiatrists and social workers to ensure that the necessary support is in place.

Triage actions from referrals received 1/1/2023 — 30/4/2024

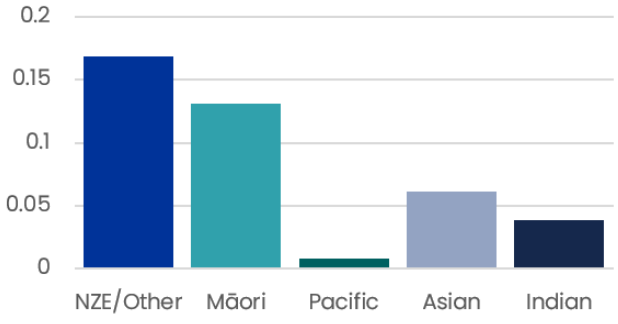


Our Maternal Mental Health Speciality Clinical Nurse has a consultation-liaison role and has close working relationships with our Kaiaraara Tu Ora | Māori Midwife Specialist, community midwives, social worker and Well Child nurses. These relationships enable a team-based strategy that ensures integrated and continuous care, along with support that is customised for the individual requirements of every māmā and pēpi.

Number of referrals received broken into ethnic categories 1/1/2023 — 30/4/2024

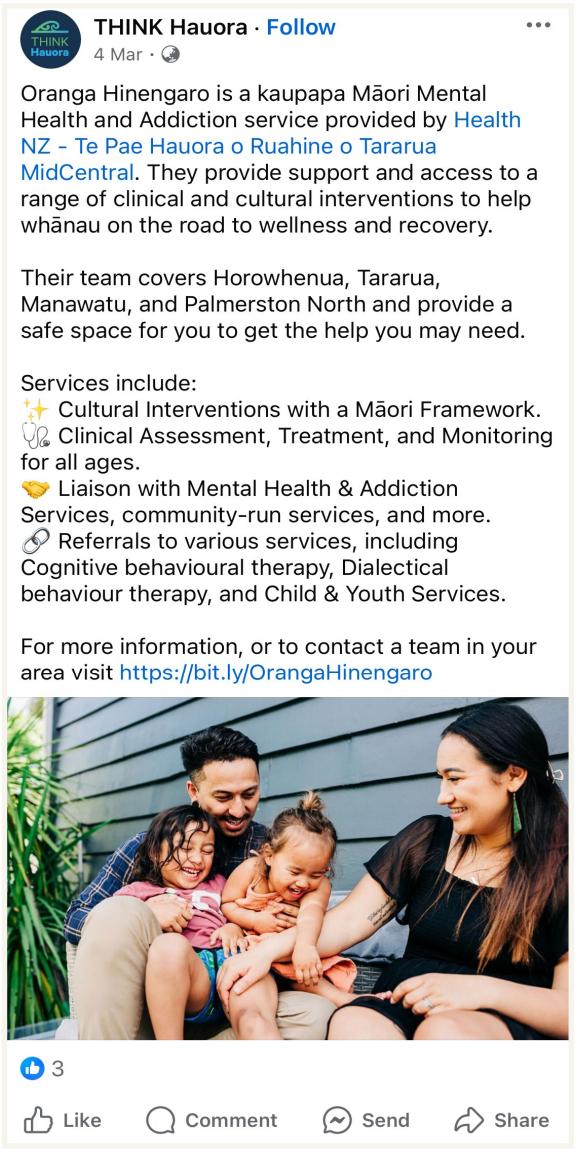


The proportion of referrals relative to the number of births across different ethnic categories 1/1/2023 — 30/4/2024



Wāhine Māori are offered additional referrals to Oranga Hinengaro (a Kaupapa Māori Mental Health service) or Pae Ora | Māori health service. Developing maternal mental health pre-birth plans using the Te Tapa Wha model and working closely with Oranga Hinengaro care coordinators ensure that health care is delivered in culturally appropriate manner.

When looking at referrals to maternal mental health by ethnicity we see that the service predominately caters to NZ European/other ethnicities and Māori. We have much lower engagement from Pacific, Asian and Indian ethnicities. One strategy employed to counter this is regular visits from the Specialty Clinical Nurse to postnatal inpatients to raise awareness of maternal mental health and support services. Additionally, THINK Hauora's Pasifika Health Team has actively promoted their support services within the maternal health sector, emphasising culturally tailored alternatives for wāhine Pacific.



Maternal Early Warning System

Business as Usual

Maternity Early Warning System (MEWS) is a clinical tool designed to improve the detection and response to acute deterioration in wāhine during pregnancy or within 42 days of birth. It includes a standardised maternity vital signs chart, an early warning score based on eight specific parameters, and a local escalation pathway for timely intervention. The system, which is not used routinely during labour, aims to enhance patient safety by providing a structured approach for healthcare professionals to recognise and act upon clinical signs of deterioration.

MEWS has been in use throughout Palmerston North Hospital since 2019. The chart is stocked in Hine te Iwaiwa | Birthing Suite, Te Aotūroa | Maternity Ward and our primary units as well as the Emergency Department and our Women's Assessment and Surgical unit, the other most common wards for pregnant or recently pregnant wāhine. In 2023, we introduced a question in the Adult Early Warning System (EWS) audit to assess accurate chart selection across the entire hospital. The subsequent results have been reassuring.

Staff education for MEWS is embedded within Midwifery Emergency Skills Refresher Days, PROMPT multidisciplinary training and Maternity Nursing Skills Days. New staff utilise an online education module with further in person training if needed once they have settled into their role.

MEWS chart usage within Palmerston North Hospital

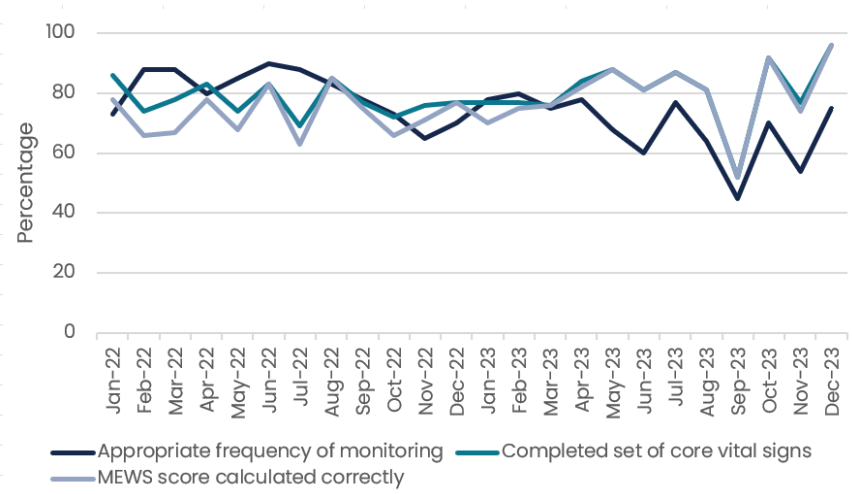


Chart usage and care escalation are monitored through monthly audits and maternity case reviews. Our case review process offers us the opportunity to for a more detailed look at care escalation, documentation, and ongoing management.

Audits using the tool developed by the Health Quality and Safety Commission, have shown a much more variable chart usage particularly towards the end of the year. This may be partially attributable to a reduction in the number of files audited per area per month. Nevertheless, it highlights the importance of continual surveillance.

Auditing shows an average of 69 per cent of wāhine received the appropriate frequency of vital signs monitoring (66 per cent in Te Aotūroa and 71 per cent in Hine te Iwaiwa), which is a decline from previous years performance.

One contributing factor is the failure to promptly repeat observations according to the escalation plan when they slightly deviate from the target range. Additionally, the limited utilisation of modifications—designed to tailor escalation triggers for wāhine with chronic conditions or abnormal vital signs that do not represent clinical deterioration—plays a role. These issues are likely exacerbated by staffing shortages.

By the close of 2023, our main primary facilities transitioned to an electronic MEWS format integrated into our clinical information system, BadgerNet. Our subsequent goal is to implement this transition at Palmerston North Hospital.

Reduce Preterm Birth and Neonatal Mortality *In Progress*

In 2022, the preterm birth rate for MidCentral domiciled wāhine was 7.3 per cent[1]. This figure shows a slightly higher preterm birth rate compared to our facility-specific data. This discrepancy is likely due to intradistrict transfers to tertiary facilities, resulting in a more accurate representation of preterm birth rates for our population. However, as domiciled data is derived from a national data compiled from various sources it is not as current as our local data set.

Our preterm birth rate for MidCentral facilities was 6.8 per cent in 2023, with 130 pēpi being born before 37 weeks' gestation. Most of our preterm births occurred between 34 and 36 weeks' gestation (80 per cent of preterm births and 5.5 per cent of all births). Wāhine Māori had the highest overall rates of preterm birth (8.5 per cent), followed by wāhine Indian (7.9 per cent). Domiciled data from 2022 also shows Māori to be disproportionally affected with a preterm birth rate of 9.5 per cent.

Through our continuous data audit, we can further explore our facilities data. When looking at the modifiable risk factor of smoking, wāhine who smoke have a preterm birth rate of 14.1 per cent compared to 6.3 per cent in nonsmokers. Wāhine Māori have a much higher rate of smoking or vaping when hāpu (22.1 per cent) compared to other ethnicities (5.7 per cent).

To address this concern, the maternity team collaborated with Te Ohu Aauhi Mutunga (TOAM) and Pae Ora our Māori Health Services team to consider how we can better support wāhine hāpu and their whānau to become smokefree. TOAM services provide free smoking cessation support within the MidCentral rohe. TOAM uses whānau centred and behaviour change approaches, providing personalised one on one support, group programmes and cessation clinics within primary health care. These services are regularly incentivised. Additionally, TOAM also a targeted wāhine Māori programme for 18–30-year-olds, using a Whānau Ora approach to help wāhine achieve their aspirations. This group programme focuses on self-care, immersive mātauranga Māori and kaupapa Māori practices, aiming to find positive alternatives to smoking. Our hui explored ways to establish meaningful pathways for whānau to refer and access the services offered. Meetings followed with both our community midwifery team and the wider NZCOM membership to increase awareness of TOAM's services and socialise referral pathways among midwives of the region.

To determine other opportunities for improvement our MQSP team initiated a preterm birth audit. We are currently reviewing records of preterm births within MidCentral facilities in 2023. The records of wāhine who were transferred to tertiary facilities due to the risk of extreme preterm birth (under 28 weeks' gestation) have also been included so we can review the care they received here. Terminations of pregnancy, births under 20 weeks' gestation and pēpi with major abnormalities with plans for palliative care after birth have been excluded from the data set. Once completed, we will be able to have a multidisciplinary review identifying trends in antenatal and intrapartum management of wāhine who experienced preterm birth in our rohe. We will also be able to examine other factors such as socioeconomic deprivation index and time of engagement with a midwife.

[1] Indicator 17. *Maternity Clinical Indicators. Health New Zealand. 2024. Retrieved from* https://www.tewhatuora.govt.nz/for-health

Clinical Indicators

Business as Usual

The New Zealand Maternity Clinical Indicators provide comparable data on maternity interventions and outcomes for pregnant wāhine and their pēpi. Data is collected from the National Maternity Collection (data on publicly funded maternity services provided under Section 94 of the Pae Ora (Healthy Futures) Act 2022 and from inpatient and day-patient health event data sourced from the National Minimum Dataset). Trends over time and regional comparisons can be explored using the Maternity Clinical Indicators web tool [1].

Indicator One: Registration with an LMC in the first trimester 2022

MidCentral	Māori	Pacific	Indian	Asian	Euro/Other	NZ
83.4%	73.9%	67.7%	91.8%	82.8%	90.4	76.4%

[1] Health New Zealand. Maternity Clinical Indicators. 2024. Retrieved from https://www.tewhatuora.govt.nz/for-health-professionals/data-and-statistics/maternity-clinical-indicators/

The data for the remaining indicators in this section comes from our continuous data audit and our Maternity Clinical Information System, BadgerNet. Our continuous data audit provides us with more contemporaneous data but is reflective only of wāhine who have birthed within MidCentral facilities rather than wāhine domiciled to MidCentral.

Eight indicators refer to standard primipara, defined as wāhine aged between 20 and 34 years old at the time of giving birth, who are giving birth for the first time, at term (37-41 weeks' gestation), of a singleton pepi where the presentation is cephalic (headfirst), and there has been no recorded obstetric complication that indicator specific obstetric interventions. These wāhine are expected to have uncomplicated pregnancies and are used as a comparison group to control for confounding variables when making interhospital comparisons.

Health NZ estimates that 15 per cent of births are from standard primiparae. Rates in our region are slightly higher at just over 20 per cent and have remained relatively stable over the past three years.

Stacie and Liam with their new pepi Scarlett born June 2023

Wāhine birthing at MidCentral Health facilities by parity

	2021	2022	2023
All wāhine	2153	2009	1915
Standard primiparae	485	479	402
Non-standard primiparae	394	345	357
All wāhine multiparae	1274	1185	1156
% of wāhine birthing who are standard primiparae	22.5%	23.8%	21.0%

When reviewing our data we can see significant disparities for wāhine Indian compared to other ethnic groups. Their normal birth rate is notably lower, while their intervention rates are considerably higher. This discrepancy warrants further investigation.

Please note that when broken down by ethnicity, the sample sizes are very small and thus should be interpreted with caution.

Maternity Clinical Indicators – summary of 2023 MidCentral Health data broken down by ethnicity and comparison with national dataset for 2022

Clinical Indicator	MidCentral 2023						NZ 2022
	Average	Māori	Pacific	Indian	Asian	Other	
2. Standard primiparae who have a spontaneous vaginal birth	52.2% 210/402	62.0% 49/79	68.4% 13/19	20.7% 6/29	51.7% 15/29	51.6% 127/246	59.3%
3: Standard primiparae who undergo an instrumental birth	15.8% 53/402	5.1% 4/79	5.3% 1/19	24.1% 7/29	6.9% 2/29	15.8% 39/246	20.7%
4: Standard primiparae who undergo caesarean section	19.7% 79/402	19% 15/79	0% 0/19	41.4% 12/29	27.6% 8/29	17.8% 44/246	20.0%
5: Standard primiparae who undergo induction of labour	27.6% 111/402	21.5% 17/79	31.6% 6/19	34.5% 10/29	27.6% 8/29	28.4% 70/246	9.3%
6: Standard primiparae with an intact lower genital tract (no 1st to 4th degree tear or episiotomy)	26.3% 85/323	34.4% 22/64	26.3% 5/19	0.0% 0/17	9.5% 2/21	27.7% 55/196	24.2%
7: Standard primiparae undergoing episiotomy and no 3rd or 4th degree perineal tear	19.8% 64/323	9.4% 6/64	15.8% 3/19	29.4% 5/17	28.6% 6/21	21.7% 44/202	27.6%
8: Standard primiparae sustaining a 3rd or 4th degree perineal tear and no episiotomy	6.8% 22/323	9.4% 6/64	10.5% 2/19	17.6% 3/17	4.8% 1/21	4.9% 10/202	4.5%
9: Standard primiparae undergoing episiotomy and sustaining a 3rd or 4th degree perineal tear	3.1% 10/323	0.0% 0/64	0.0% 0/19	23.5% 4/17	4.8% 1/21	2.0% 4/196	2.1%
10: Women having a general anaesthetic for caesarean section	7.9% 46/582	11.3% 14/124	3.7% 1/27	6.5% 4/62	5.3% 2/38	7.6% 25/331	7.5%
11: Women requiring a blood transfusion with caesarean section#	3.2% 19/591	6.3% 8/136	0.0% 0/32	3.6% 2/56	2.6% 1/38	2.4% 8/327	3.8%
12: Women requiring a blood transfusion with vaginal birth#	2.8% 36/1296	1.8% 7/373	5.6% 4/72	6.3% 4/64	4.5% 4/89	2.4% 17/698	2.7%
13: Diagnosis of eclampsia at birth admission	0.05%	0.0%	0.0%	0.0%	0.0%	0.05%	0.04%
14: Women having a peripartum hysterectomy	0.05%	0.0%	0.0%	0.0%	0.0%	0.05%	0.08%
15: Women admitted to ICU requiring ventilation during pregnancy or postnatal period	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.02%
16: Maternal tobacco use during the postnatal period	-*	-*	-*	-*	-*	-*	-*
17: Preterm birth	6.8% 130/1917	8.5% 43/504	5.0% 5/100	7.9% 10/126	5.6% 7/126	6.1% 65/1061	7.7%
18: Small babies at term (37–42 weeks' gestation)**	13.7% 245/1791	14.9% 69/462	15.6% 15/96	8.6% 10/116	15.1% 18/119	13.3% 133/998	3.1%
19: Small babies at term (40–42 weeks' gestation)**	35.1% 86/245	31.9% 22/69	20.0% 3/15	0.0% 0/10	33.3% 6/18	41.4% 55/133	25.6%
20: Babies born at 37+ weeks' gestation requiring respiratory support	3.0% 54/1791	2.1% 10/462	2.0% 2/96	4.3% 5/116	1.6% 2/120	3.5% 35/998	3.4%

Coded data from National Minimum Dataset

* Data not available from National Maternity Collection

** MidCentral uses customised birthweight centile <10 rather than INTERGROWTH-21st growth charts.

Continuous Labour and Birth Audit

Business as Usual

The MidCentral continuous labour and birth audit began in 2017, collecting the data on labour and birth events and outcomes. Using the Ten Group Classification System[1], it categorises birthing wāhine into comparable groups for analysing labour events and outcomes. This enables tracking of outcomes over time and facilitates comparisons with other units across the globe. Our primary data source is BadgerNet, our maternity clinical information system, with manual corrections for data quality and accuracy. The audit results inform quality improvement initiatives and are presented in meetings, publications and our annual reports.

When we initiated the audit and reviewed 2016 data the overall caesarean section (CS) rate was 30.5 per cent, with Group 5 (wāhine with previous CS) contributing the most. When comparing our data to similar European maternity units we found that we had higher CS rates in Groups 1 (wāhine nulliparous with spontaneous labour), 2a (wāhine nulliparous induced) and 4a (wāhine multiparous induced) which was likely contributing to us having a relatively large sized group 5. We began to make changes to our labour management and induction processes and started to see reductions in our CS rates (both overall and within groups 1, 2a and 4a).

In 2023, the overall CS rate increased from 27.4 per cent to 30 per cent. This rise was primarily influenced by higher CS rates in group 2a (wāhine nulliparous induced)[2]. Additionally, there were increased CS rates in Groups 3 (wāhine multiparous with spontaneous labour) and 10 (preterm labour)[3] and a larger group size of Group 4a (wāhine multiparous induced).

To reverse this trend, our multidisciplinary team must consider how we better support labour progression.

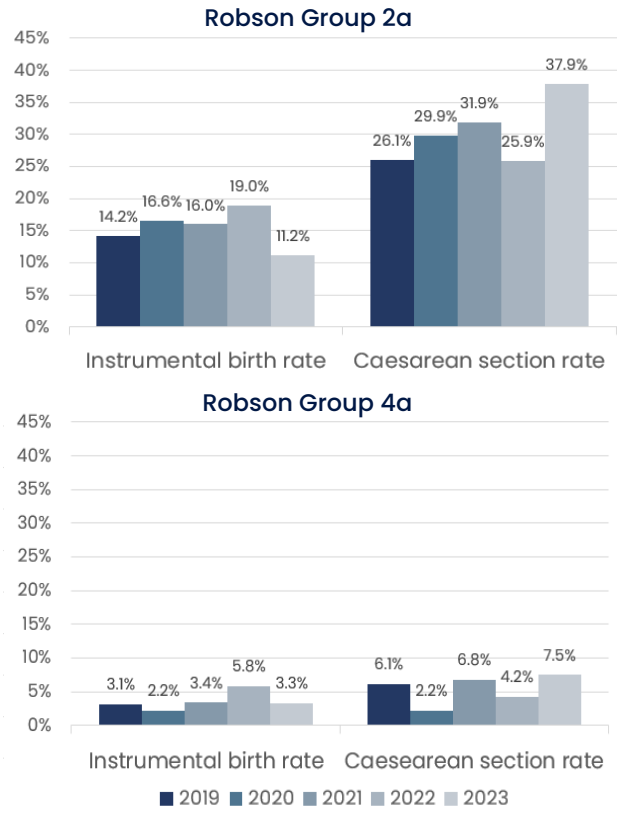
We have also noted a decrease in the size of Group 3 (wāhine multiparous with spontaneous labour) in relation to the size of Group 4 (wāhine multiparous induced or who has CS prior to labour). This may be related to updated guidelines on management of conditions like hypertensive disorders in pregnancy and small for gestational age fetuses and higher induction of labour rates.

Nulliparous = first time māmā. Multiparous = has had at least one previous birth.
Robson classification system. WHO Statement on Caesarean Section Rates WHO/RHR/15.02. 2015.

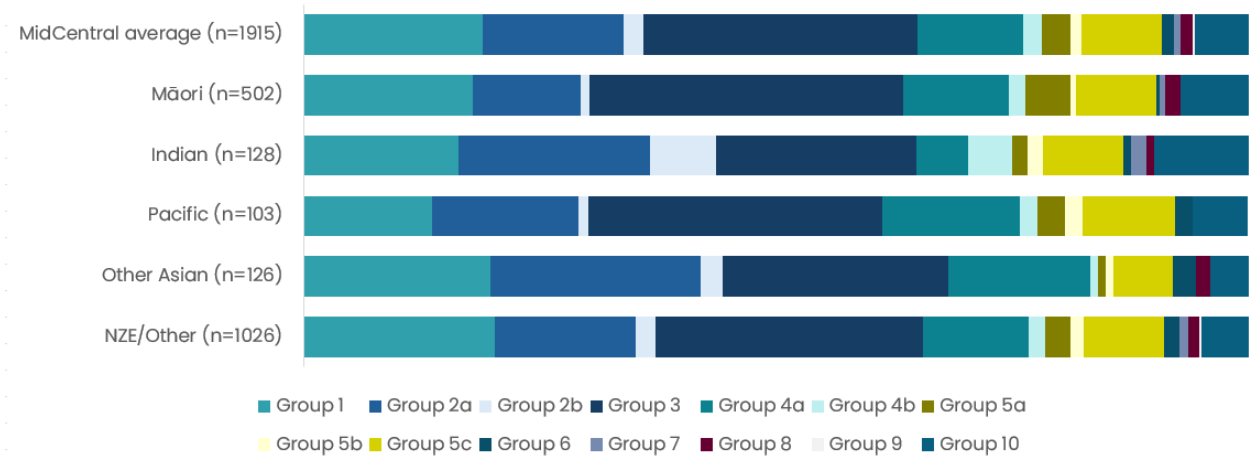
When looking closer at Group 2a (wāhine nulliparous induced) we find that along with a statistically significant increase in CS rates 2, there has been a decrease in our rates of instrumental births. We have also found this trend for Group 4a (wāhine multiparous induced). With this data we plan to reflect on this change particularly focussing on management of second stage labour dystocia. Across these two groups, rates of obstetric anal sphincter injuries (OASIs), postpartum haemorrhage and neonatal admissions have remained relatively stable, despite the increases in inductions and CS.

As part of our audit, we collect ethnic information to help monitor health equity. We have found distinct differences in ethic distribution across the Ten Groups. In 2023, wāhine Māori had lower induction rates, particularly first-time mothers. Wāhine Indian were overrepresented amongst wāhine having pre-labour CS and preterm births while wāhine Pacific were more likely to be multiparous and have higher induction of labour rates. Similarly, wāhine Asian were also overrepresented in induction of labour rates.

Instrumental and caesarean section rates among Robson Groups 2a and 4a at MidCentral



Robson Group break down by ethnicity at MidCentral for 2023



[1] Robson, M. 2001. Classification of caesarean sections. Fetal and Maternal Medicine Review;12(01):23-29.
[2] Statistically significant increase at p <0.05. z score = 1.9655, p value 0.041.
[3] Statistically significant increase at p<0.05. z score = -1.788, p value 0.0459.

Caesarean Section Rates by Robson Group

		Size of Group NB in Group / Total NB Births	CS Rate CS Births in Group / Total Births in Group	Contribution of Group to CS Rate CS Births in Group / Total NB births
		2023	2023	2023
	Robson Group		30.0% (575/1917)	
1	Wāhine nulliparous, single cephalic pregnancy, ≥ 37 weeks gestation in spontaneous labour	19.0%	16.8% (61/364)	3.2%
2	Wāhine nulliparous, single cephalic pregnancy, ≥ 37 weeks gestation who had labour induced or a CS before labour	17.0%	45.5% (148/325)	7.7%
2a	Group 2 those with labour induced	14.9%	37.9% (108/285)	5.6%
2b	Group 2 those with CS before labour	2.1%	100% (40/40)	2.1%
3	Wāhine multiparous without a previous uterine scar, with single cephalic pregnancy, ≥ 37 weeks gestation in spontaneous labour	29.0%	4.7% (26/555)	1.4%
4	Wāhine multiparous without a previous uterine scar, with single cephalic pregnancy, ≥ 37 weeks who had labour induced or a CS before labour	13.1%	21.1% (53/251)	2.7%
4a	Group 4 those with labour induced	11.2%	7.5% (16/214)	0.8%
4b	Group 4 those with CS before labour	1.9%	100% (37/37)	1.9%
5	Wāhine multiparous with previous uterine scar, with single cephalic pregnancy, ≥ 37 weeks gestation	12.7%	78.2% (190/243)	9.9%
5a	Group 5 with spontaneous labour	3.1%	33.9% (20/59)	1.0%
5b	Group 5 with labour induced	1.1%	36.4% (8/22)	0.4%
5c	Group 5 with CS before labour	8.5%	100% (162/162)	8.5%
6	All wāhine nulliparous with a single breech pregnancy	1.3%	100% (25/25)	1.3%
7	All wāhine multiparous with a single breech pregnancy (including those with previous CS)	0.7%	100% (14/14)	0.7%
8	Wāhine with multiple pregnancies (including those with previous CS)	1.3%	37.5% (9/24)	0.5%
9	Wāhine with a single pregnancy with a transverse or oblique lie (including those with previous CS)	0.2%	100% (3/3)	0.2%
10	Wāhine with single cephalic pregnancy <37 weeks (including those with previous CS)	5.9%	40.7% (46/113)	2.4%

Outcomes Across Groups (%)

Group 1 (wāhine nulliparous with spontaneous labour)

	ARM	Oxytocin	Epidural	NVB	Inst	C/S	C/S 2nd stage	Apgar <7 at 5	OASIs	Labour >12 hrs	PPH >1000mL	Admission to NNU
2023	35.3	34.8	38.9	71	12.3	16.7	6	2.7	5.7	19.3	7.1	9.9
2022	33.2	29.7	39.1	65.1	17	17.9	4.8	4	5.2	16.9	5.9	15.7
2021	34.6	27	35.3	69.5	15.1	15.4	3.9	3.3	3.8	15.8	7.7	13.3
2020	39.2	36.4	40	69.1	15.3	15.6	8.1	2.8	5.6	19	6	16.3

Group 3 (wāhine multiparous with spontaneous labour)

	ARM	Oxytocin	Epidural	NVB	Inst	C/S	C/S 2nd stage	Apgar <7 at 5	OASIs	Labour >12 hrs	PPH >1000mL	Admission to NNU
2023	25	5	7	94.2	1.1	4.7	1.3	1.7	1.3	1.7	3.8	6.5
2022	28.6	4.9	8.9	94.9	2.4	2.7	0.5	1.4	0.2	1	6.3	5.3
2021	29.4	6	8.9	95.4	2	2.6	0.7	0.8	0.3	1.4	3.2	5.5
2020	29.1	4.8	7.2	96.2	1.9	1.9	0.5	1.2	1.7	0.6	4.1	8.9

Group 2A (wāhine nulliparous induced)

	ARM	Oxytocin	Epidural	NVB	Inst	C/S	C/S 2nd stage	Apgar <7 at 5	OASIs	Labour >12 hrs	PPH >1000mL	Admission to NNU
2023	36.8	47	48.8	50.9	11.2	37.9	9.8	7.5	4.6	8.3	9.1	20
2022	39.5	43	55.1	55.1	19	25.9	7.6	3.8	4.6	5.7	9.2	20.2
2021	39.5	44.1	50.6	52.1	16	31.9	6.5	4.9	6.1	6	8.8	17.9
2020	44.8	46.5	47.3	53.5	16.6	29.9	11.2	5	3.8	4.1	9.1	22

Group 4A (wāhine multiparous induced)

	ARM	Oxytocin	Epidural	NVB	Inst	C/S	C/S 2nd stage	Apgar <7 at 5	OASIs	Labour >12 hrs	PPH >1000mL	Admission to NNU
2023	53.3	27.1	20.1	89.3	3.3	7.5	0	0	3.8	1.4	6.1	10.3
2022	48.7	23	20.9	90.1	5.8	4.2	0	3.5	0	0	5.2	16.2
2021	53.2	24.9	21	89.8	3.4	6.8	0.9	4.4	0	1.9	7	13.7
2020	47.2	20.9	17.8	95.6	2.2	2.2	0.5	3.3	2	0.5	5.2	16.1

^ Dee Saini and husband
> Pepi Olive with siblings Arlo and Mabel

3

MQSP

Project Plan

Implementation of NEWS / NOC as per National Roll out	
Status	Business as usual
Initiatives	• New staff education • Ongoing education incorporated into Midwifery Emergency Skills Refresher • Feature on Maternity Nursing Skills Day to increase understanding of neonatal physiology • MQSP coordinator on national working group
Measures	• NEWS audit • Neonatal admissions
Plan	• Continue audit • Continue education in both nursing and midwifery mandatory education days • Migration to electronic NOC/NEWS in BadgerNet • Incorporation of SGA recommendations • Move auditing to iauditor

NE Taskforce projects as they arise	
Status	Business as usual
Initiatives	• GAP midwife appointment • Customised growth charts centiles in BadgerNet routine practice • Transition to GROW 2.0 • Paired cord gases standard practice for all operative births, and risk based for vaginal births • Education push on correct technique to avoid insufficient paired cord gas samples • Ongoing FSEP education
Measures	• GAP audit • Paired cord gases audited in continuous labour and birth audit • ANZNN data
Plan	• Continual monitoring

Encouraging low risk wāhine to birth at home or in a primary facility	
Status	In progress
Initiatives	• Establish primary birth action plan with engagement from wider stakeholders • Recruitment efforts for primary birthing units to increase operational hours • Development of maternity hubs at primary facilities • Social media campaigns • Resuming tours of units and linking in with childbirth education providers • Facilitation of home birth education day
Measures	• Number of wāhine birthing in a primary facilities
Plan	• Ongoing recruitment drive to staff unit 24/7 • Update tour videos of primary facilities • Continual social media presence • Promote early pregnancy engagement at primary facilities

Equitable access to postpartum contraception, including regular audit	
Status	Business as usual
Initiatives	• Primary care providers hold contracts for long-acting reversible contraception (LARC) insertion and removal • Two types of LARC available at hospital following birth • Standardising contraception discussions with wāhine prior to discharge
Measures	• LARC data collected by THINK Hauora • Hospital analytics team monitor inpatient LARC insertions
Plan	• Look into training more midwives in LARC insertion to offer services at primary facilities • Promotion of contraception options to wāhine hapū

Equitable access to primary mental health services, mental health referral and treatment pathway	
Status	In progress
Initiatives	• Continual combined referral pathway and joint triaging between Think Hauora and MidCentral
Measures	• Monitoring of referrals and packages of care provided among primary and secondary services
Plan	• Plan future delivery needs and how primary and secondary services can continue to support each other

Ongoing audit and review of MEWS & trigger tool	
Status	Business as usual
Initiatives	• Monitor appropriate chart type usage in wider hospital by establishing question in EWS audit • Transitioned to electronic charts in primary facilities • Ongoing education within PROMPT, Midwifery Emergency Skills Refresher and Maternity Nursing Skills Day
Measures	• Monthly audit • Monitored in case reviews
Plan	• Transition to electronic charting at the hospital • Move auditing to iauditor

Reduce preterm birth and neonatal mortality	
Status	In progress
Initiatives	• Link with Te Ohu Aauhi Mutuna (TOAM) smoking cessation services to explore ways to increase referral rates • MQSP Coordinator on Taonga Tuku Iho: Knowledge Translation for Equity in Preterm Birth Care and Outcomes in Aotearoa review panel
Measures	• Preterm birth rates audited in continuous labour and birth audit
Plan	• Specific preterm birth audit

Monitor key maternity indicators by ethnicity to identify variations in outcomes & improve areas where there are differences in outcome	
Status	Business as usual
Initiatives	• Included in continuous labour and birth audit
Measures	• Included in continuous labour and birth audit
Plan	• Explore migrating data set to Power BI to make data exploration easier and more accessible

Co design models of care to meet the needs of wāhine Indian	
Status	In progress
Initiatives	• Janm aur Parvarish from Counties Manukau shared with region
Measures	• Consumer feedback
Plan	• Continual promotion of Janm aur Parvarish • Remove USS copayments for wāhine Indian

Co design models of care to meet the needs of wāhine under 20 years of age	
Status	In progress
Initiatives	• Consumer liaison to engage with teen parent units within region
Measures	• Consumer feedback
Plan	• Continual engagement with teen parent units to gain understanding on unique needs and improve care pathways

Interdisciplinary fetal surveillance education for all clinicians involved with intrapartum care	
Status	Business as usual
Initiatives	• Onsite fetal surveillance workshop facilitated by RANZCOG • LMCs invited at no cost • Regional collaboration to increase education opportunities
Measures	• Midwifery attendance monitored by Midwife Educator
Plan	• Ongoing education to ensure all staff complete biennially

Cultural competency workshops for all Maternity Service Staff	
Status	In progress
Initiatives	• Te Tiriti o Waitangi and Te Kakano education days scheduled and mandatory for staff • Proactive enrolment of staff by Educator, Clinical Coach and Maternity Nurse Specialist to facilitate staff attendance
Measures	• Education monitored by Midwife Educator
Plan	• Ongoing education to ensure all staff complete

Implementation of HQSC maternal morbidity review toolkit and SAC rating (maternal & NE case review)	
Status	Business as usual
Initiatives	• SAC 1 and 2 reviews managed through Serious Adverse Events Governance process, • Multi-disciplinary case reviews
Measures	• SAC and reportable events managed by Quality Assurance team
Plan	• Review current processes to reduce overlap in reviews

Implementation of hypertension guideline, with a review/re stock of medications to ensure easy availability & administration in acute care settings	
Status	Completed — Implemented 2022

Use of the Health Equity Assessment Tool (the HEAT) to assess services for the impact of health equity	
Status	In progress
Initiatives	• Considered in service development, guidelines and procedure documents
Measures	• Capture ethnicity data in auditing
Plan	• HEAT analysis to be applied to primary birth action plan • Include in leadership training material

Establish a clinical pathway for wāhine with identified placental implantation abnormalities	
Status	Completed — Regional collaboration on pathway completed 2022

Establish septic bundle kits to address human factor components, such as stress in high acuity settings	
Status	Business as usual
Initiatives	• Education delivered within PROMPT, Midwifery Emergency Skills Refresher and Maternity Nursing Skills Day
Measures	• Auditing of Maternal Sepsis and Screening Tool forms • Case reviews
Plan	• Include in ongoing education • Review antibiotics within kits • Review how kits are restocked

Establish clinical pathways across primary and secondary/tertiary care to enable earlier recognition and treatment of sepsis	
Status	Business as usual
Initiatives	• Additional education sessions provided to obstetric team

Māmā Bayley Williams with Max | Born March 2023

Health New Zealand
Te Whatu Ora
Te Pae Hauora o Ruahine o Tararua
MidCentral