# ANNUAL REPORT 2020/2022

## MATERNITY QUALITY & SAFETY PROGRAMME NELSON MARLBOROUGH

Te Whatu Ora
Health New Zealand
Nelson Marlborough

# Contents



## The use of she/her/mother/māmā/wāhine/woman/women

Whilst the above words are used widely throughout this report, we recognise that not all people who are pregnant or have given birth identify with the female gender. These words are not intended to exclude any person and acknowledge that we live in a gender diverse world. We have used the above words for consistency and ease of understanding but they should also be taken to include all people who are pregnant, have given birth or are in the postnatal period.




Donna Addidle


Debbie Fisher

# Foreward

Kia ora Koutou Katoa,

It gives us great pleasure to present the Te Whatu Ora Nelson Marlborough Maternity Quality and Safety programme (MQSP) report for 2020-2022. This is our region's eighth report and it has been a very important journey since our first report was published.

During this time our programme has gone from strength to strength and achieved many initiatives, focussing on responding to our communities voices and needs so that we continue to make a difference every day in our maternity services across Te Tau Ihu. Donna and I would like to take this opportunity to recognise and thank all of the midwives, nurses, doctors, allied health team, health care apprentices and our community services for the dedicated care they provide every day to wāhine and their pēpi and whānau across our hospitals, maternity units, community based spaces and in new families homes.

Although our birth rates have remained relatively stable over this reporting period, our birthing population continues to change and increase in diversity. Workforce and serving our diverse population continues to challenge the health service and our focus has been on how we can ensure we can provide our services in the best way for māmā and their pēpi. Supporting and nurturing our developing workforce from undergraduate through to post registration in midwifery has resulted in the region being bold in new initiatives such as the maternity health care apprentice roles created to support Māori into maternity roles and support through to complete their midwifery education.

Our maternity services are well connected with wider community organisations including Māori health providers. These networks bring a really unique strength for the community. These connections span public health, vaccinations, well child/ tamariki ora, mental health services, social services and community agencies, education, police and programmes such as Hei Pa Harakeke. Te Tau Ihu clinical leaders were pivotal in the development of the Te Wai Pounamu Te Pa Harakeke: Nurturing care in the first 1000 days. A big thank you to all of the families who have provided feedback to us on our maternity services – Ka Pai! To continue to strengthen our services we need to hear the voices of our communities to help us focus on what is important for new families across Te Tau Ihu.

In summary we are very proud of our maternity team and the achievements over the past two years. We hope you find this report inspiring and informative on our services and quality initiatives undertaken. A big thanks to our MQSP coordinators for leading a strong programme of quality and safety and for the development of the annual report. We also want to thank our dedicated MQSP clinical governance team who guide the mahi throughout the year.

Donna Addidle
Service Manager, Women Child & Youth

Debbie Fisher
Associate Director of Midwifery

# Our Vision, Mission, Values


## Our Vision: Ko te Whakakitenga

Working with the people of our community to promote, encourage and enable their health, wellbeing and independence.


## Our Values: Ā Mātou Uara

At Te Whatu Ora Nelson Marlborough we believe life's a whole lot better when we all try to get along and give our very best. Pretty simple really. We work together to make it happen.

"We believe that wāhine, their pēpi and their whānau should have access to high quality, safe midwifery care that acknowledges pregnancy and childbirth as a normal life event."

**MIDWIFERY VISION STATEMENT**





# Maternity Quality and Safety Programme

This is the eighth Maternity Quality and Safety Programme (MQSP) Annual Report by Te Whatu Ora Nelson Marlborough (formerly Nelson Marlborough DHB) since the establishment of MQSP in 2011.

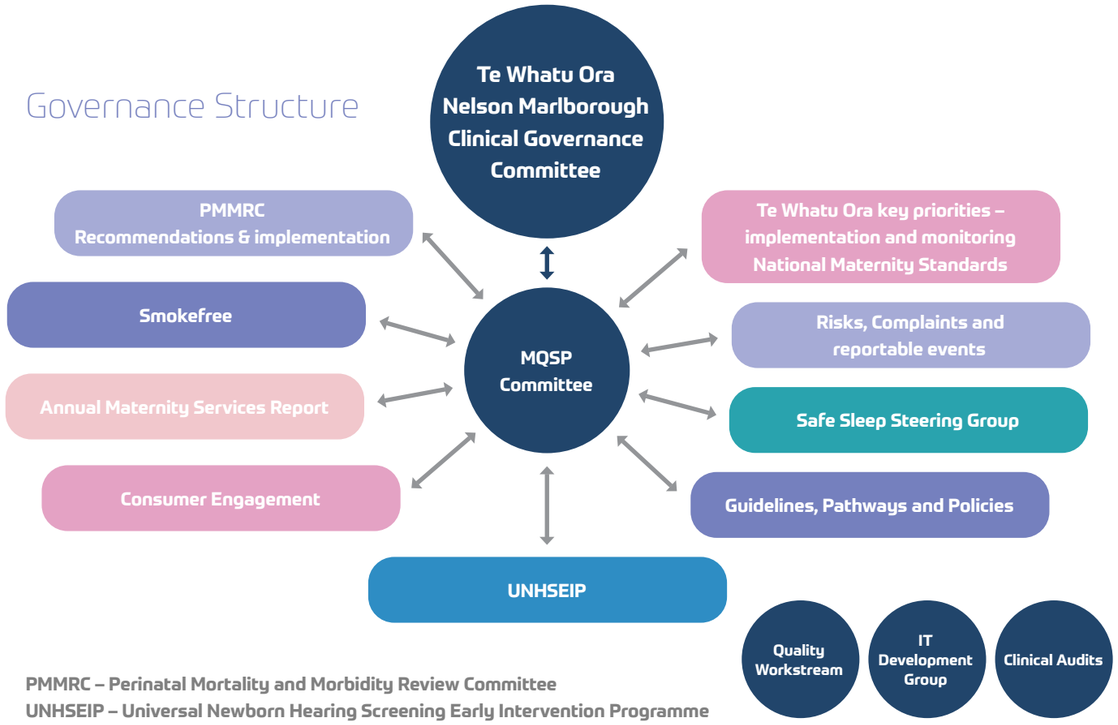
The purpose of the Maternity Quality and Safety Programme is to review and improve the quality and safety of maternity services as experienced by women and their whānau throughout the region. We have recognised that to be successful a collaborative multidisciplinary team approach is needed, including the voice of consumers. Throughout the latter part of 2021 and 2022 there has been a consumer representative sitting on our MQSP committee, reflecting the voice of the community. We hope to be able to grow this representation in 2023 throughout the region. In particular, we aim to have representation of Māori wāhine. In accordance with the principles of the Te Tiriti o Waitangi it is our commitment to have an equity focus for tangata whenua in all aspects of MQSP in accordance with Te Whatu Ora priorities.

Governance of the programme is undertaken by the MQSP committee.

MQSP is aligned with the National Maternity Standards:

1. Maternity Services provide safe, high quality services that are nationally consistent and achieve optimal health outcomes for mothers and babies
2. Maternity Services ensure a woman-centered approach that acknowledges pregnancy and childbirth as a normal life stage.
3. All women have access to a nationally consistent, comprehensive range of maternity services that are funded and provided appropriately to ensure there are no financial barriers to access for eligible women.

## Governance Structure




**PMMRC – Perinatal Mortality and Morbidity Review Committee**
**UNHSEIP – Universal Newborn Hearing Screening Early Intervention Programme**

There are two MQSP coordinators sharing the full time role. Regular MQSP meetings take place on a bi-monthly basis.

In common with other regions, Covid-19 has impacted priorities over 2020-2022. Changing alert levels and disruption to normal everyday work saw increased focus on the frequently changing pandemic response. But despite this a number of national and local recommendations were implemented. These are outlined further on in this report.



## Aims and Objectives

We remain committed to providing and improving the quality of maternity services for our women, babies and whānau.

The maternity services aims and objectives are to:

- Provide woman-centered maternity care that meets the needs of the population
- Continue to establish, implement, and review, as required, systems and processes to support the provision of quality safe care
- Take a whole of systems approach towards improving the health of women and children as guided by national priorities and health service expectations
- Develop the maternity workforce to ensure our maternity services are responsive to the needs of the population
- Develop and strengthen regional links

## Purpose of Report

The Purpose of this report is to:

- Describe the population we serve and the work we do.
- Be responsive, transparent and accountable to the women and whānau we serve, including response to consumer feedback and ongoing consumer involvement.
- Outline the initiatives underway to ensure our maternity workforce is supported to ensure high quality, safe care.
- Performance in relation to New Zealand Maternity Clinical Indicators 2020
- Provide information about the quality improvement work taking place and to update on our previous workplan and initiatives.
- Provide information about the work underway in addressing priorities identified by the National Maternity Monitoring Group (NMMG), the Perinatal and Maternal Mortality Review Committee (PMMRC) and the Maternal Morbidity Working Group (MMWG).

## Alignment with key strategic documents:

### The New Zealand Maternity Standards

Nelson Marlborough has aligned the MQSP with the National Maternity Standards and use them to inform future plans.

### National Maternity Monitoring Group Annual Report 2019_Pūrongo Ā-tau (health.govt.nz)

The NMMG acts as a strategic advisor on areas of improvement in the maternity sector and provides a national overview of the quality and safety of New Zealand's maternity services. This group oversees and reviews the National Maternity Standards.

The 2019 NMMG report was published towards the end of 2020 and is the most recent report available

### Perinatal and Maternal Mortality Review Committee (PMMRC) 14th Annual Report Te Pūronga ā -Tau Tekau mā whā o te Komiti Arotake Mate Pēpi, Mate Whaea Hoki .

The PMMRC reviews the deaths of mothers and babies in New Zealand. The 15th Annual Report was released in December 2022 so was not used in compiling this report.

### Maternity Morbidity Working Group (MMWG) 3rd Annual Report.

Te Pūrongo ā-Tau a Te Rōpū Mahi mō te Manaaki I te Whaea Matemate

The MMWG was established for a three-year term to improve the quality and experience of maternity care for women, babies, families and whānau through robust, women-centred maternal morbidity review, and through the development of quality improvement initiatives.

### Pae ora – healthy futures

Pae ora is the Government's vision for Māori health

### Nelson Marlborough Health Annual Plan 2021-22

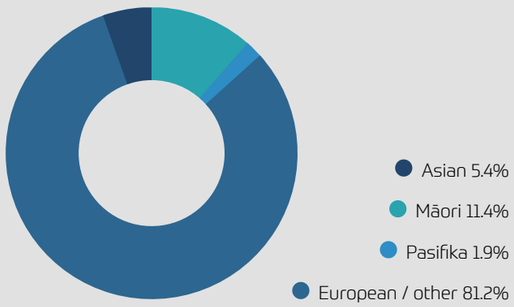
### Nelson Marlborough Māori Health & Wellness Strategic Framework 2008 -2038

# Our District

Our population has grown from 152,090 in 2019 to 161,250 in 2022.
This is estimated to rise to 166,780 by 2030.

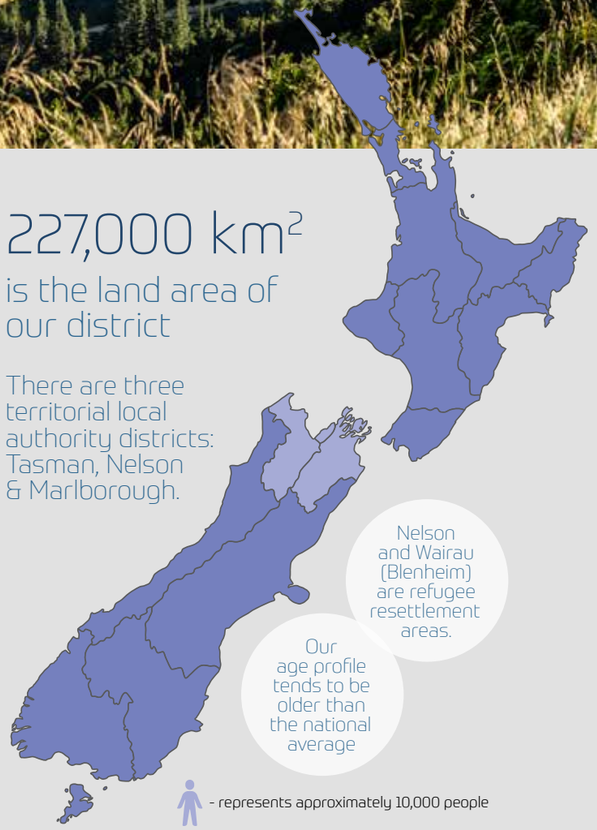
Nelson Tasman comprises three large settlements – Nelson, Richmond and Motueka; smaller urban and rural communities such as Mapua, and remote rural communities such as Golden Bay, Tapawera and Murchison. Marlborough comprises the main town of Blenheim, with Renwick, Picton and Havelock forming small rural settlements. The Marlborough Sounds, Ward and Seddon form our smallest rural communities.

## Nelson Marlborough population by ethnicity 2022




227,000 km$^2$
is the land area of our district

There are three territorial local authority districts: Tasman, Nelson & Marlborough.




- We have a lower proportion of people in the most deprived section of the population compared to the national average.
- We have a lower proportion of Māori and Pacifica people compared to the national average, but do have a higher rate of young Māori (under 25 years)

(Source: Te Pou o te Whakaaro Nui . DHB population profiles 2020-2030)

Image by Dr Peter McIlroy.



# Our Birthing Community

Our community demographics are taken from our local maternity database and the National Maternity Collection which provides statistical, demographic and clinical information.

The below provides a visual picture of health statistics for women giving birth in Nelson Marlborough in 2020-2022.

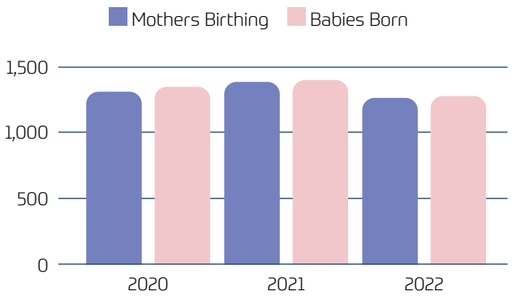
## Who are our whānau?

Data based on births within Birthing Units and obtained from local maternity database.

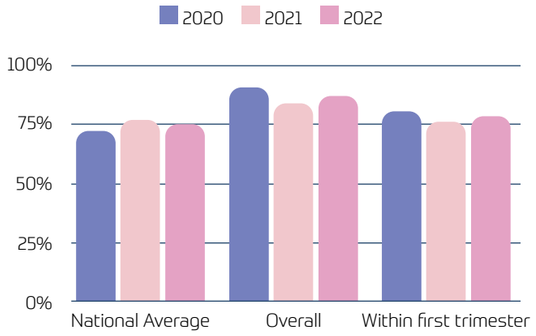
On average, 161 babies born every day in NZ in 2022, 4 babies born every day locally

Maternal age: Highest percentage of mothers are in the 30-34 year bracket

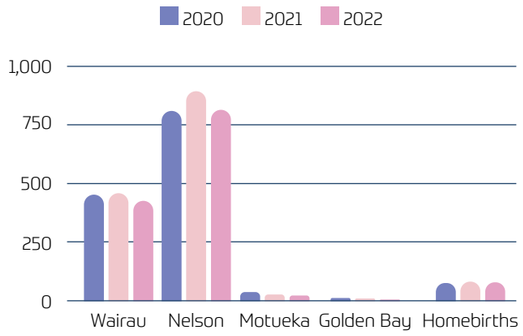
## In a facility



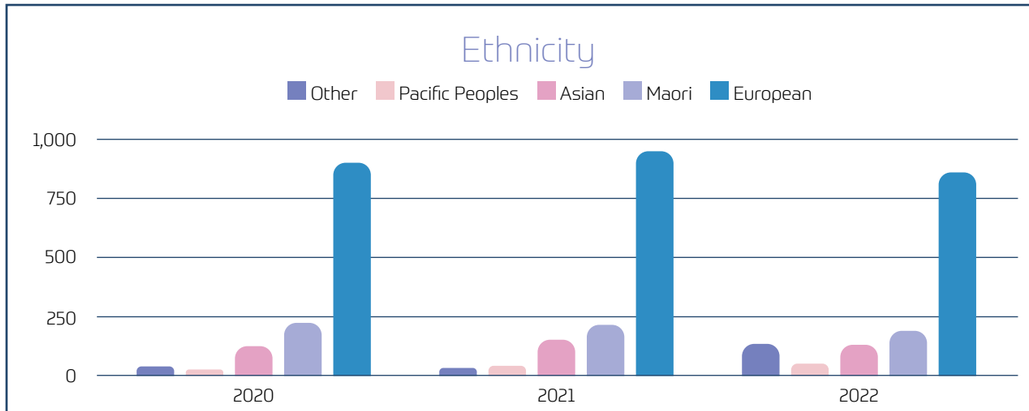
## Registration with LMC




## Facility (mothers birthing)




## Ethnicity




## Quintiles

| | 2020 | 2021 | 2022 |
|---|---|---|---|
| Q1 (least deprived) | 135 | 125 | 129 |
| Q2 | 403 | 401 | 401 |
| Q3 | 292 | 278 | 232 |
| Q4 | 402 | 473 | 415 |
| Q5 (Most deprived) | 78 | 107 | 83 |
| Other | 2 | 3 | 3 |

## Smoking - at first registration

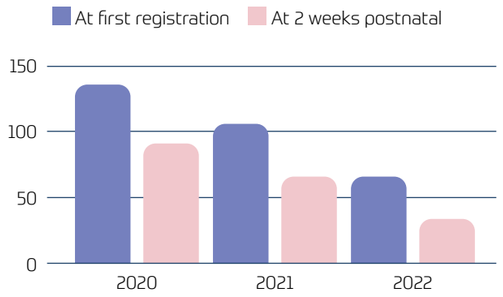







Image by Dr Peter McIlroy.

Kia hora te marino,
kia whakapapa pounamu te moana,
Kia tere karohirohi i mua i tou huarahi.

*May calm be spread around you,*
*May the sea glisten like greenstone and the shimmer of summer dance across your path.*

**– Maori blessing**

# Our Maternity Services

Maternity Services across Te Tau Ihu – Top of the South continue to provide community, primary and secondary facilities to our communities. We are very proud of our maternity teams who bring a high level of dedication, professionalism and team focus to meeting the national maternity standards.

We continue to appreciate feedback from people accessing maternity care because all feedback helps us to continue to shape and improve our maternity services. Where concerns have arisen from care – we take these seriously and review what occurred, and why, in order to provide answers to whānau and often we also identify what we can do differently and improve on. Where we receive compliments – these are shared with the staff and affirms the dedication and care the team give to every whānau coming into our services.

There is a significant midwifery workforce shortage across the region that we are working hard to manage safely. Wairau (Blenheim) has dedicated groups of LMC midwives and a hospital-based case loading team of midwives who are providing continuity of care for all women during their pregnancy, birth and postnatal time. Nelson and Motueka midwifery teams are working closely together to ensure women who are unable to access a LMC (lead maternity carer) midwife in the community can get a midwife for their care. We have needed to work creatively to ensure we can meet the needs of our communities. We have dedicated midwives working out of Nelson and Motueka maternity units providing pregnancy and postnatal care for women and their whānau. Motueka has only one LMC midwife in the community, so the hospital service has had to step in to support community midwifery services as the provider of last resort to enable women to have access to a midwife locally – particularly for those women wanting to birth at home or at Motueka Maternity unit.

Locum midwives have been so valuable to supporting our team across the district – we have really enjoyed having midwives from all parts of Aotearoa come and work with us. Thank you to those midwives and our local midwives for going above and beyond to ensure we can continue to provide the comprehensive range of maternity services that our communities need.

We continue to advertise for midwives and work with our recruitment team to try and fill vacancies and support more midwives in the community too.

Across Te Tau Ihu we have welcomed new midwives in Golden Bay, Tasman and Nelson and we are expecting more new graduate midwives across the whole region in 2023-2024. Further initiatives to attract midwives to the region, support midwives returning to practice and arriving from overseas is our priority to ensure we have enough midwives so women find it easy to find a midwife and have continuity of care throughout their pregnancy, birth and beyond.

In 2022 we welcomed the commencement of a new Midwifery Educator in Nelson and 2 Midwifery Coaches across Te Tau Ihu. These positions have been key in supporting our current maternity workforce in ongoing education and professional development and supporting midwives returning to practice, new graduate midwives and teaching practical clinical skills. The midwifery coaches have also been able to support the team by teaching and coaching staff through adverse events and where service improvements have been identified.

The maternity services also want to welcome our new Health Care Apprentices in Wairau and Nelson. This is an exciting new initiative that has supported Māori persons into Health Care Assistant roles within maternity with the view of then going on to enter the Bachelor of Midwifery programme in our local satellite area.

The Nelson Marlborough region is a satellite area for the undergraduate Bachelor of Midwifery Programme at the Ara Institute of Canterbury. We recognise the importance of nurturing our student midwives and value the opportunity to educate and support them within our region. Once they enter midwifery practice we continue to support and nurture them. A few local midwives offer support via the midwifery first year in practice programme (MFYP). As these midwives are 'home grown' it makes it easier for them to transition to midwifery practice in either core midwifery or LMC practice. They are a key component in our workforce plan for the future.

New Obstetricians have also joined the service across Te Tau Ihu and our team of doctors are there to assist women who need additional care during pregnancy, labour or need a planned caesarean section birth at Wairau and Nelson maternity units.

**LEFT and ABOVE: Nelson Maternity – Four birthing rooms, one birthing pool room, one pregnancy loss area 'The Rose Room', one clinical assessment room, four antenatal beds (including a Day Assessment area) 10 postnatal rooms, 10 SCBU cots. Nelson maternity unit has seen a makeover of its birthing rooms with large 'all wall' decals featuring local nature photographs taken by a local practitioner.**


**Wairau Maternity – Three birthing rooms (one with birthing pool), eight combined antenatal and postnatal beds, four neonatal cots, Tatau Pounamu (Maternity Hub). Wairau birth rooms will also see a makeover in 2023.**

Being a satellite student of the Ara Institute of Canterbury had its challenges. Living in Nelson meant it was always a long trip away, sometimes being in Christchurch for two weeks at a time. As most of the students were Christchurch based a lot of what we encountered was how the tertiary hospital in Christchurch operated. As Nelson is a secondary hospital things are very different. Being able to see the way both places worked was sometimes confusing but mostly had its benefits and showed us different views and perspectives on the policies.

We found being able to work in Nelson Hospital and learning the processes, policies, and staff dynamics helpful for when we joined the workforce. Having had the ability to work alongside LMCs in different parts of the country as well as Nelson gave us a wide knowledge and experiences which have certainly benefitted us in our New Graduate year. We are very grateful to all the staff in Nelson Maternity and LMCs for taking us under their wing and helping us feel a part of the midwifery community and grow in confidence as new midwives.

We do face challenges similar to those around the country: increasing complexities; balancing intervention with the promotion of normal birth; support of LMC midwives in an increasingly complex world which also results in more demands on the core midwifery staff. Ensuring we have the staff to safely manage these challenges is a priority. Regular Access Holder meetings provide a forum for self-employed LMC midwives to come together as a group with the service managers. Here they can connect with their colleagues, raise issues and challenges as well as discussing new ideas.

In the previous report it was identified that the surcharge for maternity ultrasound scans was a barrier to accessing care. We had received anecdotal evidence that this also creates inequities in accessing care and increased adverse outcomes for Māori wāhine. In 2022 the hospital maternity service was funded to cover the cost of radiology surcharges that existed for the Nelson-Tasman region. Maternity ultrasound scans are now completely free of charge for women who are eligible for publicly funded health care services.

The Day Assessment area in Nelson is a new initiative, established to provide higher risk women with safe, effective maternity care. These women need extra, regular antenatal monitoring and are reviewed by the same obstetrician and the same midwife. This is very reassuring for women as they don't feel they need to repeat their story multiple times and important clinical management plans are not compromised. Women appreciate the continuity of clinicians and feel they are recognised and are receiving safe maternity care.

The Day Assessment area also provides the prophylactic anti-D service and ferrinject infusions. This is a weekday service which allows a degree of flexibility for women and their families.

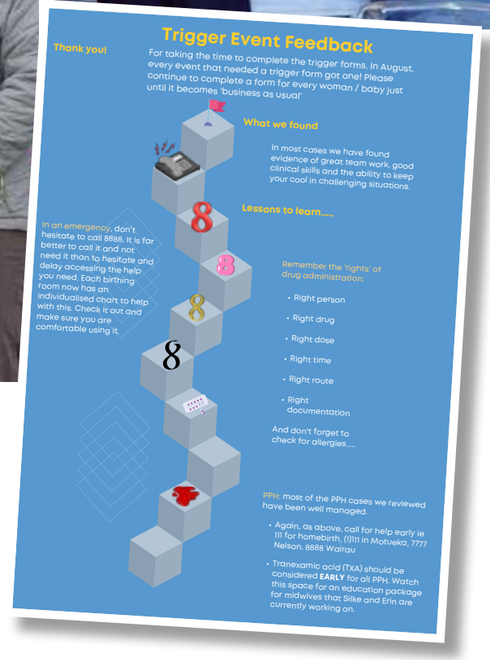
**Motueka Maternity Unit (Te Whare Whānau) – One birthing suite with birthing pool, one clinical assessment room (can be adapted for a second birthing area), three postnatal rooms with double beds. Motueka maternity unit is seeing a face lift in terms of furnishings and new bassinets in 2023.**

In 2022 a review of Maternity Services in Golden Bay was undertaken by a small team working together with whānau and their maternity care experiences looking at how we could improve services for women experiencing pregnancy complications and loss. As a result of the review and valuable feedback from whānau, recommendations have been identified to support safe, high quality maternity services in Golden Bay with improved integration with specialist services when women need additional care. The review and its recommendations are valued by the maternity services and have been accepted and supported by the health services across Golden Bay and Nelson and the joined-up quality improvement teams and lead clinicians have begun working through the action plan. This will continue across 2023-2024.

**ABOVE: Golden Bay – One combined birthing and postnatal suite, one clinic room. There are three midwives in Golden Bay employed by the Nelson Bays Primary Health Organisation to provide LMC care. In 2023 they will be joined by a local new graduate midwife which is very exciting for the region. One of the midwives has taken on a new quality management role and another has a new maternity administration lead role. They are working together to ensure continuing alignment with other primary units in NZ, keeping the midwives up to date with the latest protocols, national guidelines and education opportunities as well as participating more at a regional level such as attending the region's MQSP committee meetings. The unit is based in the Golden Bay Integrated Family Health Centre. The midwives also are on-call providing urgent maternity care for women temporarily in the region who may require maternity care.**


‘Flight Midwife’ education is also provided for midwives who escort women transferring to a tertiary facility.

PROMPT (practical obstetric multi-professional training)




# Midwifery Education

Te Whatu Ora Nelson Marlborough employs two Midwifery Educators to provide education for midwives from Golden Bay through to Marlborough. One is based in Nelson, the other in Wairau. This enables midwives to meet their Midwifery Council of New Zealand (regulatory body) re-certification requirements locally. The workshops also provide education around important maternity topics that are not regulatory requirements and present targeted education that responds to workplace challenges. This learning has been beautifully supported by the work of our Midwifery Clinical Coaches.

Over the last two years, the education programme has been severely impacted by Covid-19. Several workshops were postponed, cancelled or converted to online delivery to protect the workforce. Currently the programme is continuing to be challenged by workforce issues. Maintaining an adequate midwifery team ‘on the floor’ has necessitated ongoing workshop cancellations since the Covid-19 peak – there are simply not enough midwives to cover the service whilst their colleagues are engaged in education. This is a national concern.

Our base programme consists of Maternity Emergency Skills (including Maternal and Neonatal Resuscitation), Breastfeeding, Fetal Surveillance, Midwifery and Normal Birth Skills workshops. When staffing allows, we create additional learning opportunities, for example the ‘Supporting Families: Maternal Mental Health and Family Violence Workshop’ and suturing workshops.

In Wairau Hospital, midwives can join their obstetric colleagues at the monthly lunchtime Maternity Clinical Update and weekly cardiotocograph (CTG) meetings.

In Nelson, meetings for CTG review (fetal surveillance) also occur, as well as some journal clubs where a midwife presents a new piece of research from a midwifery or medical journal. We also hold ad hoc informal education sessions we refer to as ‘biscuits and brainfood’, which may cover a clinical skill or some interesting information from an attended workshop or conference. We re-started PROMPT (practical obstetric multi-professional training) in 2022. This is an international programme that involves staff from various health professions within the hospital attending and working together in high fidelity, emergency simulations. This is an effective programme that improves relationships and communication between disciplines and improves outcomes for our māma and pēpi.

Throughout 2022 we have also held regular ‘Trigger’ meetings in Nelson – looking at incidents and events with an educative lens. This includes significant postpartum haemorrhage, unexpected admissions to SCBU, management of 3rd / 4th degree tears etc. These cases are reviewed by a multidisciplinary team and presented at a trigger meeting. Any learnings are incorporated into the midwifery education programme and information is shared across the locality in a non-punitive way with a focus on learning. In 2023 we hope to offer a leadership opportunity to coordinate trigger and PMMRC activity. In Wairau, a combined PMMRC and trigger meeting has long been established and occurs on a monthly basis.



## Clinical Coach Midwives

The Midwife Clinical Coach is a new role created nationwide to provide practical clinical education in the workplace and promote a learning environment that encourages and supports development of midwifery clinical skills and knowledge. It is envisaged that this midwifery support will help reduce staff stress and therefore enhance staff retention, crucial in the climate of significant midwifery workforce shortages.

This role commenced in Nelson and Wairau in March 2022. The Midwife Clinical Coaches orientate staff who are new to the regions maternity unit and work closely with new graduate midwives (MFYP), midwives on the ‘Return to Practice’ (RTP) and Internationally Qualified Midwives (IQM) programmes, and any midwife who needs to refresh clinical skills or knowledge. The Midwifery Council appoints Midwife Clinical Coaches as supervisors to oversee the RTP and IQM programs, requiring monthly meetings and reporting to the Midwifery Council. The Nelson coach has supported 3 RTP midwives.

In both regions orientation packages have been updated and progress has been made to streamline the orientation of new graduates, health care assistants, nurses, and midwives new to the unit. Alongside this orientation support, support has been provided to midwives who identified individual learning needs. Staff have also been supported by the coaches to integrate new guidelines and initiatives on the floor in both units.

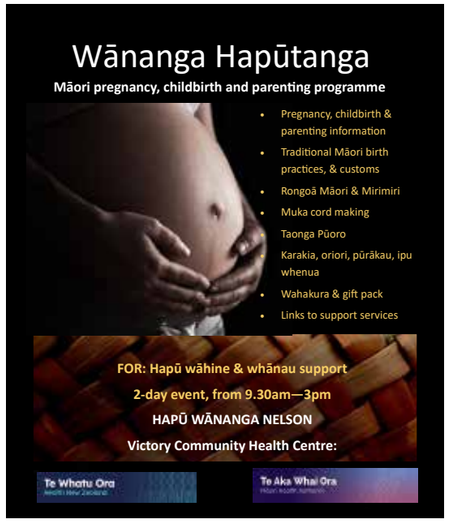
Both Midwife Clinical Coaches have become Newborn Life Support (NLS) Instructors and support the Midwife Educators delivering this education, in addition to other education such as PROMPT. The coaches have undertaken training on restorative practices and are using this knowledge, which emphasises the importance of relationships and restoration, to assist in debriefs following adverse or challenging events with women and practitioners.


In Wairau a maternity newsletter ‘The Wairau Wrap’ is produced by the coach every 4 months providing a space for midwives to share learnings from workshops or research and to update colleagues on quality initiatives, audit outcomes and midwifery activities they are involved in. It is also a space to welcome new staff and to acknowledge and value the additional contributions staff make to support their colleagues and improve outcomes for women and their babies.

# Pregnancy to Parenting Education (PPE)

Parenting and Pregnancy education continues to be offered in a hybrid model of online and face to face sessions by the hospital. There is one antenatal educator based in Nelson who supports face-to-face sessions and provides a zoom link for those unable to attend in person. We are in need of a 'on the ground' parenting and pregnancy educator in Wairau to be able to support face to face sessions.

Covid saw all classes move to an online module and zoom format, however since the latter half of 2022, we have been able to provide face to face sessions again. This has received good feedback from new parents wanting to meet other new parents. The zoom option also suits those who may be unwell or away for a session.




## Wānanga Hapūtanga – Kaupapa Māori pregnancy and parenting programme

The first kaupapa Māori pregnancy and parenting programme for wāhine and their whānau was launched in Wairau in November 2018.

We have continued to provide this and expanded it to include Motueka, Nelson and Wairau but due to staffing challenges and COVID restrictions there were some cancellations in 2022. A restart in 2023 is planned across Te Tau Ihu. A Kaiwhakahaere Kaupapa Moe Haumaru Portfolio Manager for Safe Sleep was appointed in 2022 with a direct focus on safe sleep education, resource distribution and supporting Wānanga Hāputanga. In 2023 these portfolios and roles will be moved across to Te Aka Whai Ora and the continuation of these programmes will be developed regionally with local delivery.

Classes typically run one evening a week over 6 weeks and cover a variety of topics from pregnancy to 12 weeks postpartum.

## Pēpi First Quit Smoking programme

Through the Pēpi First programme, we aim to support women to give their pēpi the best start in life through being smoke free in pregnancy and the homes they live in. This free programme is available for all hapū māmā who smoke and provides intensive one-to-one support with a quit coach, as well as nicotine replacement therapy and vouchers to reward achievement of smokefree goals. Quit coaches offer flexible appointment times and options, giving women the choice of being seen at one of our community clinics, in their workplaces or at home. We also offer support to partners and other family members who smoke in order to give women the best chance of quitting and staying smokefree.

The Manager of Māori Health and Vulnerable Populations is a champion for the local programme, which mirrors others that have been shown nationally to improve quit rates for Māori and vulnerable population groups.

In 2021-2022, the service received 42 referrals and quit coaches worked with 24 women throughout alerts levels one to four. When face-to-face appointments were not possible due to COVID-related constraints, quit coaches quickly transitioned to phone-based support and home delivery of nicotine replacement therapy. Prior to Alert Level Four, quit rates sat around 55%. At times it has not been possible to validate quit rates through the use of carbon monoxide monitors due to health and safety reasons. During these periods, self-reported quit rates sat around 53%


## Hei Pa Harakeke – First 1,000 Days

Hei Pa Harakeke project has expanded from Motueka to Victory (Nelson) and Wairau areas with a strengthened Te Pa Tata alignment.
The Hei Pa Harakeke team is made up of community health and non-government organisational (NGO) professionals from across the area, covering multiple areas of child health, including infant mental health and other family support services. The aim of the team is to bring together people and organisations supporting whānau to provide a focus on developing nurturing relationships which are vital to pēpi's development. The relationship starts during pregnancy when there may be signs that additional support may be needed. Whānau are offered the programme of support during pregnancy and the first 2 years of life to nurture the maternal/whānau-infant relationship and prioritise infant mental health in those vital first years.
Hei Pa Harakeke is for any hapū wāhine or whānau with tamariki who are in their first 1000 days of life (from conception to 2 years old) who will benefit from therapeutic support with their parent-infant relationship and live in the geographical areas covered.

# Neonatal care in Nelson

The number of babies cared for in the Nelson Special Care Baby Unit (SCBU) peaked during the pandemic at 246 admissions for 2021. We had 215 infants in 2020 and 223 in 2022. We support pēpi from our home area of Nelson and Tasman Bays from around 32 weeks gestation onwards, while accepting whānau transferred from Wairau, West Coast and Canterbury as able.

Acknowledging the significant challenges in limiting whānau members and support people visiting during this time, in addition to huge changes in the workforce, we have continued to embed our model of Family Integrated Care. We work in partnership with parents in all areas of decision making and coach them to become their pēpi's main care-giver as much as they are able. In this way parents are integral to providing the neonatal care required as they wish, rather than merely visitors to the unit.

The upgrade of the unit point-of-care blood gas analyser means we now have gold standard testing for blood sugars, in addition to lactate, electrolytes and serum bilirubin, all from a micro-sample capillary heelprick or cord blood syringe. This SCBU initiative complements the work undertaken to improve the neonatal encephalopathy pathway and the implementation of the NOC/NEWS charts in the maternity unit.

# Paediatrics and neonatal care in Wairau

In Wairau hospital we have a combined neonatal and paediatric unit - one of only two in the country. We care for babies from 34 weeks' gestation and have three 'cot' beds although this can be flexed at times depending on acuity and the number of paediatric patients. We are located next door to our maternity unit and work closely with them. We have swing beds which enable us to share care where the midwives will be looking after the mother while we will be caring for their pēpe. We also have a special stabilisation room where we can nurse higher needs pēpe requiring respiratory support or even intubation until they can be retrieved by a tertiary team, usually Wellington neonatal intensive care unit (NICU). As with Nelson SCBU, we have a blood gas analyser machine which has made a big difference to our practice and improved point of care testing and time to some treatments.

We cared for 88 babies in 2020, 96 in 2021 and 87 in 2022. These numbers are lower than usual for us as we cared for 120 in 2019. The pandemic may have contributed to this as overall in 2020 we saw far fewer admission - especially noticeable was those children we would expect with respiratory illnesses. This may have been due to a greater awareness of hand hygiene and mask usage but of course none of these things would have an impact on babies being born early or needing our support. We do feel that the use of the newborn early warning system (NEWS) and the ABL90 blood gas machine is having a positive impact on babies in that problems such as neonatal hypoglycaemia are being picked up sooner and therefore being treated earlier and not requiring admission. We look forward to providing an update in 2023 when we have a full years data to quantify this.

# Safe Sleep

We continue to be committed to providing a quality safe sleep programme with the focus on making sure 'every sleep is a safe sleep' for pēpi. Sudden Unexpected Death in Infancy (SUDI) in most situations is preventable, if whānau and caregivers are able to provide protective care including a safe sleep environment. Te Waka Haoura (TWH) continues to ensure that the safe sleep messaging is reaching whānau and the wider community. The programme has been running since 2018 and has gained momentum since its conception.

Safe sleep is now a multi organisational programme that has coordinators and champions across Aotearoa. Within the Nelson Marlborough Tasman region, we have Safe Sleep Champions (SSC) who work across a range of entities that are reaching those who are most in need. We maintain a close working relationship with the SSC ensuring that they receive relevant education updates and changes to the safe sleep programme.

TWH runs a Hāpū Wānanga which brings together multiple organisations. In this space we provide an Aō Māori approach using tikanga as a framework. It is an incentivised programme where māmā and whānau are connected to services to meet the needs of the individual whānau by focusing on equity and breaking down the barriers some whānau experience when accessing health services. Hāpū

wānanga promotes Safe Sleep, Smoke free (Pēpi First), breastfeeding and gentle handling to ensure pēpi has the best start to their journey in life.

Covid 19 outbreaks throughout 2020-2022 continued to make delivering the safe sleep messaging difficult and at times Hāpu Wānanga's were cancelled.

The Safe Sleep programme now offers a green alternative for whānau to use. Whānau are given Moses Baskets as a safe sleep bed (SSB). Whānau who attended Hāpu Wānanga are given wahakura as a part of their koha pack. The harakeke (flax) that wahakura is weaved form holds significant cultural mana for whānau, the fan shaped blade is a representation of whānau with the outer leaves (Awhi rito/ parents and Tūpuna/ grandparents/ancestors) protecting the rito/child at its centre. Safe Sleep is humbled by being able to gift a wahakura to māori māmā as it holds mana and cultural significance.

98.7%

98.7% of eligible babies completed screening by one month of age

2.3%

2.3% of screened babies referred to Audiology for ongoing monitoring and diagnosis

Babies born who live in Nelson Marlborough locality

**1312**

Babies screened

**1343**

1.3%

1.3% of eligible population offered screening but declined/disengaged.

**2022 was spent learning and preparing for the introduction of Easy Screen, replacing the MB11.**

The Easy Screen provides a quicker screening experience. The machine is more resilient to the environment and the baby. We can now screen babies younger and older if necessary. The average screen length is only 12 second per ear.

**The hearing screening team consists of four screeners including a coordinator. The team is based in Nelson and works in Seddon, Picton, Blenheim, Nelson, Richmond, Motueka and Golden Bay. Home visits are offered on a needs basis.**

### Our Why

Offering screening to all babies and identifying the very few numbers of babies born with a hearing loss so we are able to offer early intervention. This gives these babies the best opportunity for the least amount of impact from their hearing loss on their future development.

*Screening numbers based on babies screened within the Nelson Marlborough area. Some of these may have been born outside of area.

# Universal Newborn Hearing Screening and Early Intervention Programme (UNHSEIP)

"The service promotes and provides an environment that generates new ways of working and learning".

We provide the national newborn hearing screening and early intervention programme in all of our maternity units. We also visit whānau at home when needed – because ensuring every pēpi has their hearing checked is really important and we want to ensure whānau don't have any barriers to accessing the service.

There are four screeners, all based in Nelson but travel to all the units and undertake home visits as needed. Within the last year all four screeners have undertaken Easy Screen training – in preparation for the arrival of Easy Screens in December 2022.

In 2022 – the UNHSEIP program was audited by the Designated Auditing Agency (DAA) group – there were no corrective actions identified from the audit.

"There is an experienced and knowledgeable team who work collaboratively, and the team demonstrates a commitment to a family/whānau centered programme".



## Newborn Metabolic Screening (NMS)

Our maternity service continues to strive to meet the national standard of 95% of blood spot cards for NMS reaching the laboratory in the 4 day standard because we recognise that any delay can lead to a delay in diagnosis and treatment.

In the final quarter of 2022 71.1% of our cards reached the laboratory in the 4-day period. This was a significant drop from 82.9% in the third quarter. 96.7% arrived within a week of being sampled. Quarterly performance in the 4-day rate of return has improved compared to the same time period in 2021, but less than for that in 2020. Whilst covid has played a part in these findings we are aware that moving forward we will need to look at and implement some strategies to improve our transit times.

In 2022 NMS was audited externally and two corrective actions were identified:

- Documentation for informed consent and screening
- Development of a NMS guideline.

We are currently working on these actions and look forward to providing further information in our 2023 Annual Report.

## Newborn Observation Chart (NOC) Neonatal Early Warning Score (NEWS)

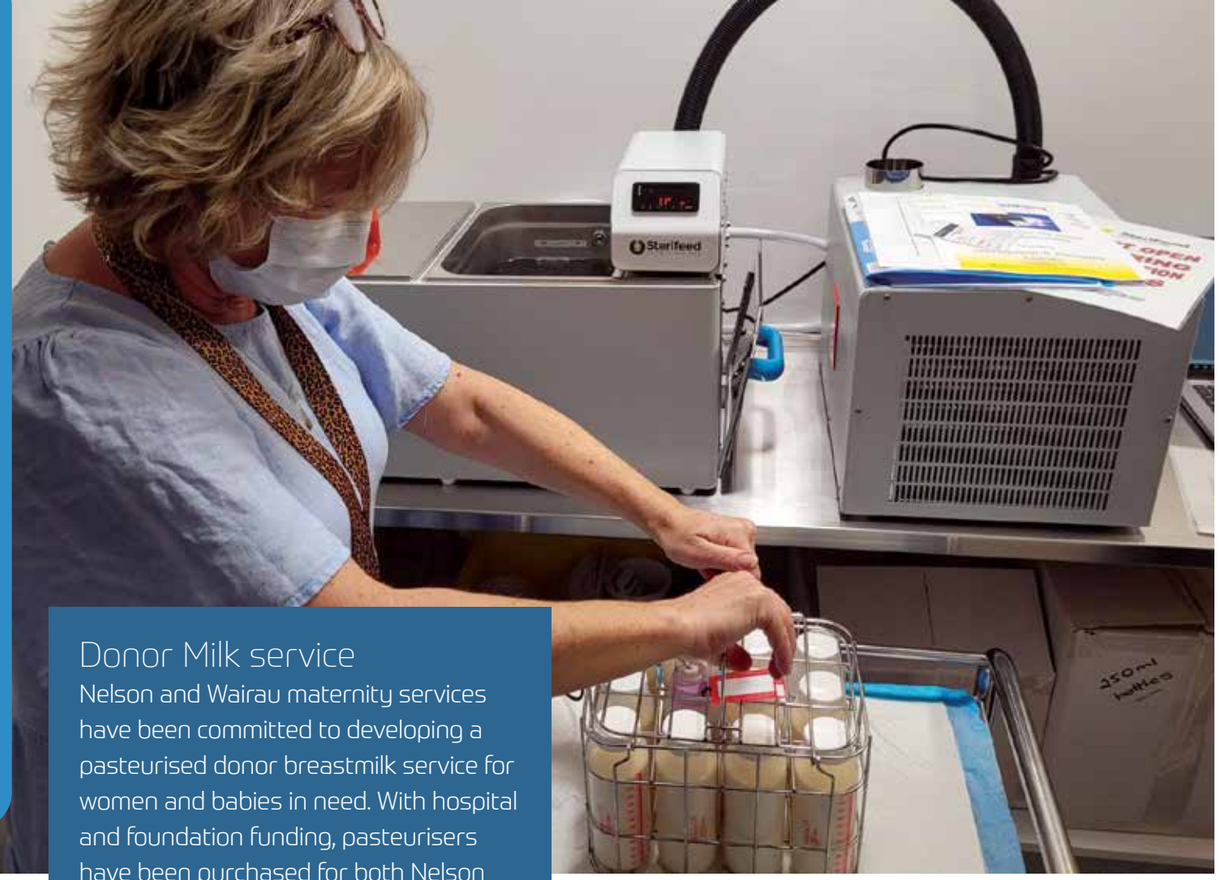
The NOC NEWS is a vital signs chart which has been developed to standardise the initial assessment and care of all pēpe in New Zealand. The NOC also provides a single view of clinical information and assists recognising trends which may indicate a pēpe's condition has deviated from the norm. The NEWS has been developed to assist with the early recognition of clinical deterioration of infants who are at risk, with the aim of improving outcomes for these infants and to help us detect and reduce the severity of Neonatal Encephalopathy and other neonatal conditions.

The NEWS has been in practice since April 2021 – ACC facilitated the implementation and provided some funding on set up and again when 6 months of auditing had been completed.

There are two NEWS champions who carry out the audits in Nelson and Wairau. They report back findings locally so that any educational needs can be met directly.

With the funding received for the adoption and monitoring of the NEWS chart, seven portable pulse oximeters were purchased.

The pulse oximeters are a critical piece of equipment needed to implement the "Screening for Congenital Heart Defects" project. This project is due to commence in early 2023.




## Donor Milk service

Nelson and Wairau maternity services have been committed to developing a pasteurised donor breastmilk service for women and babies in need. With hospital and foundation funding, pasteurisers have been purchased for both Nelson and Wairau maternity units and the pasteurisation programme.

Getting the service up and going has been largely due to the dedication of a local Lactation Consultant and a small group of midwives and neonatal nurses. This service will be available for mothers and babies within the maternity units and neonatal services. Updating our information documents, guidelines and consent procedures will all be a part of improving the donor breastmilk service. We look forward to the early part of 2023 when we plan to be pasteurising our first batch of donor breastmilk. This will be supported by the Christchurch Human Milk Bank manager and the manager from Nascor Neonatal in Australia.

We would like to acknowledge the amazing women who have so generously given this precious gift to other women and their babies.

## Small for Gestational Age (SGA) Babies

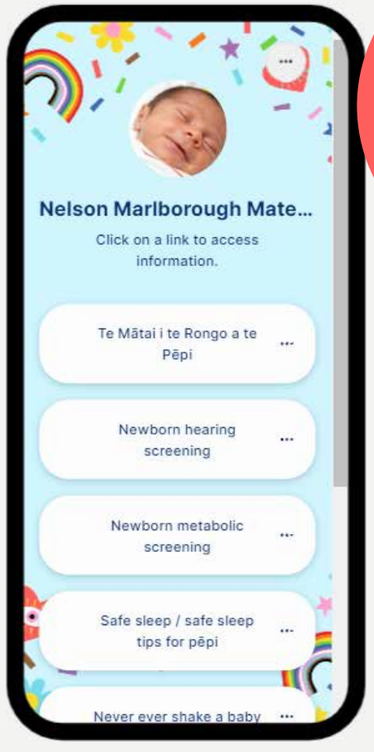
Fetal growth restriction (FGR) is associated with stillbirth, neonatal death, and morbidity. Over 40% of stillborn babies born after 24 weeks without congenital abnormalities are small for their gestational age (SGA), which is used as a proxy for FGR. This risk is reduced if growth problems are identified antenatally to allow for increased surveillance and timely birth. Research from a ten-year study in the United Kingdom shows that the regions where the Growth Assessment Programme (GAP) had been fully implemented experienced the greatest reductions in stillbirths. GAP education provides necessary knowledge, understanding and competence in fetal growth surveillance. The education includes recognition of risk factors for SGA at booking (these women are scheduled serial ultrasound scans to monitor their baby's growth), guidelines for referral to specialist care, standardised measurements of fundal height (measurement of the mother's abdomen) and guidelines on when to refer for growth scans according to these measurements plotted on individualised growth charts. Individualised growth charts provide an optimal growth trajectory based on the mother's weight, height, how many babies she has had and her ethnicity. In addition to increased antenatal surveillance for babies identified as at risk for FGR/SGA, babies who are born SGA (<10th centile on their individualised growth chart) require blood sugar monitoring due to increased risk of hypoglycaemia (low blood sugar).

GAP implementation and education has been in place in Nelson Marlborough since 2020 and is firmly embedded across the region. Ongoing audit of 'missed' cases (where a baby was born SGA but was not detected as SGA antenatally) is undertaken by the two GAP champions for the region, with education provided to practitioners to address any themes or improvements identified. The region has consistently performed above the national average with referral rates for suspected FGR/SGA, antenatal detection of SGA babies, and completion of growth charts and birthweight centiles. An area of identified improvement in the Nelson-Marlborough region is the still high proportion of SGA babies who are born after 40 weeks and severely SGA babies born after 38 weeks.

We are pleased to report that inequity in scan access across the region has been addressed with the private surcharge for clinically indicated ultrasound performed by community radiology providers now being met by Te Whatu Ora Nelson Marlborough. This removes the financial barrier for women who require scans to monitor growth.

The GAP champions are excited to be attending a conference in Auckland in 2023 which includes a presentation from Jason Gardosi from the Perinatal Institute in the UK (the pioneer of GAP and customised growth charts). We look forward to incorporating learnings into practice.






'This is a wonderful way of grabbing attention and providing information'

'Lots of useful information covering specific areas'

'This is a good idea and it is very easy to understand what it is all about'

## Early Days

We are aware that many people prefer to access information electronically. One of the few benefits during covid was that people became familiar with QR codes so we developed a poster with an attached QR code, enabling whānau to download information directly to their phones. The technology used allowed the information to be updated centrally and anyone who had downloaded the information to their device would automatically receive the update. The information is made available in both Te Reo Māori and English. The posters are available in each postnatal room. The information can be read while the whānau are with us following the birth of their baby and used in the discussion between the midwife and whānau when discussing important topics such as safe sleep. Paper versions are still available for those who prefer them.

Lani Gaskell.

# Consumer engagement

My name is Lani Gaskell, I am a mother of three beautiful daughters. I became involved as a Maternity Consumer Representative in Te Tau Ihu after the birth of my third daughter and completing my Bachelor of Sport & Exercise. My study and work focused particularly on perinatal exercise and postnatal rehabilitation and how best we can improve pelvic health outcomes for pregnant and postnatal women.

Being a part of the Maternity Quality and Safety programme this year has broadened my passion for improving outcomes across all components of maternity care. As a consumer representative it is such a privilege to be able to connect and engage with the local community and pregnant/postnatal māmā in a safe space sharing their experiences of care; what they find helpful and what parts require work and feeding this information back to MQSP to see where we can improve the experience of maternity care.

Throughout this year I have been a part of several projects, all focusing on different elements of maternity care, whether it be birth outcomes, maternal mental health or equity and care access. Seeing the collective input and collaboration with clinicians, service providers and healthcare workers and their unwavering passion has made me feel optimistic about the changes that can be made for continuously striving to improve health and safety outcomes for women and babies!"

## Tell us what you think – what can we do better?

Engaging with woman and whānau in our community has been identified as one of the priorities of the MQSP so that we can continue to learn how we can do things better.

Consumers are encouraged to feedback about their experiences in our maternity units. Feedback forms are available throughout the units and online feedback can also be given. All feedback, complimentary and complaints, are seen by the maternity unit managers who in turn share it with the wider workforce.

Complaints or concerns about care are taken seriously and the service works hard to support families to share their experiences and answer questions they may have about their experience. Nobody likes to receive complaints or negative feedback but sometimes these really can be 'jewels to be treasured' because of the positive changes they bring about. An example of this was the work undertaken alongside a woman who had experienced a pregnancy loss in her second trimester. Whilst she described the care she received on the whole as very positive she also highlighted how upsetting she had found the time between diagnosis to admission for her to birth her baby. Lack of information as well as a perceived lack of empathy were her main concerns. We approached her and asked, whenever the time was right for her, if she would work with us to improve our service. She was grateful that we had reached out to her and asked for her help. Together we designed an information leaflet that is given to women who have a pregnancy loss requiring the use of mifepristone and misoprostol.

## Working with our communities

Nelson Marlborough is home to a number of former refugee communities from Myanmar (formerly Burma) and Bhutan. In 2020 and 2021 two babies from this community became very unwell and were transferred to Starship hospital. These babies were found to have Beriberi (thiamine deficiency).

Outbreaks of Beriberi have occurred frequently in refugee and displaced populations and is well described in Burmese refugee camps. There is an increased thiamine need in pregnancy and lactation.

This was not well understood here in New Zealand where the staple food for recent refugees is white rice which is low in thiamine and is often washed several times reducing the content further.

A local paediatrician researched the topic and, following presentation of one of the cases at our Perinatal Mortality & Morbidity Review Committee (PMMRC) meeting, the MQSP coordinator offered assistance in putting together a team to look at what we could do to reduce the risk of further cases.

A working group consisting of a paediatrician, community pharmacist, a GP, a community dietitian, public health nurse, social worker, Red Cross representative, contract manager, community pharmacy facilitator and MQSP coordinator met regularly. A maternity guideline was developed to assist midwives in prescribing appropriate supplements during pregnancy and the postnatal period. The guideline is also on the local Health Pathways so can be accessed by GPs. The community dietitians have developed a pictorial resource to help people choose thiamine rich foods. This is especially useful as these communities mainly use a spoken dialect rather than written.

Any opportunity to publicise and highlight this issue is taken. In August 2022 a woman from the community joined the MQSP coordinator in presenting to GPs and Midwives at a 'Turning Challenge into Opportunity' evening. Her story was well received and enabled the community to represent themselves.

## Ooh Meh on her experience when Lily became unwell

When she was first born Lily was healthy, for the first month she was fine. Then at the start of October (Lily was born in late August) she began to stop drinking breastmilk and would become quite floppy, lethargic, and sleepy. We didn't have a car so we would have to walk to the doctor or hospital when she became unwell, sometimes this would happen in the evening, and we would have to walk a long distance in the cold to get to the hospital. My first thought when Lily stopped drinking breastmilk as she became unwell was that she was not going to survive, that she would die.

I want to thank all the doctors, nurses, interpreters and other healthcare staff in both Nelson and Auckland who helped me when Lily became sick. I think that it is good that the system has changed as a result of what happened to Lily. Because we were new here, we didn't know anything about this problem and how to prevent it. In Myanmar and in the refugee camps we were always in survival mode and had no idea about diet and food was very scarce, we would just eat what was available so if bamboo shoots were sprouting, we would eat that and only that for a month until it was no longer available. When we came to New Zealand we still had no idea about good diet. We didn't know that we shouldn't wash the rice here. I learned this information after my baby became unwell.

# Our outcomes for wāhine and pēpi

Despite the workforce issues that have been encountered on an almost daily basis, our staff, both clinical and non-clinical, strive to deliver the best care possible. This was true even with the extra challenges that covid-19 brought into the workplace and our communities.

We continue to be committed to providing and improving the quality of maternity services for our women, babies and whānau by continuing to:

- provide woman-centered maternity care that meets the needs of the population
- establish, implement, and review, as required, systems and processes to support the provision of quality safe care
- take a whole of systems approach towards improving the health of women and children as guided by national priorities and health service expectations
- develop the maternity workforce to ensure our maternity services are responsive to the needs of the population
- develop and strengthen regional links

## Clinical Indicator Analysis

The New Zealand Maternity Clinical Indicators 2020 data was published in October 2022 and is the most recent data available. The publication shows key maternity outcomes for each DHB from 2015 to 2020.

The following information shows our performance and position in relation to both the indicators and the national averages. Clinical Indicators 2 – 9 are based on the standard primiparae only.

> The standard primiparae group are:
>
> - Aged 20 – 34 (inclusive) with a first, uncomplicated, singleton pregnancy.
> - Birthing at full term (37 – 41 weeks) with a baby with a cephalic (head down) presentation.
>
> This group represents the least complex situations for which intervention rates can be expected to be low and therefore give valid comparisons between regions.
>
> Standard Primiparae make up approximately 15% of all births nationally.

The purpose of the Clinical Indicators is to highlight areas where quality improvement can potentially be made.

Further information around this data can be found at: Maternity Clinical Indicators 2020 – Te Whatu Ora - Health New Zealand

## New Zealand Maternity Clinical Indicators 2019 / 2020

| | INDICATOR | 2019 | 2020 | National average 2020 | How we look |
|---|---|---|---|---|---|
| 1 | Registration with an LMC in first trimester | 80.8% | 80.6% | 72.6% | ✓ |
| 2 | Standard primiparae who have a spontaneous vaginal birth | 62% | 57% | 62.1% | × |
| 3 | Standard primiparae who undergo an instrumental vaginal birth | 17.6% | 17.3% | 19.2% | ✓ |
| 4 | Standard primiparae who undergo caesarean section | 20.4% | 18.1% | 17.6% | × |
| 5 | Standard primiparae who undergo induction of labour | 3.6% | 5.1% | 9.2% | ✓ |
| 6 | Standard primiparae with an intact lower genital tract | 17.6% | 17.5% | 26.7% | × |
| 7 | Standard primiparae undergoing episiotomy (and no 3rd or 4th degree tear) | 23.4% | 20.3% | 26.1% | ✓ |
| 8 | Standard primiparae sustaining a 3rd or 4th degree tear and not undergoing an episiotomy | 2.7% | 3.4% | 4.3% | ✓ |
| 9 | Standard primiparae undergoing episiotomy and sustaining a 3rd or 4th degree tear | 2.7% | 2.3% | 2.1% | – |
| 10 | Women having a general anaesthetic for caesarean section | 6.1% | 6.2% | 7.8% | ✓ |
| 11 | Women requiring a blood transfusion with caesarean section | 3.9% | 3.1% | 3.4% | ✓ |
| 12 | Women requiring blood transfusion with vaginal birth | 1.8% | 2.1% | 2.4% | ✓ |
| 13 | Diagnosis of eclampsia at birth admission | 0 | 0 | 0.03% | ✓ |
| 14 | Women having a peripartum hysterectomy | 0.07% | 0.07% | 0.04% | – |
| 15 | Women admitted to ICU and requiring ventilation during pregnancy or postnatally | 0 | 0 | 0.03% | ✓ |
| 16 | Maternal tobacco use during the postnatal period | 7.1% | 7.4% | 8.6% | ✓ |
| 17 | Preterm birth (under 37 weeks gestation) | 7.3% | 6% | 7.9% | ✓ |
| 18 | Small babies at term (37-42 weeks' gestation) | 2.9% | 2.5% | 3% | ✓ |
| 19 | Small babies at term (40-42 weeks' gestation) | 38.5% | 30.3% | 29.6% | – |
| 20 | Babies born at 37+ weeks' gestation requiring respiratory support (>4 hours) | 2.1% | 1.3% | 2.7% | ✓ |

## Action Points from Clinical Indicators

- Continue with plans for 'Normal Birth' workshops
- Midwifery Educator supported to become a 'Spinning Babies' Educator
- Continue to monitor perineal tears, especially as local data for 2021 and 2022 suggests that 3rd and 4th degree tears are rising.

I attended the Spinning Babies Aware Practitioner training in Melbourne in June 2022.

Spinning Babies is a physiological approach to preparing for and caring for birth. During birth, babies descend through the pelvis by rotating to fit each curve in the passage. When fetal rotation is made easier, birth is easier. Spinning Babies® brings body work and birth work together to help improve fetal positioning such as breech, transverse, posterior and to reduce the chance of caesarean. The techniques include self-care and specific body activities to restore body balance and make room for the baby. The aim is to allow babies to put themselves into the best positions possible for childbirth – within the anatomical space available.

I have shared the knowledge and skills learned from this course with colleagues attending the Normal Birth workshop in Nelson and Wairau. I'm also able to be a trouble-shooting resource for midwives during birth.

Silke Powell- Midwifery Educator, Wairau

# Clinical Indicator Equity

In addition, we have looked at the clinical indicators and other data with a health equity lens to establish where we are doing well and, more importantly, what we should be focusing on to improve equity of outcomes for the different ethnicities within our region. When interpreting the data it is important to remember that some ethnicities are represented by small numbers of women (see page 8 for population details)

| NZ Clinical Indicators by ethnicity 2020 | Indian | | | Māori | | | Pacific | | |
|---|---|---|---|---|---|---|---|---|---|
| | National | Local | How we look | National | Local | How we look | National | Local | How we look |
| Registration with an LMC in first trimester | 75.8% | 83.3% | ✓ | 60.6% | 73.2 | ✓ | 47.1% | 58.3% | ✓ |
| Standard primiparae (SP) who have a spontaneous vaginal birth. | 44.6% | 30.8% | × | 74.1% | 63.6% | × | 70.8 | 42.9% | × |
| SP who undergo an instrumental vaginal birth | 28.3% | 23.1% | ✓ | 12.1% | 18.2% | × | 13.2% | 28.6 | × |
| SP who undergo caesarean section | 25.7% | 46.2% | × | 13% | 15.9% | × | 15.5% | 28.6% | × |
| SP who undergo induction of labour | 15.8% | 7.7% | ✓ | 6.3 | 2.3 | ✓ | 9.8 | 14.3 | × |
| SP with an intact lower genital tract | 10.2% | 14.3% | ✓ | 40.9% | 13.5% | × | 22.6% | 20% | × |
| SP undergoing episiotomy (and no 3rd or 4th degree tear) | 42.8% | 14.3% | ✓ | 13.5% | 13.5% | ✓ | 21.7% | 20% | ✓ |
| SP sustaining a 3rd or 4th degree tear and not undergoing an episiotomy. | 7.7% | 0 | ✓ | 3.1% | 2.7% | ✓ | 5.1% | 0 | ✓ |
| SP undergoing episiotomy and sustaining a 3rd or 4th degree tear. | 4.7% | 14.3% | × | 0.7% | 0 | ✓ | 2.2% | 20% | × |
| Women having a general anaesthetic for caesarean section. | 7.9% | 0 | ✓ | 10.5% | 5% | ✓ | 9.8% | 0 | ✓ |
| Women requiring a blood transfusion with caesarean section. | 3.6% | 0 | ✓ | 4.3% | 0 | ✓ | 5.1% | 0 | ✓ |
| Women requiring blood transfusion with vaginal birth. | 3.7% | 4.2% | × | 2% | 3.8% | × | 4% | 8% | × |
| Diagnosis of eclampsia at birth admission | 0 | 0 | ✓ | 0 | 0 | ✓ | 0 | 0 | ✓ |
| Women having a peripartum hysterectomy. | 0 | 0 | ✓ | 0 | 0 | ✓ | 0 | 0 | ✓ |
| Women admitted to ICU and requiring ventilation during pregnancy or postnatally. | 0 | 0 | ✓ | 0 | 0 | ✓ | 0 | 0 | ✓ |
| Maternal tobacco use during the postnatal period. | 0.3% | 0 | ✓ | 22.9% | 20.8% | ✓ | 6% | 12.5% | × |
| Preterm birth (under 37 weeks gestation) | 8.8% | 10.8% | × | 8.9% | 6% | ✓ | 8.1% | 5.9% | ✓ |
| Small babies at term (37-42 weeks' gestation) | 7.3% | 12.5% | × | 3.3% | 3.1% | ✓ | 2.4% | 6.5% | × |
| Small babies at term (40-42 weeks' gestation) | 33% | 0 | ✓ | 27.1% | 30% | × | 29.1% | 0 | ✓ |
| Babies born at 37+ weeks' gestation requiring respiratory support (>4 hours) | 2.9% | 3% | ✓ | 2.9% | 1.8% | ✓ | 3.4% | 0 | ✓ |

The PMMRC, in it's 14th Annual Report, set the challenge to invest resource into monitoring key maternity indicators for Māori wāhine and pēpi as well as other ethnic groups to identify variations between them, so we can ensure we are meeting our Tiiriti obligations. Utilising the Robson database is beginning to give us a picture of what inequities exist.



# Labour and Birth Outcomes

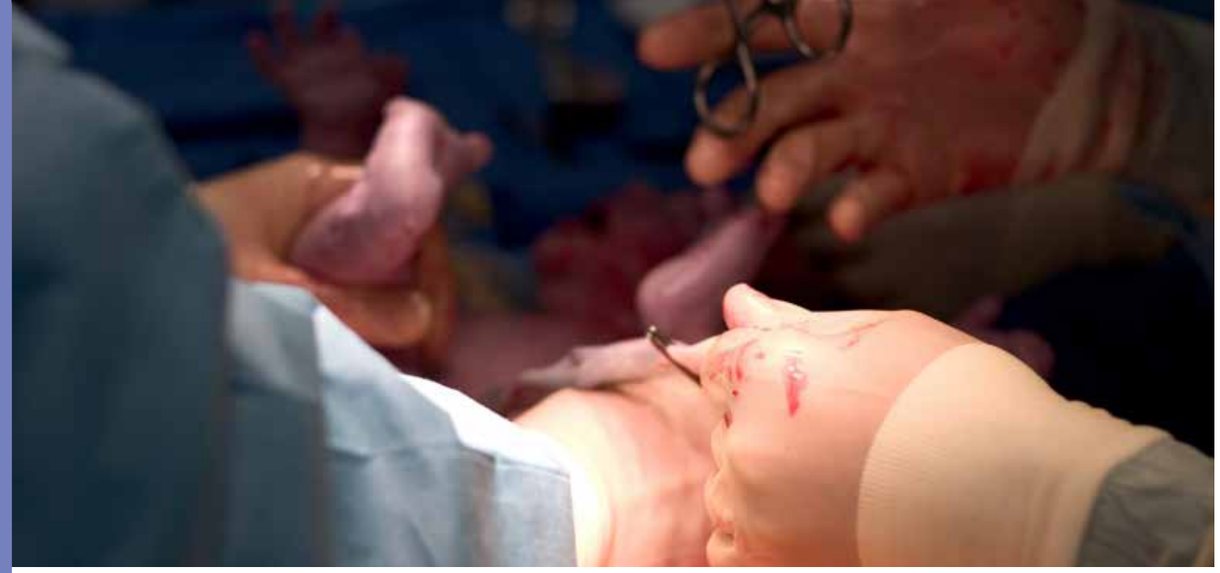
The data represented in this section has been obtained from the Nelson Marlborough continuous labour and birth audit. This is a new initiative within the region, commencing in 2022 with retrospective data collection since January 2022 and ongoing prospective collection of data and audit of outcomes. Data is collected on women birthing within the Motueka, Nelson and Wairau units.

We have adopted the Robson 10 Group Classification System to categorise our labour and birth outcomes. In 2015 the World Health Organisation (WHO) proposed the use of the Robson classification as a global standard for assessing, monitoring and comparing caesarean section rates both within healthcare facilities and between them. This system accounts for all birthing women – not just those who proceed to caesarean section. This will enable us, over time, to analyse the outcomes within our region and enable robust comparison with other regions both nationally and internationally. Other areas in New Zealand have moved, or are considering moving, towards collecting data using the Robson groups. We are excited to be able to make comparisons across a whole group of women rather than just with standard primiparae who only make up approximately 15% of the birthing population.

## What did we learn in 2022?

Included in the table below are all women who birthed in the Nelson, Wairau and Motueka (primary) birthing units. It does not include homebirths or births at the primary unit in Golden Bay (although we are working towards accessing the information from Golden Bay to be able to present it in future reports). It gives a broad overview of our outcomes in 2022. It is followed by statistics on the Robson groups where there have been big enough numbers for relevant analysis.

| At a glance… | | Māori | Pacifica | Asian | European | Other |
|---|---|---|---|---|---|---|
| **Total women birthing** | 1259 | 189 (15%) | 50 (4%) | 130 (10%) | 856 (68%) | 34 (3%) |
| **Total SVB** | 692 (55%) | 112 (16%) | 33 (5%) | 55 (8%) | 475 (69%) | 17 (2%) |
| **Total Assisted** | 150 (12%) | 16 (11%) | 4 (3%) | 21 (14%) | 107 (71.5%) | 2 (1.5%) |
| **Total EM C/S** | 238 (19%) | 36 (15%) | 10 (4%) | 32 (14%) | 150 (63%) | 10 (4%) |
| **Total EL C/S** | 179 (14%) | 25 (14%) | 3 (2%) | 22 (12%) | 124 (69%) | 5 (3%) |
| **PPH** | 210 (17%) | 32 (15%) | 10 (5%) | 21 (10%) | 142 (68%) | 5 (2%) |
| **3rd / 4th tear** | 35 (4% of vaginal births) | 3 (9%) | 2 (6%) | 5 (14%) | 25 (71%) | 0 |
| **Induction** | 305 (24%) | 46 (15%) | 11 (4%) | 30 (10%) | 206 (67%) | 12 (4%) |
| **Preterm** | 73 (6%) | 12 (16%) | 3 (4%) | 6 (8%) | 50 (69%) | 2 (3%) |

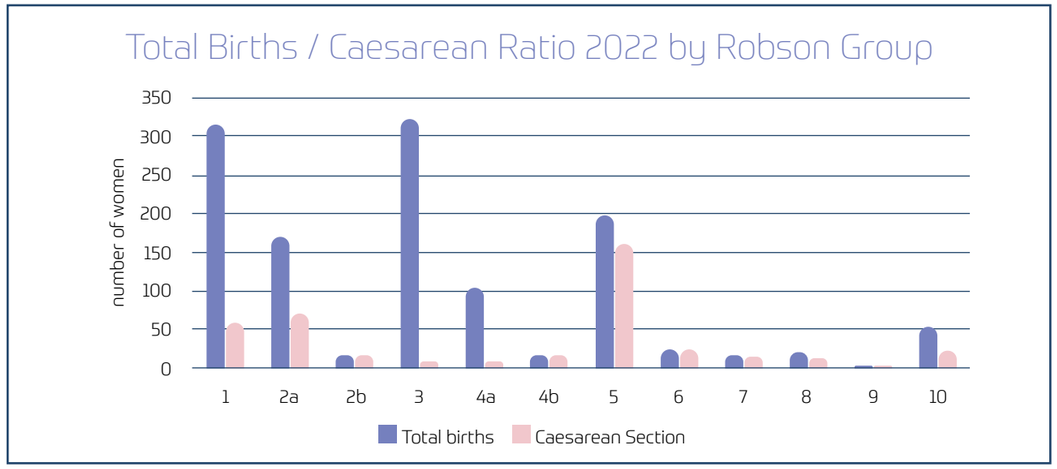


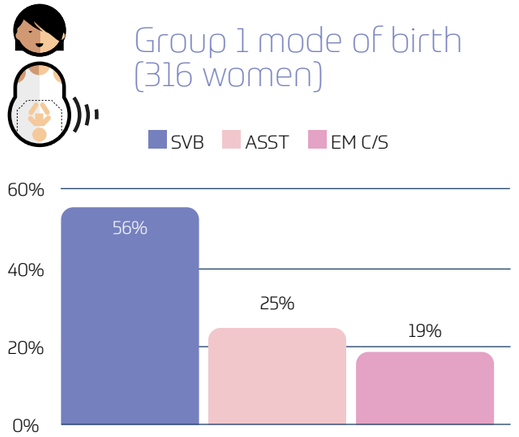
The rising caesarean section rate has been an area of concern both locally and nationally. Our database enabled us to see our caesarean rate but also, for the first time, which groups of women contributed the most to the overall rate. We could see that both of our secondary units had caesarean rates of over 30%, with Nelson's being 36%. We also saw that our largest group of caesareans was in Robson group 5 (women who had undergone a previous caesarean) where over 80% of women had another caesarean, even if the reason for their previous one was not present in their current pregnancy. We also noted that the next largest rate was in group 2a (first time mothers being induced) where over 40% resulted in a caesarean. This has been a 'lightbulb' moment for us and has focussed our minds. If we can reduce the number of caesarean sections in this group of first-time mothers then we can influence the number of women entering group 5. We are currently working towards changing our induction of labour methods (IOL) to include misoprostol which has been shown nationally and internationally to reduce caesarean section rates. We hope to implement this in early 2023 and we look forward to reporting further on this in our next report.

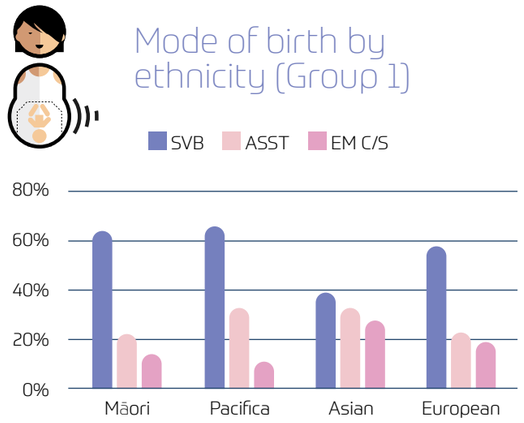
## Robson group numbers

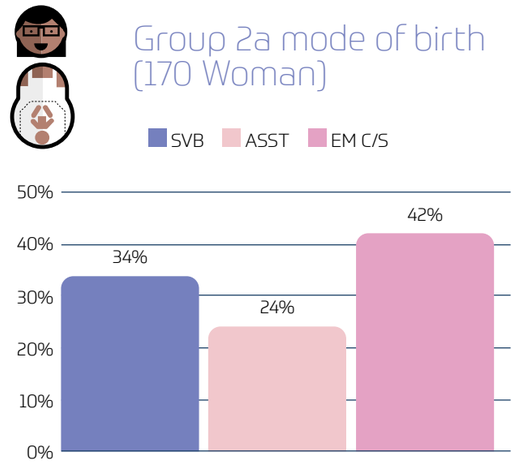
| Group | Total | Māori | Pacifica | Asian | European | Other |
|---|---|---|---|---|---|---|
| **1** | 316 | 36 | 10 | 39 | 227 | 4 |
| **2a** | 170 | 17 | 8 | 20 | 116 | 9 |
| **2b** | 17 | 3 | 0 | 0 | 14 | 0 |
| **3** | 323 | 59 | 18 | 28 | 207 | 11 |
| **4a** | 104 | 22 | 2 | 5 | 72 | 3 |
| **4b** | 16 | 3 | 1 | 2 | 9 | 1 |
| **5** | 197 | 34 | 7 | 27 | 127 | 2 |
| **6** | 25 | 2 | 0 | 2 | 21 | 0 |
| **7** | 17 | 2 | 1 | 1 | 12 | 1 |
| **8** | 20 | 0 | 0 | 2 | 17 | 1 |
| **9** | 1 | 0 | 0 | 0 | 1 | 0 |
| **10** | 53 | 11 | 3 | 4 | 33 | 2 |

**We wanted to take a closer look at mode of birth across the Robson groups and by ethnicity within those groups.**




SVB - Spontaneous vaginal birth
ASST - Assisted (instrumental) birth
EM C/S - Emergency cesarean section
EL C/S - Elective cesarean

## The 10 groups of the Robson Classification

**GROUP 1** Nulliparous women with a single cephalic pregnancy, ≥37 weeks gestation in spontaneous labour

**GROUP 2** Nulliparous women with a single cephalic pregnancy, ≥37 weeks gestation who either had labour induced or were delivered by caesarean section before labour

**GROUP 3** Multiparous women without a previous uterine scar, with a single cephalic pregnancy, ≥37 weeks gestation in spontaneous labour

**GROUP 4** Multiparous women without a previous uterine scar, with a single cephalic pregnancy, ≥37 weeks gestation who either had labour induced or were delivered by caesarean section before labour

**GROUP 5** All multiparous women with at least one previous uterine scar, with a single cephalic pregnancy, ≥37 weeks gestation

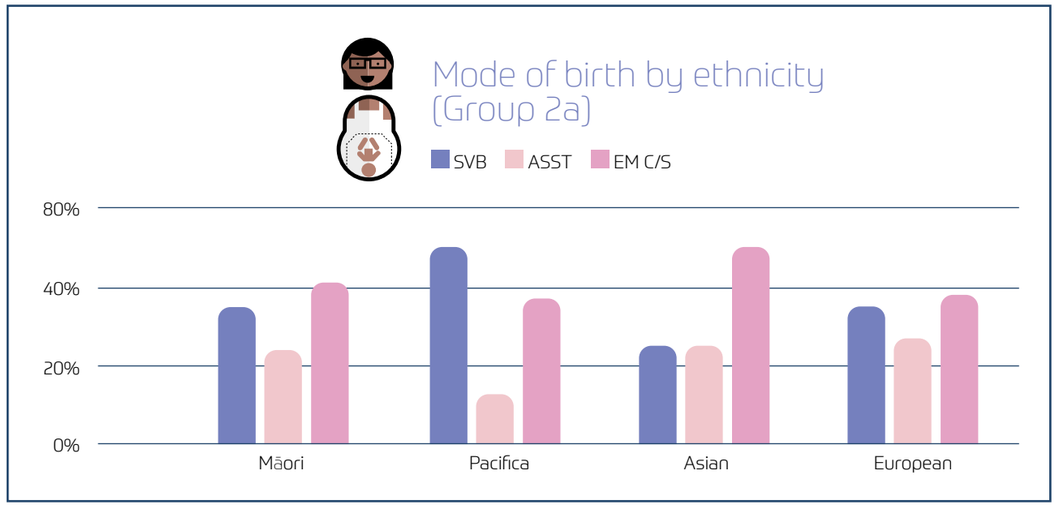
**GROUP 6** All nulliparous women with a single breech pregnancy

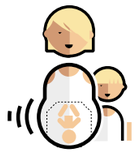
**GROUP 7** All multiparous women with a single breech pregnancy, including women with previous uterine scars

**GROUP 8** All women with multiple pregnancies, including women with previous uterine scars

**GROUP 9** All women with a single pregnancy with a transverse or oblique lie, including women with previous uterine scars

**GROUP 10** All women with a single cephalic pregnancy <37weeks gestation, including women with previous scars

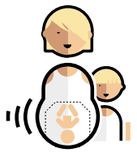


## Group 3 mode of birth (323 Woman)



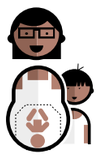




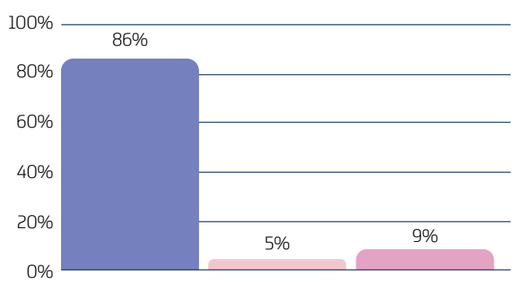
## Mode of birth by ethnicity (Group 3)



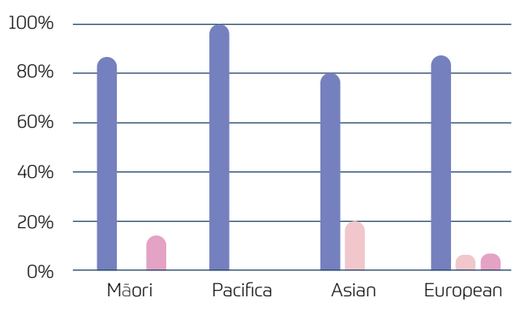




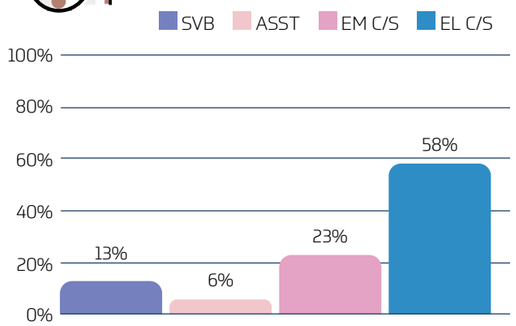
## Group 4a mode of birth Woman)

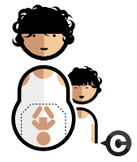




## Mode of birth by ethnicity (Group 4a)

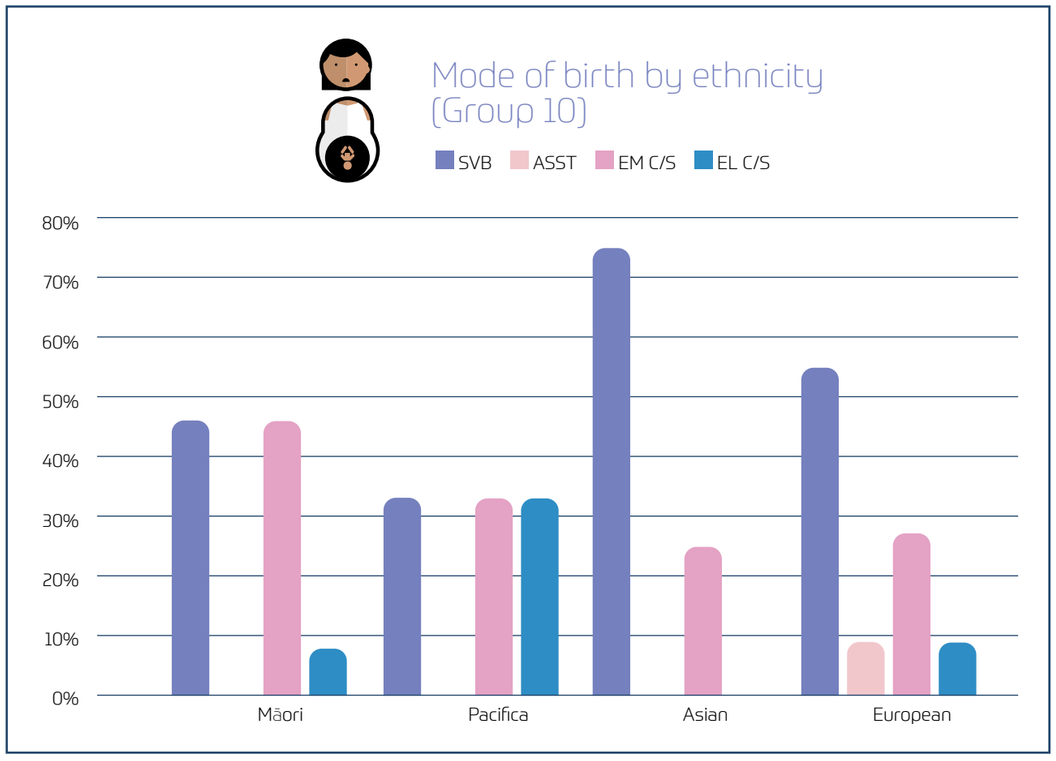



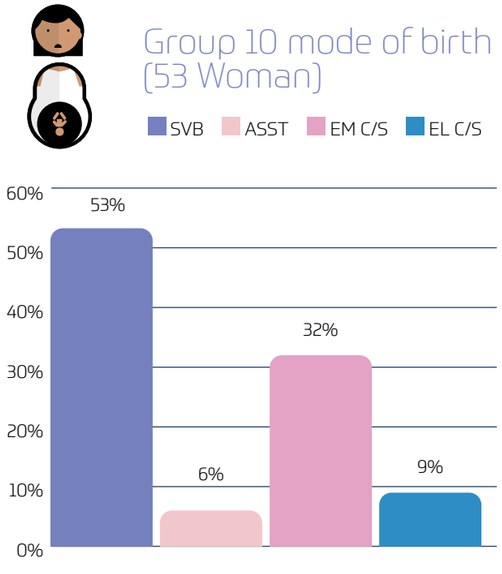

## Group 5 mode of birth (197 Woman)



## Mode of birth by ethnicity (Group 5)




We have been able to see that overall ethnicity has not been a factor in birth outcomes in terms of mode of birth or postpartum haemorrhage (PPH). The exception would be our Asian mothers who are more likely than average to have a caesarean section, assisted birth or a 3rd / 4th degree perineal tear. In particular, our Indian mothers in 2021 had a 51% caesarean section rate, 46% in 2022. Again, this has to be viewed in terms of the small numbers (55 women who identified as Indian in 2021 and 41 in 2022). In 2023 we are planning to take a closer look at our 3rd / 4th degree tears as the rates do appear to be rising (see table below).

| Year | Total *births | SVB | Asst | 3rd / 4th degree tears | | | Rate |
|---|---|---|---|---|---|---|---|
| | | | | SVB | Asst | Total | |
| 2020 | 847 | 716 | 131 | 9 | 6 | 15 | 1.7% |
| 2021 | 878 | 741 | 137 | 24 | 10 | 34 | 3.8% |
| 2022 | 843 | 693 | 150 | 22 | 13 | 35 | 4.1% |

*Vaginal births

**Group 6 – 9 contain too few numbers for any meaningful interpretation.**

# Achievements against priorities (Workplan 2020 -23)

Covid-19 saw disruption to normal everyday operations and we had to redefine priorities in relation to this. Developing ever changing responses and providing clinical care was the top priority. Consequently some projects stalled during this time. The following outlines progress for projects in our workplan.

## Implement the Sepsis 6+2

We were able to meet our target of implementation by March 2021. The sepsis bundle was rolled out in both our secondary units and primary units. One guideline is used across the region, with specific sections for our primary units. Area-specific education was provided for staff across the region.

## NOC/NEWS implementation

This is now fully implemented and is 'business as usual'. Monthly audits are ongoing. In 2023 we will work towards incorporating the NOC/NEWS and other newborn information into one document.

## Neonatal Encephalopathy

Cardiotocograph (CTG) interpretation stickers are now in use and incorporate a 'fresh eyes' approach. Initial monthly audits showed where extra education and input was needed. All employed staff are now required to complete an annual update on fetal surveillance, with a face-to-face session at least every three years. Self-employed LMCs are also offered face-to-face education at no cost.

Case reviews of CTGs occur in a multidisciplinary, educative environment in both Wairau and Nelson. They are well established in Wairau and are held regularly. Nelson has had a more ad-hoc approach but had at least four meetings in 2022. Our remote rural colleagues in Golden Bay are invited to attend by zoom as are our primary unit colleagues in Motueka Maternity. An ISBAR communication tool is now in place as is the proforma for neonatal resuscitation.

## Reduce preterm birth and neonatal mortality.

The workplan identified the reduction of preterm birth (PTB) rates and associated neonatal mortality as a priority for our region. This focus accords with national and international initiatives that recognise PTB as a major health issue that has significant impacts on families as well as healthcare and education systems.

In 2022, we began a project to reduce rates of PTB by focusing on early intervention and the provision of information to women, especially those recognised as being most at risk. A referral guideline for women who have birthed before 37 weeks was introduced and advised referral to the obstetric clinic in the postnatal period. Attendance at clinics provides an opportunity for women and whānau to talk about their birth and discuss what can be done in future pregnancies. A discharge summary for women at risk of PTB was also produced. This document explains why they have a higher chance of preterm birth in future pregnancies. It highlights what they can do to reduce this risk, what other interventions may be necessary and the importance of early registration with an LMC.

A more general PTB information sheet was produced and made available to all pregnant women in the antenatal period. The content is similar to the discharge summary but is broader in scope. It also outlines signs and symptoms of preterm birth and the care provided by SCBU.

## Implementation of national guidelines on hypertension in pregnancy and prophylactic anti-D

In August 2021 anti-D Immunoglobulin use in pregnancy and the postpartum period was updated to include prophylactic anti-D during pregnancy. Equitable access to this has been considered and it is now available in both secondary and primary units so most women are able to access it in their own locality.

A new national guideline for diagnosis and treatment of hypertension and pre-eclampsia was released in October 2022. We have not yet implemented this locally but will be working towards this in 2023.

## Consumer Engagement

We have been very fortunate to have had Lani (see page 26) as a consumer representative. We are sad to lose her in this role at the end of 2022 (but delighted that she is undertaking the midwifery degree at the Ara Institute of Canterbury). We are seeking out other consumers and are working with our Improvement Facilitator - Consumer Engagement & Volunteer Co-ordinator to attract a diverse range of people to reflect our community. We look forward to updating on this in our next annual report.

# PMMRC, NMMG and MMWG Recommendations

Much of the work around national recommendations has been threaded throughout the report. The table below summarises this work. The 14th PMMRC annual report reiterated its recommendations from previous reports that they found had not yet been fully implemented across the country.

Completed / near completion  work in progress  significant work still to be done

## Neonatal encephalopathy ( PMMRC)

| UPDATE | OUTCOME |
|---|---|
| • Mandatory fetal surveillance face to face education is provided every 3 years for employed staff. It is also recommended and offered to self-employed staff (free of charge). Staff are also encouraged to engage with the yearly online fetal surveillance education programme.<br>• Intrapartum fetal surveillance guidelines are available and in line with current recommendations.<br>• CTG interpretation tool in place in both secondary units<br>• Case reviews of CTGs presented in a multidisciplinary forum.<br>• A Therapeutic Cooling guideline is in place. There is also a Neonatal Encephalopathy pathway in place and this will be updated in early 2023.<br>• A proforma for neonatal resuscitation has been implemented.<br>• An ISBAR tool has been developed to improve communication | |

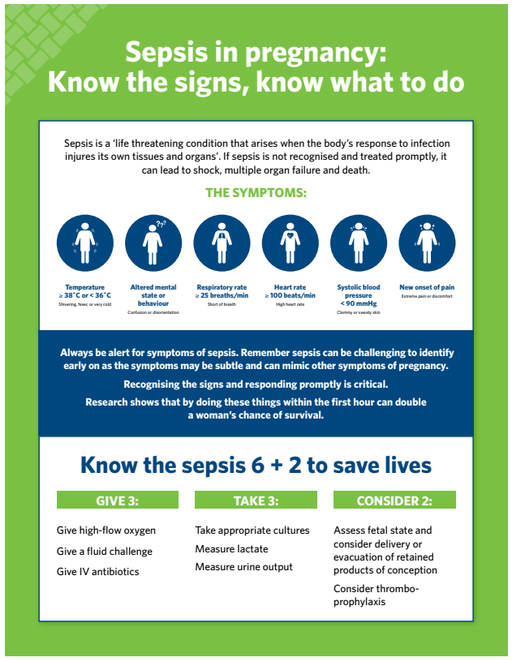
Whilst there has been a lot of work around neonatal encephalopathy, we will continue to prioritise it. Moving forward we will be collecting data around ethnicity to see what, if any, inequities we can identify.

## Mothers of Indian Ethnicity (PMMRC)

| UPDATE | OUTCOME |
|---|---|
| • Work on collecting data on health outcomes with an equity lens continues slowly. Our labour and birth outcomes are now being viewed with an ethnicity lens.<br>• The number of Indian women birthing in Nelson Marlborough varies. 55 women identified as Indian in 2021 and 41 in 2022. There is no current local evidence that women of Indian ethnicity have higher rates of perinatal mortality.<br>• Distribution to LMCs of Janm aur Parvarish - free pregnancy health information zoom sessions for Indian women. This is a valuable resource provided by Counties Manakau and made available nationally.<br>• Work will be ongoing to address inequity and continue to improve outcomes locally for our Indian community. | |

## Equitable access to contraception (NMMG)

| UPDATE | OUTCOME |
|---|---|
| • Most women in the region are under the care of an LMC so contraceptive advice and provision is mainly organised by them.<br>• Secondary maternity services provide a postbirth service for the insertion of a Jadelle or Mirena. This is provided by medical staff (usually a senior house officer) on request from the LMC and / or woman. LMCs can also refer women back to the maternity unit in the postnatal period for this service.<br>• All women who undergo caesarean section are offered contraception prior to discharge, with prescriptions and / or advice given.<br>• Community based services providing women with contraceptive options vary across the region and are generally accessed via general practice, family planning services and nursing practices. There is a free LARC (long-acting reversible contraception) insertion and removal service for those with a community services card, in quintile 5 or are Māori/Pacifica. GP practices identified as being in areas where access is important also offer this free to the same group of women. In Wairau there is a funded Family Planning service. | |




## Sepsis (MMWG)

| UPDATE | OUTCOME |
|---|---|
| • Education has been provided in both our secondary and primary units. It has also been included in PROMPT and Midwifery Skills workshops.<br>• A clinical pathway for sepsis in pregnancy and the postpartum period has been introduced and is relevant in both primary and secondary units. We are aiming to audit its effectiveness in 2023.<br>• Sepsis kits particular to the needs of both the primary and secondary units are now in place. | |

## Maternal Mental Health (NMMG)

| UPDATE | OUTCOME |
|---|---|
| • There is a Mothers and Babies Service (MBS) based in Christchurch. Mothers and babies have stayed locally at Wahi Oranga whilst waiting for a bed in Christchurch, but this is not ideal. It is recognised that the lack of inpatient mother and baby facilities in our own region is problematic.<br>• We provide consultation & education; He Pai Harakeke initiative; Brief intervention counsellors, Wellbeing practitioners in primary care. The Care Foundation has provided training (re He Pai Harakeke) for Family Start, Te Pipi Oranga and Plunket. Te Piki Oranga have a targeted programme for Māori whānau.<br>• There is a perinatal maternal mental health pathway (on health pathways; also has information on resources in community & apps) that outlines what screening should be done by midwives & other primary care providers; medicine information for GP's and referring to specialist services. Also there is the specific information sheet for midwives about contacting mental health addiction services (MHAS)<br>• There is education for midwives from the MBS. They visit the region in person and invite maternity care providers to join in education sessions. | |

In common with other areas around the country we look forward to Te Whatu Ora providing national guidance and resource to meet the growing demand for access to mental health support both antenatally and in the postnatal period.

We recognise the significant good work that our local support network provides to women in the community eg Maternal Mental Wellbeing Marlborough and the Perinatal Anxiety & Depression Aotearoa network.

## Preterm Birth (NMMG)

| UPDATE | OUTCOME |
|---|---|
| • There is ongoing work around smoking cessation.<br>• Care can include activities such as: cervical length monitoring, progesterone, cervical cerclage, use of aspirin and calcium if women are referred to clinic<br>• Referral of woman to antenatal clinic as per the Referral Guideline<br>• A new local referral guideline was implemented in 2022 and uptake will be audited towards the end of 2023.<br>• Information for women at risk of preterm birth has also been introduced. This includes advice on engaging early with an LMC in future pregnancies.<br>• We envisage that our ability to monitor and record uptake of outpatient appointments will become easier and more useful with the long-awaited introduction of an integrated electronic maternity information system. | |

## Place of Birth (NMMG)

| UPDATE | OUTCOME |
|---|---|
| • In the 'Choose where to give birth' section on our public website, home birth is the first option on the list and is linked to the Homebirth Aotearoa website. It states that for many women, giving birth at home is a safe option. Primary Unit birthing in Golden Bay and Motueka is next with information provided on what women can expect.<br>• Information is also provided on birthing in both Wairau and Nelson secondary birthing units.<br>• A video is provided which gives a virtual tour of Wairau, Nelson and Motueka birthing units.<br>• We are fortunate to have many LMC midwives who are committed to primary birthing and are strong advocates for this. We provide free access to PROMPT to LMCs to ensure ongoing confidence in managing emergency situations in the primary setting. | |

## Implementation of HQSC maternal morbidity review toolkit and SAC rating (PMMRC)

| UPDATE | OUTCOME |
|---|---|
| • Incident reporting is in place through the Safety 1st system.<br>• PMMRC meetings are held monthly in Wairau and bi-monthly in Nelson.<br>• Monthly data provided showing all neonatal encephalopathy cases. If transfer to Wellington has taken place, then SAC rating is determined there.<br>• 'Trigger' incident review checklist (as per HQSC guidelines) is in use and regular multidisciplinary case review meetings are held in both secondary units. Learnings are shared across the locality. | |

## Use of the Health Equity Assessment Tool (HEAT) to assess services for the impact of health equity (MMWG)

| UPDATE | OUTCOME |
|---|---|
| • The MMWG recommends using HEAT to meet the principles of equity of outcomes for our community.<br>• As a region, the maternity service needs to utilise HEAT as a basis when looking at developing and implementing services, reviewing guidelines etc.<br>• There is significant work to be done in this space. | |







# MQSP Workplan 2023 – 2024

The below workplan will form the basis for MQSP activities over the next two years. It will be fluid in nature so that items can be added as necessary, for example as a result of sentinel events, other incidents or complaints.

| INITIATIVE | ACTION | EXPECTED OUTCOME | DATE |
|---|---|---|---|
| Sepsis 6+2 | • Audit of the implemented Sepsis 6+2 bundle | • Guideline compliance<br>• Recognition and management of sepsis as outlined in guideline | Initial audit by end of August 2023.<br>Re-audit mid 2024 |
| NOC / NEWS implementation | • Audit of the implemented NOC/ NEWS | • Document compliance | Continuous audit 2023. Re-audit mid 2024 |
| Maternity Early Warning System (MEWS) | • Audit of the implemented MEWS programme | • Recognition and escalation as per guidelines | End 2023 |
| Improve access to postnatal contraception | • More work needing to be done in this area including audit of numbers of women currently accessing long-acting reversible contraception (LARC) within our maternity units. | • Establishing current rates of LARC being offered and utilised will enable us to identify where we need further input to ensure equity of access and care. | Throughout 2024 |

| | | | |
|---|---|---|---|
| Neonatal Encephalopathy | • Continue to prioritise education on CTG interpretation in labour management. | • Compliance with 'fresh eyes' approach to CTG interpretation.<br>• All staff to attend FSEP via RANZCOG face-to-face learning every 3 years.<br>• Other years staff to complete online FSEP education and assessment. | Ongoing.<br>Audit education compliance in first quarter of 2024 |
| Maternal Mental Health | • This is a complex issue that, like other regions, we hope will improve under the national Te Whatu Ora leadership.<br>• We await national guidance on a maternal mental health strategy.<br>• Meanwhile it has been recognised that we need a stronger bond between mental health and maternity services. | • Establishment of a liaison position between mental health and maternity services.<br>• Position to be advertised June 2023. | September 2023. |
| Reduce preterm birth and neonatal mortality. | • Audit of referral to obstetric clinic of women who experience preterm birth | • Establish uptake of referrals offered and women who attend clinic. | December 2023 |
| Review data for our high-risk communities including Indian mothers and under 20s. | • Use the Robson classification database to build a reliable picture of outcomes for our high-risk mothers – including caesarean section, IOL and PPH | • Robust data will enable us to pinpoint what issues exist and to work with these communities to reduce inequity. | August 2023 |
| Implementation of national guidelines on diagnosis and treatment of hypertension and pre-eclampsia | • Localise guideline for both primary and secondary care. | • Guidelines to be implemented by end of 2023 and available to all staff across locality. | December 2023 |
| Induction of labour project using misoprostol | • There has been considerable delay to this project due to covid-19 and staffing shortages.<br>• 2022 has seen us start to move forward with this.<br>• A co-design project is envisaged with consumer input from the start | • Change of process in induction of labour resulting in a decrease in emergency caesarean sections in people undergoing induction. | June 2023 |
| Integrated electronic maternity information system | • This has been a slow moving work-in-progress which will continue during the time of this workplan | • Badgernet electronic system will be in place to ensure a reliable data system across the locality. | 2024 |





| | | | |
|---|---|---|---|
| Continue work in developing consistency across Nelson Marlborough to keep in line with National Maternity Standards | • Updating of guidelines to reflect the geographical differences whilst still reflecting best practice.<br>• MQSP committee makeup to be reflective of the whole locality.<br>• Evidence based changes from incidents, complaints, PMMRC to be implemented across the region and not just in occurring unit. | • Standardising of processes across the region whist still acknowledging the geographical differences.<br>• Clinicians working in different units will have access to and be aware of the same policies and guidelines.<br>• Shared learning across the region. | This will be ongoing |
| Pulse oximetry project | • Guideline to be developed.<br>• Pulse oximeters to be available in units throughout region.<br>• Pulse oximeters to be given to LMC practices to enable equity of access for homebirth babies. | • All women will be offered screening for their babies regardless of place / time of birth.<br>• Babies with previously undetected cardiac issues will be identified early. | May 2023 |

*Disclaimer: Data used within this report comes from several sources, for example, Ministry of Health, Stats NZ and Te Whatu Ora Nelson Marlborough Intelligence and Reporting Department. Our Maternity Service does not have an integrated electronic information system thereby the quality and accuracy of the data collected and presented within this report cannot be guaranteed.*