Hauora Tairāwhiti

2017/18 Maternity Quality & Safety Annual Report

1.0 Acknowledgements

We would like to thank the many people who have contributed to the completion of this our sixth edition of the Tairāwhiti Maternity Services Annual Report. We also acknowledge that the report may not be totally inclusive of all our community partners - we value our relationships always.

"Ka mihi maioha atu ki te nui o te tangata nana I homai he korero kia tutuki ai tenei kaupapa ko te putanga tuaono o te ripoata a tau mo te Puawai Aroha o te Tairāwhiti . Ka mihi hoki ki etahi o o tatou roopu a hapori kaare i watea ai ki te tuku mai he korero I te wa e tika ana – ahakoa tena ka kaingakautia o tatou whanaungatanga I nga wa katoa."

Cover Photo

Chevy Tamanui (Nga Ariki Kaiputahi) was born at Gisborne Hospital in 1996. She attended Central School, Gisborne Intermediate and Gisborne Girls High, and then spent five years in Australia. Chevy returned home in 2016 and is currently looking after her daughter full-time.

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2.0 Introduction

Local Leadership of MQSP – Introduction from Liz

It is a great pleasure as the Director of Midwifery for Hauora Tairāwhiti to present our sixth Maternity Quality and Safety Programme (MQSP) Annual Report for 2017/18. This report provides you with a comprehensive overview of our district-wide maternity services, our achievements, our new ways of working across the community and ongoing opportunities to continue to improve quality and safety.

The maternity team at Hauora Tairāwhiti work in partnership with the local Lead Maternity Carer (LMC) midwives, our community primary care and iwi providers and consumers to provide a service which reflects and meets the needs of our local population. We acknowledge there is inequity in the health of our population which we continuously strive to address. Our aim is to maintain and improve the quality and safety of the care we provide to all women, babies and their whānau.

We will achieve this through our commitment to continuously drive forward by reviewing what we do through the MQSP. With the new MQSP quarterly reporting requirement we will be keeping a closer eye on the areas which we are working on. The MQSP broadens our vision on what we can do as a community 'together', when we can do it, and what we can achieve now and in the future. Our main focus is on ensuring that our services are women and baby focused, equitable, accessible and engaging, starting from increasing the number of pregnant women who engage early with their LMC through to the discharge of a happy and healthy māmā and pēpi.

This year has not been without its challenges: we have seen increasing acuity within the unit, with higher numbers of women requiring more complex care. This has impacted on the number of women handed over during labour for secondary care. The challenge has been addressing capacity to meet demand, sometimes with little or no warning. The workforce is an area that is to be reviewed in the coming months so that we can assess how we can meet this increased demand on our services whilst maintaining safe staffing and high quality safe services. We have recently introduced Trendcare so that we can monitor this growing acuity.

At the beginning of this year we identified an increased number of massive postpartum haemorrhages which we actioned straight away. Initially, we undertook an audit to review the cases and to see if we could identify any common risk factors or factors causing these. We introduced a risk assessment tool and arranged an external review. Both of these documents are within this report, we have seen a decrease in postpartum haemorrhages but will re-audit after 18months.

We are proud of our achievements over the past year and look forward to the challenges ahead in making further improvements through our dedication and commitment to a 'one team/one community system' approach. I hope you enjoy reading our report.

Liz Lee Taylor
Director of Midwifery & Clinical Midwife Manager

Maternity Consumer Leader Jess Claffey

Hi I am Jess Claffey, and I am a mum to 3 beautiful children including a set of twins. We live on a sheep and beef station an hour in land of Gisborne. I became a maternity consumer leader in August 2016 but I had a bit of time off while looking after my new-born twins. I'm a consumer leader for the Tairāwhiti Maternity Quality Safety Programme (MQSP) and I feel valued, included and respected as a consumer voice for mothers.

I feel very privileged to have led the maternity survey for the month of April, with my fellow consumer leaders. I really enjoyed chatting with all the mums in the postnatal ward about the care they received during and after baby. I also got to ring them back 2 months later to ask about a follow up on their surveys and to see if the women had any further thoughts or suggestions on how we can improve the service. We had very positive feedback about our LMC and hospital midwives. I got a few stories from some mums that I wanted to share.

Dear Gisborne midwives and team, the level of care, aroha and expertise you provided my little family was outstanding. I left feeling empowered and knowledgeable from all your little tips and tricks and walked out of maternity ward feeling ready to handle anything with my new bag of tricks you ALL gave me. I felt like my journey into parenthood has been so positive because of your input. The Gisborne community is so lucky to have such an outstanding team helping us to build foundations of a positive home life, supporting our whanau, and in turn creating a stronger community for us all to live in! Much aroha to you all.

To our wonderful Gisborne midwives and LMCs, There is no way we can ever thank you enough for the competence, compassion, support, and confidence you've given from pregnancy, birth and postnatal care. You have all done an amazing job, we are so lucky that you do what you do. We will never forget how much you did to help bring our three little treasures into our lives. I wish you many blessings and send you tons of light so that you may continue your work. Thank you a million times!

I attended the World Smokefree day on 31st May, I helped give out free sausages outside The Warehouse with the team from Pinnacle Health to raise awareness of World Smokefree day. We had 11 people sign up to quit smoking but had a chat with a lot of whānau around the importance of quitting and benefits of quitting with the reward of a $50 voucher or $300 voucher for hapū māmā.

I went along to the Big Latch On day for World Breastfeeding Week, we raffled a cake in the hospital to raise awareness for the event. I couldn't believe how many mums we had attend the day, it was so neat to see some of the mums that did the survey with their babies attend.

We decided to create a Facebook page called Puawai Aroha Maternity, Hauora Tairāwhiti so we could let all mums know information about the maternity unit, what it looks like in the birthing rooms, pool birthing room, postnatal ward etc. and we have put our community events on the page. We have found it a real success especially since we are such a small town: we have 215 likes so far. We are yet to do little profiles on the hospital midwives so when mums come into the unit to birth they have already read a wee bit of information on that person. Watch this space!

Moving forward, I am looking forward to continuing my role in MQSP, being valued as a consumer leader and making a difference in the community.

Jess Claffey

Maternity Consumer Leader Jess Pomare

Having the opportunity to become a Maternity Consumer Leader in January this year was something new and exciting for me to look forward to. Being a mum of two energy-fulfilled boys, of whom both were born at Puawai Aroha Maternity Unit at Hauora Tairāwhiti, has given me the chance to experience a broad range of maternity care. Both of my birth experiences were very different and the care and support my whānau received was outstanding.

During my short time as a Maternity Consumer Leader, I have realized how much impact our health services can have on a small community. Being part of the Maternity Quality Safety Program committee has deepened my understanding and opened my eyes to how much work is put into making sure whānau receive the best maternity care possible.

To help the people of Tairāwhiti gain more knowledge and understanding of what Maternity Consumer Leaders do, we started a Facebook page as a platform to branch out more to the wider community. We have held a few mini competitions through our Facebook page to help us interact and engage with the community as well.

In April this year, our Maternity Consumer Leaders ran the annual Maternity Services Consumer Survey. I had the privilege of interviewing new mums and assisting them in completing our survey, some of whom I had also met earlier at antenatal classes. It was nice to be able to reconnect with them and meet their newborn pēpi.

For International Midwife Day, we celebrated by placing a banner around different locations in town, and posting clues as to where it was on our Facebook page. Taking a “selfie” with the banner entered you into the draw to win a free family photo shoot with one of our local photographers. It was awesome to see people getting involved as well as helping to raise awareness for our midwives.

For World Breastfeeding Week, we raffled off an amazing cake to raise funds for a new breastfeeding DVD. The raffle was drawn at the Big Latch On and one of our midwives' was lucky enough to win.

I also had the opportunity to attend meetings at Te Kuwatawata to learn about how we can improve our maternal mental health system. Learning what goes on "behind the scenes" in regards to maternal mental health was very rewarding. You gain a higher amount of respect for each individual that has to deal with maternal mental health on a daily basis.

My time as a Maternity Consumer Leader has been pleasurable. It is always exciting to meet new people and learn about everyone's different experiences with our maternity services. I am looking forward to what the future has to offer as a Maternity Consumer Leader, and have a new found respect for what our maternity services offer our community.

Ngā Mihi,
Jess Pomare
MQSP Consumer Leader

Maternity Consumer Leader Alanah Reed

The Maternity Consumer Leaders have set up a Facebook page "Puawai Aroha Maternity Unit, Hauora Tairāwhiti" and the aim for the page is to open up the maternity unit as sometimes it can be very scary for a first time mum who has never visited the unit. We started by adding videos of the birthing rooms, the reception area, the neo natal area and the whānau room. We felt using the videos the mums, dads and whānau could see what everything looks like and become familiar with the unit. We had lots of positive feedback about how the rooms looked and that some people didn't realise that there was a whānau room available.

We posted short introductions of ourselves, what our job is as a consumer leader and pictures of ourselves. These proved to be helpful as when we are out in the community at events the mums and whānau now recognise us and know who we are and will chat to us about the maternity unit and their experience.

To increase the page's profile we got in contact with local businesses and started offering some giveaways. These proved to be very popular as people could enter easily and the giveaways were items that are useful for parents, such as cloth nappies. We used the international day of the midwife to promote the work that they do in the community and to have a week long giveaway. At the end of the week we also had pictures posted of midwives taking care of our mums and babies.

We have used the page to promote events in the community such as breastfeeding week and also to celebrate the achievements of staff.

In the future we plan to post more information that is helpful to parents and whānau using the maternity unit. We want to introduce the staff with mini introductions as a way for people to recognise a familiar face when they arrive at the unit. We are also going to start 'Top 5 Tips' for topics like breastfeeding, what to bring to maternity and how whānau can support a mum in the unit.

I have been attending the Antenatal Classes that are run through the maternity unit. I would talk about the unit and my role as a maternity consumer leader. The pregnant mums and their partners would ask questions about the unit and how it all operates with the midwives, specialists and LMC's. After the women had their babies they would find it easier to approach me and chat about their experience, it was easier for them knowing a familiar face.

Here a birth story from one of the women I met:

Birth Story of Liam Prebble, shared with permission from Briony and Phil Prebble

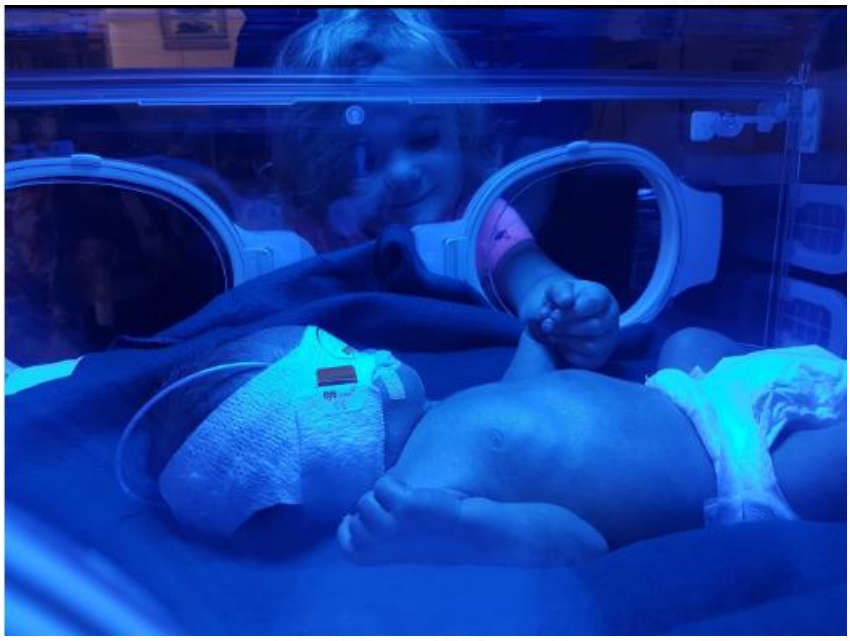
At 29+4 weeks Briony's waters broke and she went it the maternity unit where this was confirmed. Due to Waikato Hospital being full Briony was transferred to Wellington Hospital. At 32 weeks Briony was able to come back to Gisborne. On the 6th of March Briony was 32+3 days around 9pm Briony felt things were not right. She was having niggles for a few hours but then around 9pm it really started to get worse. At 10.30pm Briony was brought into the Puawai Aroha Maternity unit and was assessed and monitored and things looked like the baby was going to be born. After 35 minutes of active labour and 3 minutes of pushing Liam Prebble was born weighing 2.22kgs. Briony had skin to

skin straight away but after a few minutes the staff noticed that his breathing and colour were of concern so Liam went to the Neonatal Unit.

The midwife tried to remove the placenta but the cord had broken off so the specialist was called in to manually remove the placenta but this failed. The theatre team were called in and Briony was prepared to go to theatre. Briony told the staff that she wasn't feeling well and then collapsed. Briony was then rushed into theatre with serious haemorrhaging and the placenta was removed and the bleeding controlled.

Briony stayed in the maternity unit for 4 days as she was receiving blood transfusions and daily iron injections.

Liam graduated from the neonatal unit at 4.5 weeks old. Briony is very grateful for the care they received in both the maternity and neonatal. Briony has fond memories of the staff making her warm drinks while she was feeding, helping to manage the first bath and when they brought in Liam's older sister Aleah, the staff explained about the baby, brought her a stool so that she could put her had in and hold her brothers hand to meet him for the first time, creating a wonderful memory for her and the family.



3.0 Maternity Tairāwhiti Vision and Values

To provide evidence informed/based maternity services which are seamless, culturally appropriate, woman-centred, and integrated within Tairāwhiti.

Our Clinical Leadership and Partnership aim is: “Keeping the woman at the centre of care in the Tairāwhiti Maternity Services”.

Whakarangatira | Enrich:
We value and validate the role of mothers and parents. The woman is nurtured and respected. We form and follow guidelines to promote best practice such as breastfeeding. Screening to ensure good mental health is used regularly to help preserve and improve maternal emotional and mental wellbeing.

Awhi | Support:
The dignity of the woman and her whanau are recognized. The infants are recognised as the lines to the future. Haoura Tairawhiti continues to provide Pepi pods and support safe sleep for infants. The maternity department provides 24 hour a day advice and supervision for transitioning into parenthood. Mothercrafting is available for mothers with infants in the neonatal ICU.

Kotahitanga | Togetherness:
Midwives and consultants work in partnership with women in the community to pursue healthy pregnancies and safe births. Midwifery and consultant care is planned with the women we see to prioritise and implement actions that protect mothers and their infants from risk. Women are encouraged to involve their whanau in their health and care.

Aroha | Compassion:
We share in the joy and the sadness of our women along life’s paths. Words of praise and encouragement are used whenever possible during a woman’s care. During times of loss, for example miscarriages, we listen to and hold her sadness. With joy and sadness we facilitate the creation of memories for the woman and her whanau to carry with them in to the future.

Puawai Aroha | Blossoming of Love

Working in Harmony together for the women of Tairāwhiti:

- We always treat each other with courtesy and respect
- We value constructive feedback
- We will avoid being defensive and give feedback in a constructive manner
- We strive to recognise and celebrate individual and team accomplishments
- As Team members, we will pitch in to help where necessary to help solve problems and catch up on behind scheduled work
- We acknowledge differences in knowledge and skills between professions and areas of work and respect each contribution to team working and the women and baby’s care
- We will commit to attending clinical audit and reflection meetings whenever possible and value those as important learning tools.

4.0 Purpose of This Report

This is the sixth edition of the Tairāwhiti Maternity Services Annual Report. We aim to inform the progress of the Tairāwhiti Maternity Quality & Safety Programme (MQSP) in 2017/18, as required under section 2.2c of the MQSP Crown Funding Agreement (CFA) Variation (Schedule B42).

This report aims to:

- Demonstrate the delivery of the expected outputs as set out in Section 2 of the MQSP CFA Variation
- Demonstrate our commitment and working towards the New Zealand Triple Aim, The New Zealand Health Strategy and He Korowai Oranga | Māori Health Strategy
- Provide information about the MQSP within Tairāwhiti including the people we are serving, the challenges and the maternity service workforce/professional standards
- Outline our achievement of each of the New Zealand maternity standards for DHBs
- Provide feedback to the National Maternity Monitoring Group on their key priority areas; address the recommendations from the Perinatal Mortality Morbidity Review Committee and our contribution to the Midland Maternity Action Group.
- Document the progress towards the Tairāwhiti maternity service work programme 2017/18 and the national maternity quality & safety programme Tairāwhiti 'established' tier
- Describe the work planned to improve the maternity quality and safety in Tairāwhiti in 2018/19
- Benchmark against the New Zealand Maternity Clinical Indicators.

The MQSP framework is based on the:

- New Zealand Maternity Standards
- National Maternity Monitoring Group
- Primary Maternity Services Notice – Section 88
- Revised DHB-funded Maternity Service Specifications
- Revised Guidelines for Consultation with Obstetric and Related Medical Specialists (Referral Guidelines)
- National Maternity Clinical Guidance
- New Zealand Maternity Clinical Indicators
- Perinatal and Maternal Mortality Review Committee Recommendations
- Consumer Satisfaction Survey

The New Zealand Triple Aim

Hauora Tairāwhiti is working towards the New Zealand Triple Aim for quality improvement: Improved quality, safety and experience of care; improved health and equity for all populations; best value for public health system resources.

More information: https://www.hqsc.govt.nz/news-and-events/news/126/

New Zealand Health Strategy

The New Zealand Health Strategy sets the direction of health services to improve the health of people and communities.

More information: https://www.health.govt.nz/publication/new-zealand-health-strategy-2016

Delivering Better Public Services: A Good Start to Life

The Better Public Services programme includes 10 challenging targets to drive cross-agency working and innovative and productive approaches to address complex problems.

More information: http://www.health.govt.nz/publication/delivering-better-public-services-good-start-life

He Korowai Oranga | Māori Health Strategy

The overall aim of He Korowai Oranga is whānau ora - Māori families supported to achieve their maximum health and wellbeing.

More information: http://www.health.govt.nz/our-work/populations/māori-health/he-korowai-oranga

New Zealand Maternity Standards

The development of the New Zealand Maternity Standards is part of the Maternity Quality Initiative.

The Maternity Quality Initiative is made up of:

- a national quality and safety programme for maternity services including maternity standards and clinical indicators
- revised maternity referral guidelines, which set out processes for transfers of care including in an emergency
- standardised, electronic maternity information management to improve communication and sharing of health information among health practitioners
- improved maternity information systems and analysis, so there is better reporting and monitoring of maternity services

The Maternity Quality and Safety Programme guides the quality improvement mechanisms already in place in Hauora Tairāwhiti.

The New Zealand Maternity Standards were designed to complement existing legal and policy requirements in New Zealand including:

- Protection of consumers' rights under the Health and Disability Commissioner's Code of Health and Disability Services Consumers' Rights

- Regulation of health practitioners under the Health Practitioners Competence Assurance Act 2003 (including the setting of professional standards, requirements for ongoing competence and professional development, competence reviews, and recertification programmes)
- Regulation of maternity services provided in hospitals under the Health and Disability Services (Safety) Act 2001
- Reduction of health disparities, by improving the health outcomes of Māori and other groups, under the New Zealand Public Health and Disability Act 2000
- Specifications for primary, secondary and tertiary maternity services and facilities, such as the Primary Maternity Services Notice 2007 and specifications for DHB-funded maternity facilities and services.

The New Zealand Maternity Standards are the basis for our maternity services quality and safety programme.

More information: http://www.health.govt.nz/publication/new-zealand-maternity-standards

National Maternity Monitoring Group (NMMG)

The National Maternity Monitoring Group (NMMG) was established in 2012 as an advisory group to the Director-General of Health, and is funded as part of the Maternity Quality Initiative.

The NMMG provides oversight and review of national maternity standards, analysis and reporting and provides advice to the Ministry of Health (the Ministry) and district health boards (DHBs) on priorities for improvement in maternity services.

More information: http://www.health.govt.nz/our-work/life-stages/maternity-services/national-maternity-monitoring-group

Perinatal & Maternal Mortality Review Committee (PMMRC)

The Perinatal and Maternal Mortality Review Committee (PMMRC) is an independent committee that reviews the deaths of babies and mothers in New Zealand. The PMMRC's role can, at times, include reviewing events when the mother and/or baby was very unwell as a result of the pregnancy (severe morbidity).

More information: https://www.hqsc.govt.nz/our-programmes/mrc/pmmrc/

Raising Healthy Kids - Improving Outcomes for Vulnerable/High Needs Women

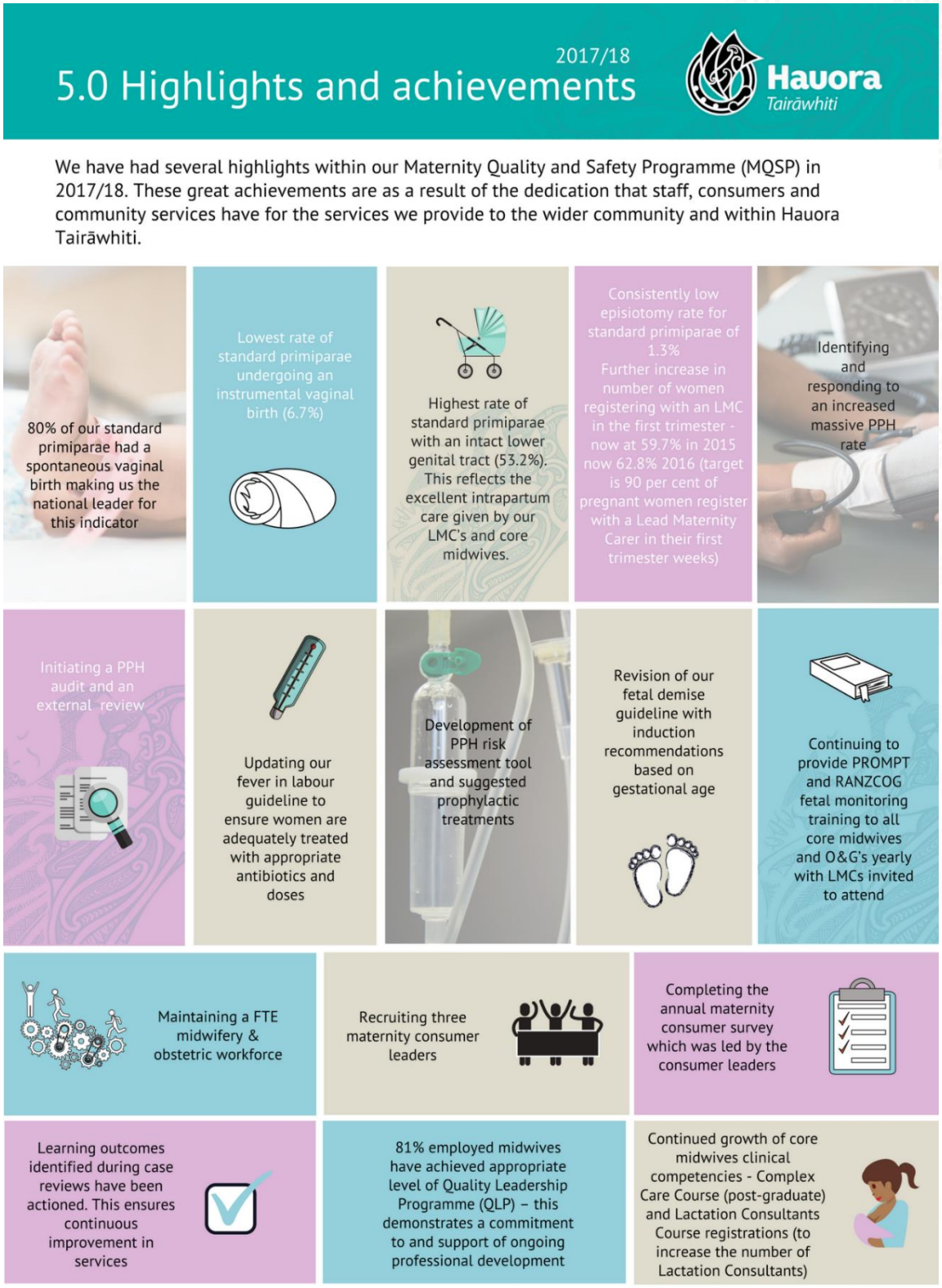
By December 2017, 95% of obese children identified in the B4 School Check programme will be offered a referral to a health professional for clinical assessment and family-based nutrition, activity and lifestyle interventions.

Public reporting on the Raising Healthy Kids health target is based on all completed B4 School Checks in a six-month period.

More information: http://www.health.govt.nz/new-zealand-health-system/health-targets/about-health-targets/health-targets-raising-healthy-kids

5.0 Highlights and Achievements from 2017/18

Refer to appendix for Work Programme 2017/18 progress report



Hauora Tairāwhiti

5.0 Highlights and achievements 2017/18

Hauora Tairāwhiti

100%

of women who identify as using tobacco are offered smoking cessation support and advice

Collaborative team work with Te Kuwatawata the single point of entry mental health services

Full education programme provided locally enabling all midwives to complete their recertification requirements

Midwives supported to attend the PMMRC and NZCOM conference

DOM and Project Leader were invited to join the NE taskforce working groups for Fetal Monitoring and Growth Assessment Protocol and are now active members of these groups working nationally

DAA Group Surveillance Audit completed with no actions required for maternity and services commended

Fully implemented courier service for transporting metabolic screening samples to the National Screening Unit. Now achieving 85.5% of blood spot cards reaching the lab within 4 days, this is a 22.5% increase in comparison to 2016 data.

Core midwife was the Winner of the 2018 Services to Midwifery Award

Exclusive breastfeeding data is 1% above the national average and 8% above the previous year which may in part be contributed to better reporting on MCIS.

Neonatal nurse/LMC/core midwife was the Winner of the 2018 Innovation and Patient Safety Award

Introduction of the acuity tool Trendcare

Increased detection rate of Small for Gestational Age (SGA) babies in pregnancy with appropriate management plans implemented

First in the hospital to obtain the Cold Chain accreditation for our vaccination fridge which enables us to offer flu and boostrix vaccinations to pregnant women attending the unit.

6.0 Maternity Clinical Indicators

The New Zealand Maternity Clinical Indicators provide annual results for maternity interventions and outcomes for pregnant women and their babies.

This year's report presents data on women giving birth and babies born in the 2016 calendar year.

This data supports quality improvement by helping DHBs to identify focus areas for local clinical review and optimal health outcomes for mothers and their babies.

The indicators look at outcomes for the Standard Primipara.

The standard primipara is a woman aged 20-34 years giving birth for the first time at 37-41 weeks gestation to a single baby who is head down. This woman should have no identified complications to her pregnancy. In other words there are no expected complications to her pregnancy or birth.

There are 20 indicators covered in this report.

https://www.health.govt.nz/publication/new-zealand-maternity-clinical-indicators-2016

The current indicators cover a range of results, including:

- care during pregnancy and the postnatal period
- severe maternal morbidity
- outcomes for babies at birth

Results are reported for Māori, non-Māori and total ethnicity categories and compare results for Tairāwhiti and New Zealand.

The 2016 clinical indicators identified a **decrease** in:

- spontaneous vaginal birth
- intact perineum
- blood transfusion at caesarean section
- smoking in the postnatal period
- the number of full term babies born small
- the number of post-dates babies born small

The 2016 clinical indicators identified an **increase** in:

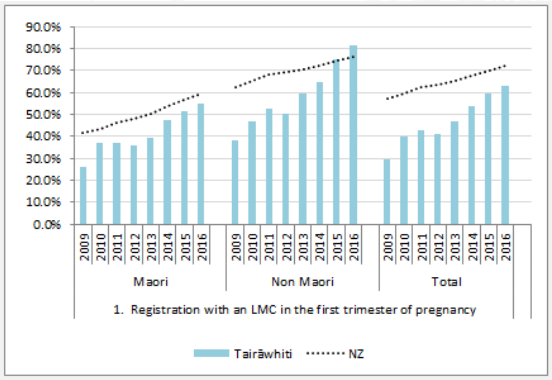
- women registering with a midwife in early pregnancy
- the number of women needing assistance at birth either by instrumental or caesarean birth
- the number of episiotomies and 3rd or 4th degree perineal tears
- the need for blood transfusion at vaginal birth
- the number of women being induced
- the number of term babies needing support to breathe

Source: Ministry of Health 2018. New Zealand Maternity Clinical Indicators 2016

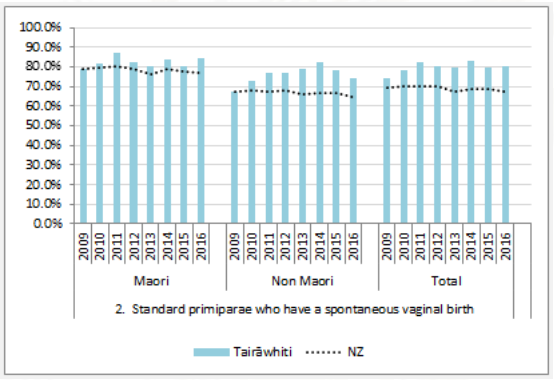
Source of graphs: MMAG Indicators 2009-2016 document

INDICATOR:	PERFORMANCE:	
Clinical Indicator 1: Registration with a Lead Maternity Carer (LMC) in the first trimester of pregnancy	2013: 2014: 2015: 2016:	46.8% of women in our DHB registered with an LMC in their first trimester. In only one DHB was the percentage lower increased to 53.9% increased to 59.7% increased to 62.8%

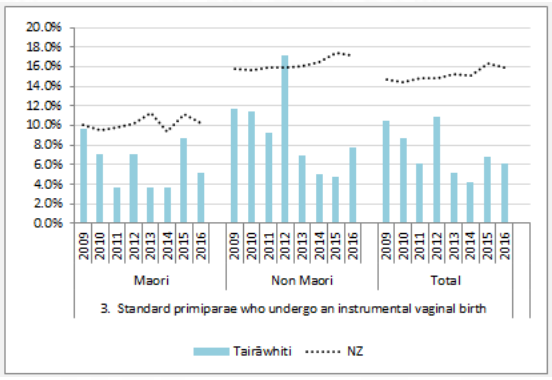
Our percentage has increased dramatically since 2009, though it is still statistically significantly lower than the national average of 71.9%. As with several of the indicators, our results in part are reflective of our demographics. Of all live births in our DHB 71% are Māori, many of whom live in the most deprived decile areas. If one looks at this indicator by ethnicity, the percentage of non-Māori women who register in the first trimester is slightly higher than the national average of 71.9. Our percentage of Māori women registering in the first trimester is near the national average for Māori women. However, this is an area which we continue to try and improve. We continue to distribute information widely through GP offices and other primary care settings. Materials include a pamphlet "Book with a Midwife before you are 10 weeks pregnant". This pamphlet, along with LMCs cards, are also being kept in sonographers' premises and given to women who come for a dating scan. We are also in the process of introducing this information to our local laboratory to be displayed for the information of women who come for antenatal bloods.



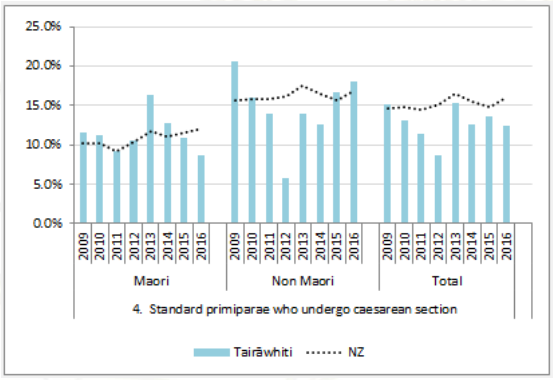
Clinical Indicator 2: Standard primiparae who have a spontaneous vaginal birth	2013: 2014: 2015: 2016:	80% of our standard primiparae had a spontaneous vaginal birth making us the national leader for this indicator. The number was 83%. No other DHB was higher. 79.5% achieve a spontaneous vaginal birth which is statistically significantly above the national average of 68.7%. 80% - again highest in New Zealand.



Clinical Indicator 3: Standard primiparae who undergo an instrumental vaginal birth	2013: 2014: 2015: 2016:	5% of our standard primiparae had an instrumental vaginal birth. the number was 4%. In both cases the number was very low, reflective of our spontaneous birth rate. All instrumental births were by ventouse. 6.8% which is statistically significantly below the national average of 16.3%, with only 2 DHBs being lower. 6.7%-lowest in New Zealand

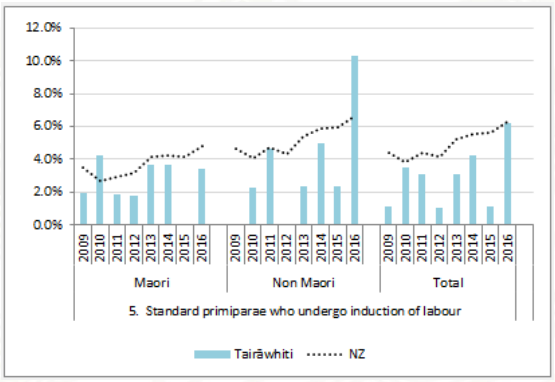


Clinical Indicator 4: Standard primiparae who undergo caesarean section	2013:	14.6% of our standard primiparae were delivered by caesarean section.
	2014:	12.8% had a C/S birth
	2015:	13.63% which is below the national average and compares with our percentages of the last six years.
	2016:	13.5%-compares favourably to NZ average of 15.9%



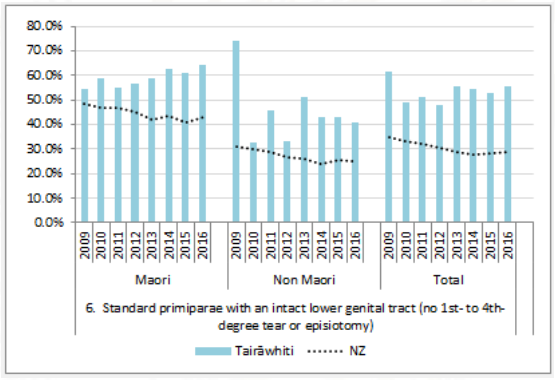
Clinical Indicator 5: Standard primiparae who undergo induction of labour	2013:	4.3%
	2014:	4.3%
	2015:	1.1%
	2016:	6.7%

This compares favourably to the NZ average of 6.3%. The increase in obesity with accompanying increase in women with GDM and the increased detection of growth restricted foetuses is leading to an increase in inductions in general.



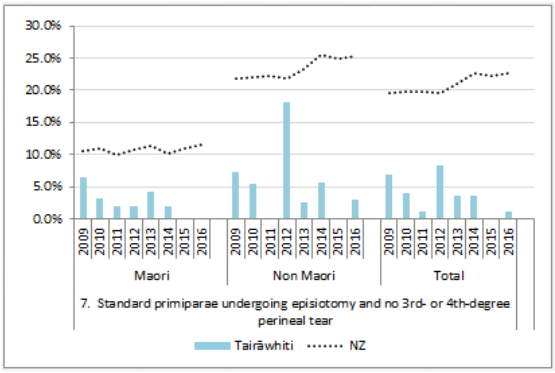
Clinical Indicator 6: Standard primiparae with an intact lower genital tract (no 1st- to 4th-degree tear or episiotomy)	2013:	54.9% gave birth with an intact lower genital tract
	2014:	53.7 % were intact. Again an excellent result
	2015:	52.6% had an intact lower genital tract
	2016:	53.2%-highest rate of intact lower genital tract in NZ

This low rate of perineal trauma reflects the excellent intrapartum care given by our LMC's and core midwives.



Clinical Indicator 7: Standard primiparae undergoing episiotomy and no 3rd- or 4th-degree perineal tear	2013:	3 women had an episiotomy and no third or fourth degree tear (3.7%)
	2014:	Also 3 women
	2015:	There were no standard primiparae who had episiotomies this year.
	2016:	1.3%

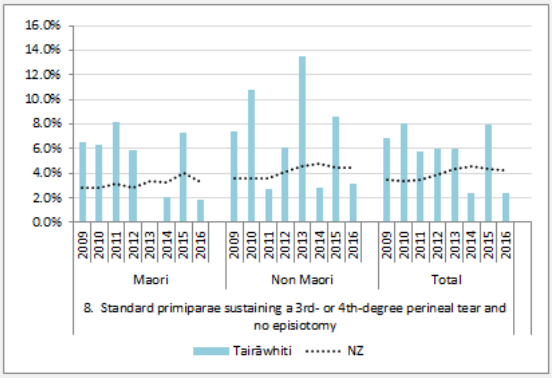
Our rate of episiotomy is consistently very low.



Clinical Indicator 8: Standard primiparae sustaining a 3rd- or 4th-degree perineal tear and no episiotomy

2013: 5 women (6.1%)
2014: 2 women (2.4%)
2015: 6 women (7.9%)
2016: 2.6%

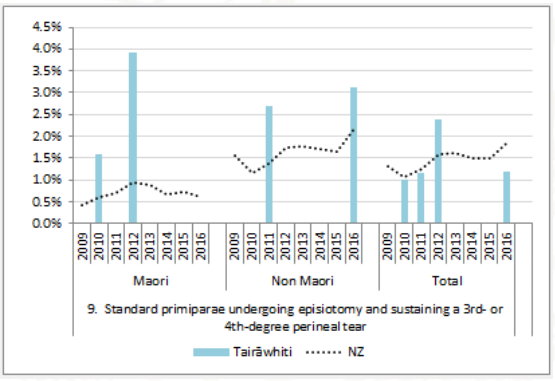
We are again well below the NZ average of 4.2%. Due to our small numbers the percentage can appear to change dramatically year to year. A running 5 or 10 year average would better reflect our rate.



Clinical Indicator 9: Standard primiparae undergoing episiotomy and sustaining a 3rd- or 4th-degree perineal tear

2013: Our reported rate was zero
2014: Our reported rate was zero
2015: Our reported rate was zero
2016: 1.3%

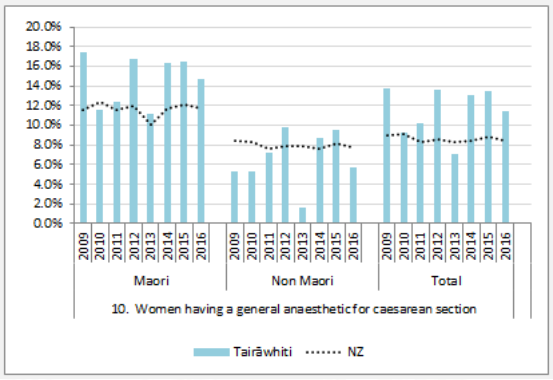
Our episiotomy percentages and third or fourth degree tear percentages among standard primiparae are consistently both low. 2016 saw a small increase but still below the NZ average of 1.8%.



Clinical Indicator 10: Women having a general anaesthetic for caesarean section

2013: 9 women (7.1%)
2014: 21 women (13 %)
2015: 20 women (13.5%)
2016: 9.7%

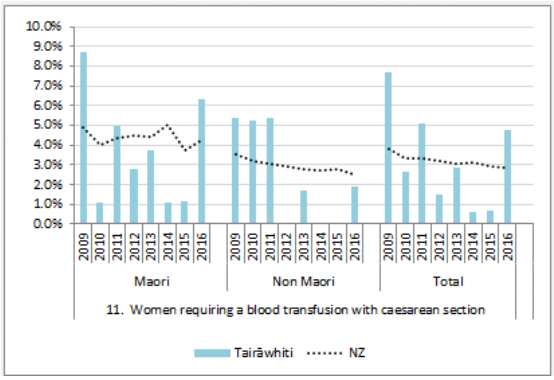
The percentage of women who received GA for C/S in 2016 is consistent with our rates in past years. When compared with the national average of 8.5% the difference does not achieve statistical significance. We have reviewed all births under general anaesthetic. No trends were noted around maternal co-morbidities or around any one anaesthetist. In addition, the Department of Anaesthesia continues to audit their practice.



Clinical Indicator 11: Women requiring a blood transfusion with caesarean section

2013: At the median for caesarean sections - 4 women (3%)
2014: 1 woman received a transfusion (the lowest rate nationally)
2015: 1 woman (0.7%) – the lowest rate nationally
2016: 3.4%

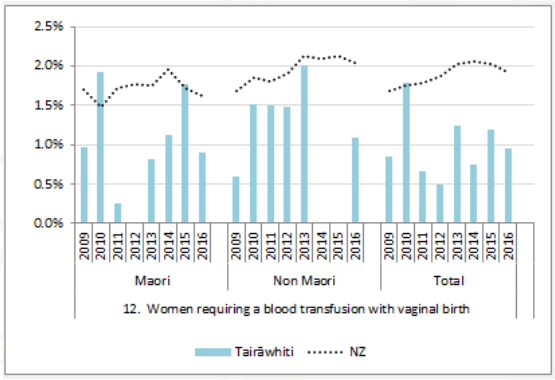
The percentage of our women who require a blood transfusion with caesarean section is above the NZ average of 2.9%. We now have a more aggressive use of oral and IV iron therapy for iron deficiency anaemias in pregnancy has resulted in better maternal haemoglobins at the time of labour.



Clinical Indicator 12: Women requiring a blood transfusion with vaginal birth

2013: 7 women (1.2%)
2014: 4 women (0.8%
2015: 7 women (1.2%)
2016: 1.0%

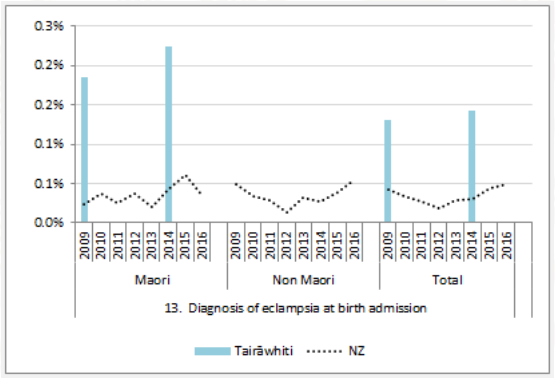
The percentage of women who require a blood transfusion with a vaginal birth is again below the national average of 1.9%. In fact the rate (0.9%) for women who birth in our facility is the lowest in New Zealand. Recognising that postpartum haemorrhage (PPH) is a potential life threatening emergency is something that we continue to emphasise. This includes requiring all midwifes and obstetricians to attend our regularly scheduled PROMPT courses. We follow the national PPH guideline and have instituted the Massive Transfusion Protocol. All women are now risk scored for PPH during labour with the incorporation of standardized measures to prevent PPH based on risk. This was instituted in January 2018. We will audit our results and hope to see a decrease in our PPH and transfusion rates after 18-24 months.



Clinical Indicator 13: Diagnosis of eclampsia at birth admission

2013: According to national data one Tairāwhiti woman suffered eclampsia during 2013. This was a coding error. There were no women who actually had this problem.
2014: No eclampsia cases
2015: No eclampsia cases
2016: No eclampsia cases

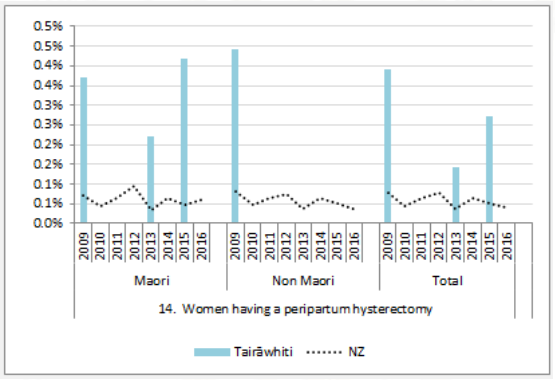
Early recognition of impending eclampsia is covered in PROMPT. Magnesium sulfate and strict blood pressure control protocols are used, which probably prevents women from developing eclampsia.



Clinical Indicator 14: Women having a peripartum hysterectomy

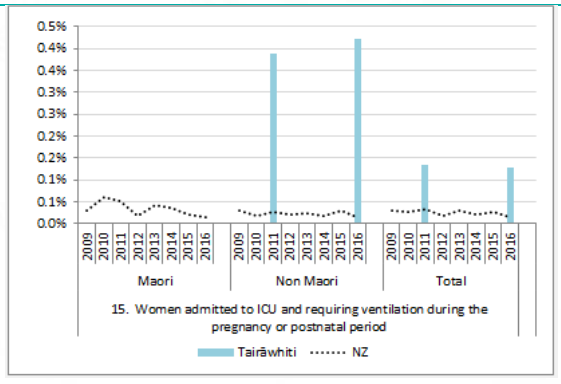
2013: 1 case
2014: No cases
2015: 2 cases
2016: No cases

Use of Bakri balloons and B Lynch sutures in cases of uterine atony unresponsive to medical treatment were successful in 2016 in preventing the need for any peripartum hysterectomies.



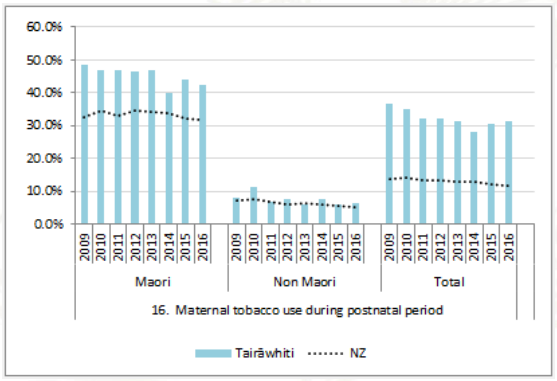
Clinical Indicator 15: Women admitted to ICU and requiring ventilation during the pregnancy or postnatal period

2013: No cases
2014: No cases
2015: No cases
2016: No cases



Clinical Indicator 16: Maternal tobacco use during postnatal period

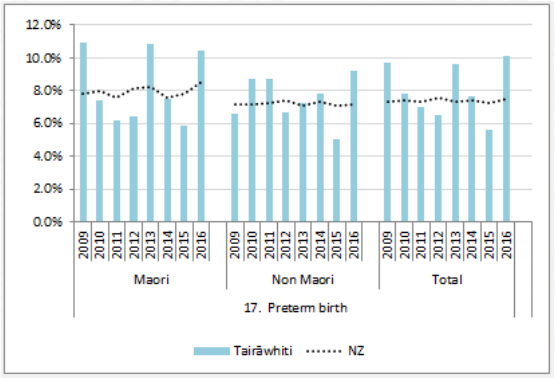
2013: 31.4%
2014: 28.5%
2015: 30.6%
2016: 29.2%



We persistently have the highest rates of smoking among pregnant women in New Zealand – the national average is only 11.7%. This is a great area of concern for us. It is important to note that this is another area that is increased due to the high proportion of Māori women in this community, many of whom live in the most deprived decile areas. Interestingly, according to MMAG data, the national percentage of Māori Standard Primiparae who smoke is minimally changed since 2009 (32.0% in 2015 vs 32.6% in 2009). The percentage has decreased slightly in our district during this timeframe. Clearly this is a difficult problem everywhere.

Clinical Indicator 17: Preterm birth

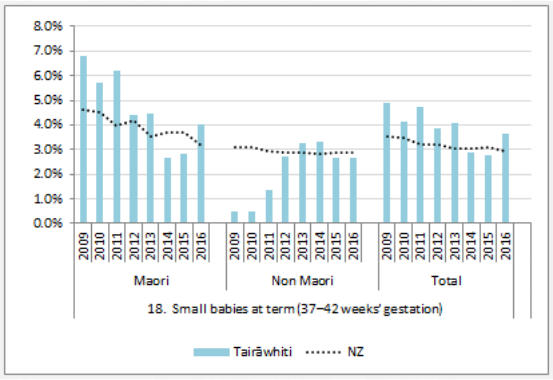
2013: 8 Tairāwhiti babies were born at <32 weeks, 61 between 32-36 weeks, a total of 69 babies or 9.7%, the highest recorded rate nationally.
2014: 55 babies (7.6%)
2015: 43 babies (5.6%)
2016: 10.5%



Our percentage and our 95% confidence intervals both place us above the NZ average of 7.5%. This is a change over the preceding two years. An audit of preterm births is planned to identify any contributing factors that are amendable to change.

Clinical Indicator 18: Small babies at term (37–42 weeks' gestation)

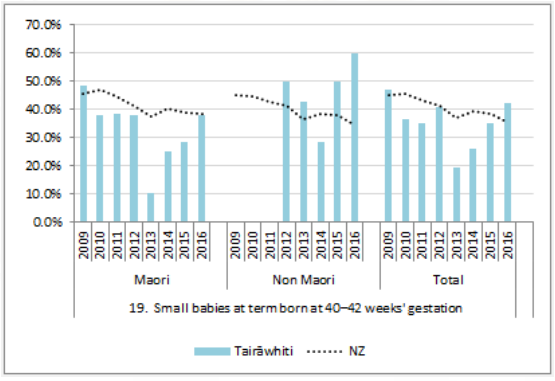
2013: 26 babies with birthweight under 10th centile (4.0%)
2014: 19 babies (2.9%)
2015: 20 babies (2.8%)
2016: 3.8%



We are above the national average of 2.9%. We promote the use of customised GROW charts with appropriate use of ultrasound to diagnose growth restriction when the GROW charts indicate small for gestational age or a slowdown in foetal growth. We plan an audit to assess our SGA detection rate over the last 3 years.

Clinical Indicator 19: Small babies at term born at 40–42 weeks' gestation

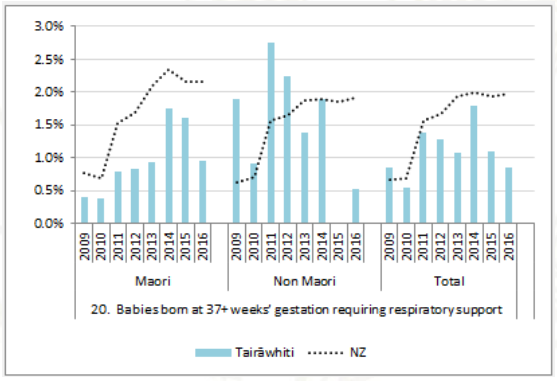
2013: 5 babies (19.2%)
2014: 5 (26.3%)
2015: 7 babies (35.0%)
2016: 37.5%



Our percentage is slightly above the NZ average of 35.8%. The variability in our percentages over the past few years likely reflects our small numbers rather than any true statistical variation. As noted above we plan an audit to assess our SGA detection rate over the last 3 years.

Clinical Indicator 20: Babies born at 37+ weeks' gestation requiring respiratory support

2013: 7 babies (1.1%)
2014: 12 babies (1.8%)
2015: 8 babies (1.1%)
2016: 0.8%



Our numbers continue to remain below the national average of 2.0%. Communication between the Paediatric and Obstetric SMO's is very good. Neonatal nursery admissions statistics are presented at Maternity Quality and Safety meetings and appropriate clinical records are reviewed by a multidisciplinary committee for learning outcomes and quality improvements. Despite our low numbers of NNU admissions we plan to audit our use of antenatal steroids to ensure they are being used appropriately and consistently across our populations.

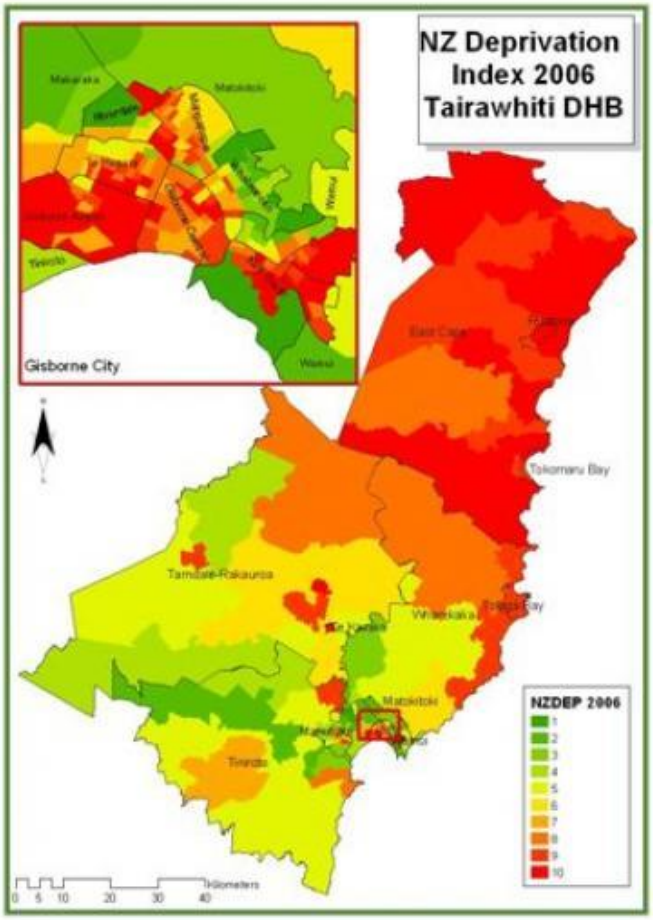
7.0 Our Population

Hauora Tairāwhiti covers the same area as the Gisborne District Local and Territorial authorities.

Covering an area of 8,351 square kilometres it makes up 3 percent of New Zealand's land area.

Tairāwhiti's total population, as per the 2006 census was 44,499. This was a 1.2 percent increase on the 2001 census. The majority of residents (31,260) reside in the city while just under 30 percent of the population (13,239) live in the rural district.

A total of 44 percent of the population is Māori while people with Pacific and Asian descent make up 2.9 percent and 1.6 percent of the district's population respectively.



Levels of Deprivation

The map at left outlines our district's levels of deprivation. Tairāwhiti has the highest level of deprivation than any other district, with two thirds of the population (65%) living in Decile 8-10. This trend is further exacerbated when split by ethnicity, with 77% of Māori in Te Tairāwhiti living within deciles 8-10, and 78% of Māori children under 10 living in Deciles 8-10. This remains the most important determinant of health for Tairāwhiti and its continuing inequity poses the biggest challenge in improving health and reducing inequality.

Thirty nine percent of the population are under 25 and 12% are over the age of 65.Our district has the highest proportion of under 25's in NZ and one of lowest proportions of those over 65. For Māori only, 1 in 20 of the population are 65 or over, this compares to 1 in 6 for the Non Māori population being 65 or over.

Although at the last Census Statistics New Zealand projected an estimated annual growth of 0.2 percent, per year until 2011, the population is expected to decline by 3.9% in the next 20 years, but the 65 and over population is expected to increase to 23% of total population by 2031.

Poor health statistics

As a result of our population make-up, Tairāwhiti has the worst health burden nationally. We have the highest rates of overall avoidable mortality and morbidity, and high rates of ambulatory sensitive

hospitalisations. Our access to some health services are the poorest nationally, for instance access to some cardiac treatment services and renal services.

Some of the factors contributing to our poor health statistics include high smoking and obesity rates (in some cases significantly higher than the national average), lower immunisation rates and a high level of health inequalities.

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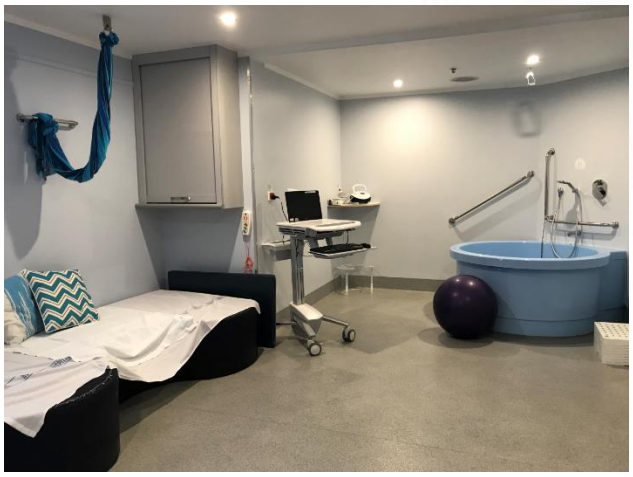
8.0 Our Maternity Facilities

Secondary Birthing Facility: Gisborne Hospital - Puawai Aroha Maternity Unit

Puawai Aroha Maternity Unit is located at the Ormond Rd Campus of Hauora Tairāwhiti (Gisborne Hospital) next to the main entrance of the Hospital and consists of 5 birthing rooms, including an active birthing room with pool facilities and 8 post/antenatal rooms. We also have a whānau room. We had 657 births in 2017, including 14 sets of twins.

Puawai Aroha Maternity Unit



Active birthing pool room

Reception area

Neonatal Unit

The Neonatal Unit is situated within the Gisborne Hospital maternity unit. The unit provides a Level 2 neonatal special care service. With the acquisition of a blood gas analyser in 2017, we can quickly obtain important results to assist in direction of care. Two neonatal staff have completed advanced newborn life support education. The six-bed unit is modern and well equipped. The staff in the Neonatal Unit help to support Maternity Services and assist with twin caesarean sections.

Neonatal Unit

Antenatal Clinic

The Antenatal clinic is situated in the Women's Health Clinic at Gisborne Hospital and consists of 2 clinic rooms and a reception office. Appointments are made by the Lead Maternity Carer caring for the woman directly to the dedicated antenatal clinic midwife. All core midwives have been orientated to the running of the Antenatal Clinic to ensure the service can be covered at all times.

Antenatal Clinic

Te Puia Springs Hospital – Ngāti Porou Hauora

The birthing facility at Te Puia Springs Hospital is run by the Ngāti Porou Hauora Charitable Trust. It is about 104kms north of Gisborne. The hospital was established in Te Puia Springs in 1907.

Te Puia Springs Hospital

There are 2 Lead Maternity Carer (LMC) midwives based at Te Puia Springs Hospital. They provide care to pregnant women from Hicks Bay down to Tolaga Bay. 37 babies were born in Te Puia Springs birthing unit during 2017. These numbers do not reflect the work that goes on in this small unit as women attend for antenatal appointments and often drop in if they have concerns about their pregnancy. Any women requiring more complex care are referred to the team at Puawai Aroha Gisborne Hospital Maternity unit and sometimes require transferring during or following the labour and birth.

Each year the team from Gisborne travel to Te Puia and run a PROMPT course. This is well attended by the hospital and community staff and the local ambulance crew and local GPs. This enables everyone to be more prepared for those challenging emergency events in a rural area and enables the women being transferred to Gisborne to arrive in a more stable condition.

This maintains a collegial and supportive relationship between the two units.

9.0 Our Maternity Services Workforce

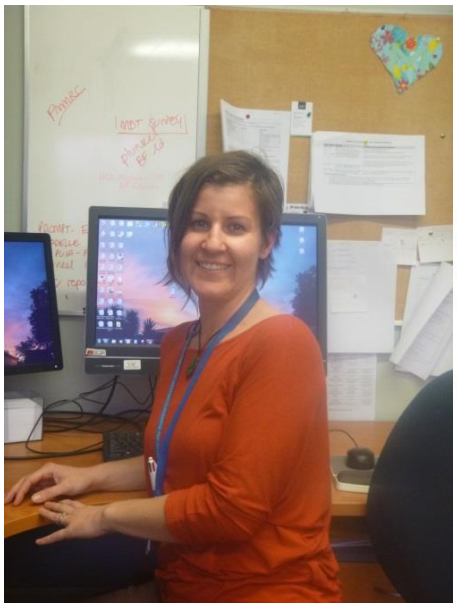
Director of Midwifery/Clinical Midwife Manager

Liz Lee Taylor was successfully recruited as the new Director of Midwifery/Clinical Midwife Manager in 2017.

Liz is committed and dedicated to ensuring the maternity services are of the highest standards and meet the needs of our local population so that we can achieve the best outcomes for our māmās and pēpi in our community and Hauora Tairāwhiti. This was reflected in the positive feedback we received from the MOH following our last annual report.

Liz is also the chair of the hospital clinical governance committee and a member of the Te Kahui Whakahaere (leadership group) and ensures a midwifery voice is heard.

Midwife Educator/Quality Coordinator



Iidil Merlini works hard to maintain the highest standards of quality and safety in the maternity services provided in Tairāwhiti and ensures all the team have access to the education and training they require to remain safe practitioners.

Iidil has also completed the lactation consultant course and supports māmās and pēpi with breastfeeding difficulties in the unit and offers advice to the midwives and LMCs. She is also responsible for ensuring we maintain the BFHI standards.

Core Midwives

We have a great team of dedicated core midwives employed by Hauora Tairāwhiti who provide primary and secondary care in a collegial and supportive environment. Hauora Tairāwhiti employ 19 core midwives, which is the equivalent of 13.9 full time positions, however with some recent changes in the workforce we are in the process of recruiting to current vacancies. We also employ 7 casual midwives who support the team when required. All midwives work in partnership with the women of Tairāwhiti and their whānau, alongside their LMC midwives. The focus is on women centred care so that we always deliver high quality care to the woman and her whānau to maximise her birthing experience, health and well-being.

Anna Vita

Anna Vita is a Core Midwife at Puawai Aroha, Gisborne Hospital and the Winner of the 2018 Services to Midwifery Award. Anna has been a midwife working at Hauora Tairāwhiti for many years, having served as the Clinical Midwife Manager in the past. She is always professional and committed to her role 100%.

She has taken on many additional roles over the years. Anna is currently the midwife representative on the Vulnerable Pregnant Women group so that mums and babies remain as safe as possible in our care and onwards. Anna is also in the hospital root cause analysis team and on the Hospital Mortality Group.

She helps facilitate District Health Board wide workshops and is a Midwives First Year of Practice mentor, a preceptor for student midwives in charge of the Maternity roster plus much, much more.

Anna always role models her professional attitude and passion for being a midwife. She models all the Hauora Tairāwhiti WAKA values. Anna is seen as the 'go-to person' for the team and shares her knowledge and experience to educate and support others.

Anna also regularly suggests quality initiatives and implements these which enrich the service we provide. Anna always goes the extra mile to support the services, her colleagues and her manager. She is always looking to the future and what can be done to make the journey for women and their whānau through our services a more pleasant one.

Carol Coetzee

Carol Coetzee nurses in the Neonatal Unit at Gisborne Hospital and is the winner of the 2018 Innovation and Patient Safety Award.

Carol has worked as a registered nurse in the Neonatal Unit, as a midwife and as a Lead Maternity Carer in the Gisborne community. She has become well known for her professionalism and the family focus that she provides. Carol has begun an initiative within her lead maternity care. She works with mothers who are close to pregnancy term to encourage them to hand express breastmilk regularly so that there is stored milk on hand from the time of birth. This promotes bonding with the baby and family and minimises the potential of separation.

Within her research, Carol is intending to show a reduction in the rates of neonatal hypoglycaemia and neonatal jaundice by having a supply of stored milk that is on hand from the time of birth for the baby. This also promotes less chance of the pregnancy going much beyond the due date and into the post-term period. Although the research is not yet published, this innovation and Carol's service to the women of Tairāwhiti needs to be recognised.

Lead Maternity Carer Midwives (LMC)

There are currently 10 LMC midwives practicing in Tairāwhiti, who work in 3 practices based in Gisborne City and provide full antenatal, labour, birth and postnatal care to women in Tairāwhiti who may choose to birth at home or at Puawai Aroha. A focus for LMC's has been to increase the number of women booking with them in their first trimester of pregnancy. We are slowly seeing positive results in this area with an increase in women booking with their LMC in their first trimester, especially now that LMCs can offer free pregnancy tests.

There is also 1 LMC working up the East Coast who provides antenatal, labour, birth and postnatal care to women living rurally from Tolaga Bay to Hicks Bay. These women may choose to birth at home or at the primary unit based at Te Puia Springs Hospital or Puawai Aroha. There is 1 midwife employed at Te Puia Springs primary based unit who also provides care in the community.

LMC midwives provide antenatal visits regularly throughout a woman's pregnancy journey and refer to the Hauora Tairāwhiti obstetric team as needed. Visits vary between midwifery practice but usually occur monthly until around 28-30 weeks, fortnightly to 36-37 weeks and then weekly until birth. Most women attend their antenatal appointments in the clinic rooms where the midwives are based. Women and their babies are seen postnatally every day they are in hospital, within 24 hours of discharge from hospital at home and then a minimum of 5 home visits until 4-6 weeks postnatally with referral to Well Child Provider Plunket or Tūranga Health who continue visits from 6 weeks.

Obstetricians

We have 4 Obstetricians working within Hauora Tairāwhiti. All are experienced practitioners and active members of their professional colleges. They provide specialist obstetric services to Tairāwhiti meeting the service delivery specifications and provide appropriate and timely advice to staff and management on obstetric matters, and on professional standards of practice. They all participate in the professional and quality assurance activities required of senior medical staff.

Project Coordinator

Over the last 6 years Judi has worked on a number of maternity related projects to ensure new initiatives become part of our every day care. This has included the Baby Friendly Hospital Initiative, Safe Sleep and Pēpi Pods, Shaken Baby Prevention education and smoking cessation support throughout the hospital.

The major project of the last few years has been the implementation of our electronic record the Maternity Clinical Information System (MCIS). The use of MCIS is now well embedded in our working day and Judi is able to report outcomes and audit care using the data entered. As the system is constantly being improved Judi sits on several national advisory groups to ensure our voice is heard and our needs met.

Perinatal Maternity Mortality Review Committee

The local Perinatal Maternal Mortality Review Committee is supported by a coordinator who attends national training each year. A monthly inter-disciplinary meeting is held and includes event reporting and reviews of cases and an opportunity for clinical discussions and sharing of information which is well attended by the multi-disciplinary team.

Hauora Tairāwhiti Vulnerable Pregnant Women (VPW)

Maternal Wellbeing and Child Protection Multidisciplinary (MDT) Hui

This year we are pleased to introduce Aimee Milne who is our new Gateway Coordinator/Health Broker/VPW coordinator. Aimee facilitates the VPW hui which involve taking interagency referrals (LMCs, social workers, police, Oranga Tamariki, Corrections and health professionals) for at-risk pregnant women. Group membership includes the VPW coordinator/Health Broker, Paediatric Social Worker, a midwife liaison, Well Child providers Turanga Health and Plunket, a member of the mental health team, a teen parent school and house representative, the Ministry for Vulnerable Children Oranga Tamariki social worker hospital liaison, māmā and pēpi Kaiāwhina and in the past a police representative.

The purpose of this group is to enable the best possible outcomes for women and their families identified to have vulnerabilities during the maternity care period (antenatal to six weeks post-partum). The role of the core midwife on the group is to confirm expected dates of delivery and previous obstetric issues to bring to the discussion plus obtaining and providing feedback to the LMC midwives in the community from other agencies supporting the woman.

The overall aim of the group is to strengthen whānau by facilitating a seamless transition between primary and secondary providers of support and care; working collaboratively to engage support agencies to work with the mother and her whānau in a culturally safe manner. We hold a fortnightly VPW MDT hui where we share information and review each case to ensure women are receiving the support they need. Once the woman births, checks are made to ensure the woman receives the safe sleep and shaken baby prevention education. Links to Well Child providers and community services are also put in place before the woman is formally discharged from the VPW hui/process.

Ongoing development for 2018/19 of the Hauora Tairāwhiti VPW MDT meetings include:

- A change to a more positive and empowering name
- A system to form a risk assessment tool e.g. traffic light level of risk to mother and baby
- Gather statistics around number of and reason for referrals initially and then ongoing work about the effectiveness of the group

Health Broker Role

The health service broker shares information at the intersection of health, statutory care/authority and community social services. By gathering information from a somewhat fragmented health system, the broker helps piece together a picture of what is happening for whanau currently, what is needed and where the gaps in service lie. Information is gathered from DHB, NIR, oral health services, Well Child providers, public health nurses, ICAMHS, ACC, child development service and GPs. The broker contributes to decisions around escalating cases to police and Oranga Tamariki. The aim is to keep children safe and at the centre of any care plan.

As a registered nurse the health broker is able to assess what the most urgent clinical needs are and find the most appropriate referral pathway to meet these needs with a coordinated approach. This has recently enabled a severely autistic child from a whanau with complex social issues to have her health needs met. The child has significant hearing loss and cannot communicate verbally. On gathering information the health broker identified that the child had an urgent need for dental care, keeping in mind she was unable to express pain. The whanau had not attended appointments that had been arranged with paediatricians, audiology and dental services and as a result had been referred back to the GP. The GP had not seen the child for one year.

The network around the child was brought together by the health broker to identify that part of the reason for missed appointments was that the child was easily overwhelmed and difficult to assess which was distressing for whanau. It was arranged that the child was seen by dental nurses at school with support from the public health nurse. She was referred for dental surgery under general anaesthetic. It has been arranged that while the child is under GA, the audiologist is to conduct their assessment, therefore, minimising distress. A social worker was also contacted to make sure the whanau are transported and supported throughout the procedure.

The Health Broker acts as a conduit in the feedback loop between services.

"A St John officer made an enquiry about a referral pathway for a young pregnant woman living with her children in an overcrowded house. Due to the language barrier it was difficult to ascertain a full story from the whānau. The health broker was able to find out more about the situation through contacts in maternity and the Vulnerable Pregnant Woman's multidisciplinary group. This enabled the health professionals, interpreters and social workers to link the whanau to wraparound services to ensure that the mother and unborn child (due within the week) had everything they needed for baby's arrival. As the complexity of the case grew due to residency issues, it was established a referral to Children's Team would be best for a coordinated approach. By the time the baby arrived the whanau had been referred to their home country's local equivalent of a consulate, where language, financial and legalities are being addressed with the support of social workers and mental health professionals. This will enable the baby to be referred to a Well Child provider for ongoing support and developmental checks."

Physiotherapy Service Development – August 2018

What we commonly term Women's Health Physiotherapy is a growing area of health care. It is now recognised more as Pelvic Physiotherapy. This includes many different pelvic health issues such as

pelvic floor dysfunction, pelvic pain, gynaecology, colorectal and urological related disorders as well as our maternity, pelvic floor rehab, and continence based care. With growth comes pressure on service delivery.

To meet the needs of our maternity population we felt we needed to change how we deliver our service (to women). Our aim is to improve access to physiotherapy by providing a class environment and reducing our waiting times.

Pregnancy related pelvic girdle pain (PGP) and abdominal wall changes such as diastasis are common during pregnancy. Early intervention and conservative advice can teach women to manage pelvic girdle pain symptoms and diastasis during pregnancy effectively.

We currently use classes in our department for the same reason across other musculoskeletal areas. Other DHB's have also introduced social media such as hospital website vimeo educational tools as a forum for providing information and basic conservative management.

An article on Physiotherapy Women's Health service evaluation in the UK recognised that delivery of quality care starts with consistent quality information and this can be executed by the LMC's who have ongoing patient contact and build relationships with their clients. This is the model we are using to develop our class.

The expectation is that by providing recent in-service education opportunities LMCs have up to date information on pelvic girdle pain and rectus abdominus diastasis and will be able to confidently deliver first line advice.

We would like women to be given the opportunity to attend a physiotherapy class as a first line of intervention. Women will be given a leaflet with booking details to book themselves in. A referral is still required as current procedure with an indication that the class information has been given. This is hopefully a way to reduce our administrative load.

The Physiotherapy led PGP class will be every 2 weeks for 1 hour on a Tuesday at 11.00 am. The aim is to provide education, take home handouts, and briefly triage. The second half hour is a basic exercise class and allows returning clients to be checked or gain further advice. Class numbers will be restricted to 6 and attendance must be confirmed.

If the class time offered is not suitable an information pack will be mailed, but every encouragement is made to attend one session.

Research currently recognises that self-management strategies often mean symptoms stabilise or resolve reducing the need for further intervention. Women feel better supported and confident to manage their symptoms.

We are trying to shift attitudes through understanding, empowerment and confidence allowing women to manage their symptoms proactively not reactively. If we can achieve this in a class environment we can manage our antenatal referral and waiting lists more efficiently.

Individual physiotherapy appointments will be made from this class setting. We are encouraging women to have ownership and manage their pregnancy related pelvic girdle pain or diastasis symptoms in a supported way with options of individualised care when indicated.

Tubigrip support or a referral to orthotics for a smiley belt can be done by the LMC. We have a basic information sheet with a pre-cut/packed tubigrip in size L for abdominal or pelvic support **within** the antenatal clinic at the hospital **for hospital based clients.** Midwifery clinics could purchase tubigrip and use the same system at their clinics.

Individual appointments may be offered at the discretion of the senior Physiotherapist, any bladder, bowel or pelvic floor referrals will be managed individually in the usual format.

Feedback will be encouraged as we strive to make changes that help us work together to improve our service.

Margie Humphreys
Senior Pelvic Physiotherapist
NZRP

Sustaining the Midwifery Workforce in Tairāwhiti

At Hauora Tairāwhiti we aim and continue to 'grow our own' midwifery workforce by supporting local students through the Wintec midwifery degree programme. We also ensure our team of midwives feel valued and listened to. All staff have an annual appraisal known as 'You Time' as this is about the individual staff member and links to our WAKA values. Each midwife has a quality activity that they are responsible for, when the roster allows they are given protected time to work on this activity e.g. member of guideline group, member of the MQSP committee, core midwife respresentative on the Vulnrable Pregnant womans group.

We encourage all midwives to prepare and submit a Quality Leadership Programme (QLP) portfolio, we now have 81% of the midwives who have successfully completed this. We also encourage and support midwives to develop further by offering funding and support for studies to become registered lactation consultants. We also support one midwife each year to enrol on the complex care course and others to attend conferences. The midwife educator is available to assist midwives with registrations and preparing for courses.

We encourage staff to take regular leave which helps to maintain their well being and has reduced the amount of sick leave required. We also offer the option of 8 and 12 hour shifts to suit individual needs but this must also comply with the service needs, ensuring the appropriate skill mix is maintained for safe staffing. We are also developing the more junior midwives to become shift coordinators, and we are already seeing some very promising results.

At Hauora Tairāwhiti we pride ourselves as working as 'one team' with good communication. We have 4 and not 3 way conversations, which means when planning care for women we include the woman and her whānau, the LMC, the Obstetrician and the core midwife. We have no registrars so consultations are directly with the consultant, which means maitaining positive relationships is important to us.

Hauora Tairāwhiti has a Baby Friendly approach for staff to enable them to return to work after parental leave

Having my baby at work with me is wonderful as I don't have to separate the roles I have as a mum and a midwife. It's important for women and their whānau to see that having children is an everyday part of life especially in this women and whānau focussed profession. Women and their families seem to enjoy having a happy baby in the room; they are able to relate to me as a mother and it can break down some of those client/professional boundaries.

I am the second midwife here at Hauora Tairāwhiti who has been supported to bring their baby to work with them and rostered to cover the antenatal clinic to enable this transition back into the workforce. This is accepted not only by the women but by all my colleagues including the obstetric team. My colleague has actually returned to work following two of her previous pregnancies and will be doing so again early next year. It means we are able to continue to breast feed which occurs between appointments and during breaks. When working clinically in delivery suite after working a few months in the clinic we are able to express in a room which is provided within the unit for this purpose with an accessible milk fridge. Thank you Hauora Tairāwhiti for enabling us to return to the workforce feeling valued as members of the team.

A quote from one of the hapū māmās attending clinic, "very cool to see Juliette with her daughter at work at the Women's Health Clinic. Awesome, it gives it a nice warm feeling!" Thanks Julia Keelan and her sister Ashley.

Sustaining practice for LMC's - Hapū Ora Midwives

Hapū Ora midwives decided that a change was needed, we therefore decided to change the way we work as LMCs in Tairāwhiti, we wanted to work smarter, not harder. So, in 2017 we changed from having our own caseloads as individual LMCs and combined them to provide a service that we call shared care. This way of working means the women we book meet all midwives in our team, currently three LMCs work at Hapū Ora Midwives, Holly Casey, Kyllie McClutchie and Christina Casey.

Shared care means we work as a team, we share experience, knowledge and skills, we all get to know the women and their whānau. We do not feel isolated and feel that we support each other better. It also means that we are not trying to cover all roles an LMC juggles; we have a rotation of the roles, one week antenatal clinics, one week on call and one week postnatal visits. We schedule 6 weeks holidays throughout the year to stay balanced

and fresh.

For the women, this means they will receive continuity of midwifery care, within a team approach; women receive quality care from our team who have similar philosophies. We work closely with other services in the community and have relationships that are strong with social services to support the Māmā that book with us.

Supporting our Māori midwifery workforce, improving Māori Health and reducing health inequities whilst maintaining traditional practices

Tēna koutou katoa,

It is with great privilege that I introduce and share with you Ngā Maia o Aotearoa to the Puawai Aroha maternity Unit, wider health workforce, community and whānau in Tairāwhiti. Ngā Maia o Aotearoa is the National body for Māori Midwives of New Zealand. The New Zealand Midwifery Council is considered a Crown entity to which Ngā Maia o Aotearoa are their treaty partners. Like the New Zealand College of Midwives, Ngā Maia has formed regions, with the difference being that regional boundaries are identified by tribal territories and affiliations.

Ngā Maia o te Tairāwhiti was founded by Midwives Sarah McGhee and the late Agnes Mulligan and became a registered Charitable Trust in 1998. This is significant history as it legitimately records Ngā Maia o te Tairāwhiti as the first regional organisation of Ngā Maia. Ngā Maia o te Aotearoa became a Charitable Trust two years later in 2000.

Operating as a Charitable trust means that Ngā Maia is a not-for-profit organisation. This also means that our Office holder roles, Board members, National and Regional representatives are operating within a voluntary capacity. This can make resources hard to come by and we rely on membership donations and funding from the Ministry of Health to provide our members, colleagues, whānau and wāhine with cultural resources and support.

Ngā Maia o Aotearoa has developed and owns Tūranga Kaupapa which is the first and only indigenous cultural framework for Midwifery in the world. Midwifery schools, Hawkes Bay & Auckland District Health Board's run regular workshops for all midwifery students, new staff and new graduates, with many other workshops being run throughout New Zealand. Under taking a Tūranga Kaupapa workshop will benefit your clinical practice, support your written practice reflections for your next Midwifery Standards review and count towards midwifery education hours. Midwifery Consumer Reviewers are also encouraged to complete Tūranga Kaupapa training. Midwives can register through the Ngā Maia website https://www.ngamaia.co.nz/turanga or through the smart-phone app. The Ngā Maia smartphone app adds relevance with finger-tip accessibility to its members. As technology advances we aim to not be left behind. Active Ngā Maia Facebook pages help to reduce workplace cultural isolation and increase support for Māori midwives

by acting as a platform to network. Focusing on providing cultural support to other Māori Midwives is vital to keeping ancient birthing practices alive.

Ngā Maia o Aotearoa is passionate about Māori midwifery workforce development and we are seeing more Māori midwives share the matauranga (knowledge) of traditional practices such as karakia, karanga, muka cord tying, ipu whenua and oriori in the birthing space. These customs not only help to enrich whānau experiences but also share these sacred spaces within birthing facilities and expose other midwives to these practices. This can be very challenging as primary interfaces with secondary and holistic meets medical. It is important for all health professionals to remember that the Government has a dedicated team that focuses on the deliverance of Pae Ora, which is the Ministry of Health's vision for Māori Health. Ngā Maia ki Waikato has written a document on the Safe use of Muka which helps other midwives become familiar with this practice. We encourage all midwives to engage with their Māori Midwifery colleagues for clarification on local tikanga.

In 2015, there were 3068 Midwives whom held an annual practising certificate. Today, there are 272 Māori midwives that have a current membership with the New Zealand College of Midwives. This means that Māori Midwives approximately equate to 9% of the Midwifery workforce. Ngā Maia welcomes all Māori Midwives and Māori midwifery students to become involved with Ngā Maia regionally and nationally. The Māori midwifery population in the Tairāwhiti region is unique and reflects a higher ratio percentage than seen nationally. It is in the Tairāwhiti region that Ngā Maia o te Tairāwhiti can be restored and be able to make huge contributions to the progress of Māori Midwifery regionally and nationally from whānau education, professional education, research participation, guideline and policy development, review committees and strengthening relationships and referral pathways to other Māori health providers.

The birthing rates for Māori continue to rise nationally. Our local Māori population equates to approximately 50% of the community in Tairāwhiti. Important questions regarding the delivery of maternity services to Māori and how midwifery practice will best support whānau through their hapūtanga to reduce Māori health inequities, increase access into health services and meet Government health initiatives such as He Korowai Oranga are needed to be raised if not already met.

The New Zealand College of Midwives acknowledges Rongoā as a complementary therapy. Te Kahui Rongoā Trust is the National body for Rongoā and is endorsed by the Ministry of Health. Rongoā already has a holistic place within everyday midwifery practice. Its presence is reflected in karakia (prayer), herbal medicine (native naturopathy) and mirimiri (massage). It is important to share knowledge of Rongoā with the wider midwifery community so that practitioners can become aware of a variety of complementary therapies available in their community. Turanga Health is a funded Rongoā provider.

Koka Sarah McGhee and her whānau give their blessings to re-establish Ngā Maia o te Tairāwhiti and it is really exciting to be preparing for a new dawn. I extend a warm invitation to all Māori Midwives to join Ngā Maia and to all midwives interested in attending our Hui-a-tau on Māori Traditional Birthing on the 15-18th November 2018 at Pukemokimoki Marae (191 Riverbend Rd, Maraenui), in Napier. Register now, as it will be a fabulous opportunity to increase your exposure on Māori Midwifery and apply attained knowledge to your practice.

To improve Māori Health and reduce health inequities we must support each other and work together.

E hara taku toa i te toa takitahi, he toa takitini. My strength is not as an individual, but as a collective.

Nga mihi nui,

Kāniwa Kupenga-Tamarama
North Island Representative for Ngā Maia o Aotearoa
Kaniwathemidwife@hotmail.com

10.0 New Ways of Working

Te Pā Harakeke – Tairāwhiti Children's Team

Hauora Tairāwhiti is a key stakeholder and service provider with Te Pā Harakeke, our way of working with vulnerable Tairāwhiti tamariki and their whānau utilising a Children's Team approach. In recent months we have refreshed and reinvigorated Te Pā Harakeke's Operating Team with the appointment of new team members in the Director and Co-0rdinator positions, together with the inception and appointment of a Practice Advisor. Concurrently a new appointment was made in the Health broker role with refocussing of that role to work across the Gateway, Vulnerable Pregnant Women and Te Pā Harakeke spaces, strengthening our responsiveness, co-ordination and information sharing across this social service sector approach.

In Te Pā Harakeke case management this has given effect to strengthening information shared at the weekly referral pathway hui. Hauora Tairāwhiti's investment in this collaborative approach enables *the right people in the right roles* (Health service broker, E Tipu E Rea primary provider, Paediatric social work) to come together in a *joined up approach,* with other stakeholders from the Ministry of Social Development, Corrections, Ministry of Education, Oranga Tamariki, and Inland Revenue. This collective *shares expertise, information, responsibility and accountability* for decision making that gives effect *to everyone at the table with a child-centred whānau centred lens,* creating *a single point of entry*, and *a seamless journey* across service provision[1].

Practice examples have included collective and consensus decisions when making a Report of Concern to Oranga Tamariki. Shared information from the voiced concerns is captured in one report to that Ministry, faciliated by Te Pā Harakeke Co-Ordinator. In another instance a young pregnant single parent with two young children, experiencing multiple and complex health, disability, education, and housing needs received swift and joined up support from in-patient care, through to primary health, together with education and resource support, in response to her immediate and identified needs.

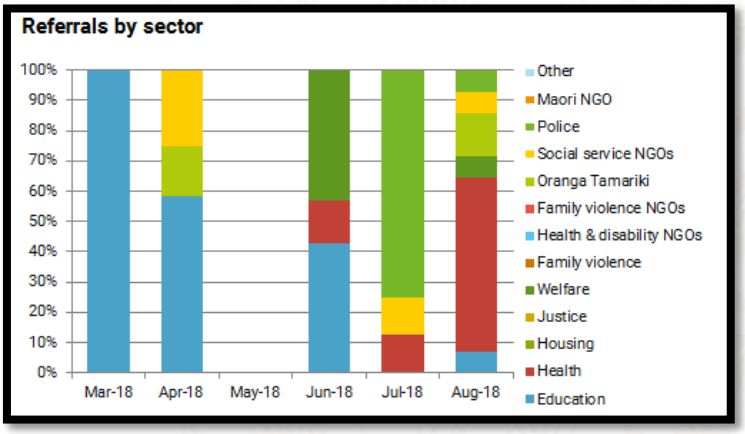
The Operational team as the backbone support to this approach, together with the health service broker have enabled child action networks (trans-discplinary teams) to come together to build an initial assessment picture with tamariki and their whānau, giving effect to one collaborative plan of co-ordinated and aligned support and services. In one instance the gathering of health assessments and reports together with cross sector information prevented a caregiving grandparent having to re-tell her story, enabled access to appropriate Income Support from MSD, clarified and improved

[1] Italics denote specific references to Te Pā Harakeke principles and values.

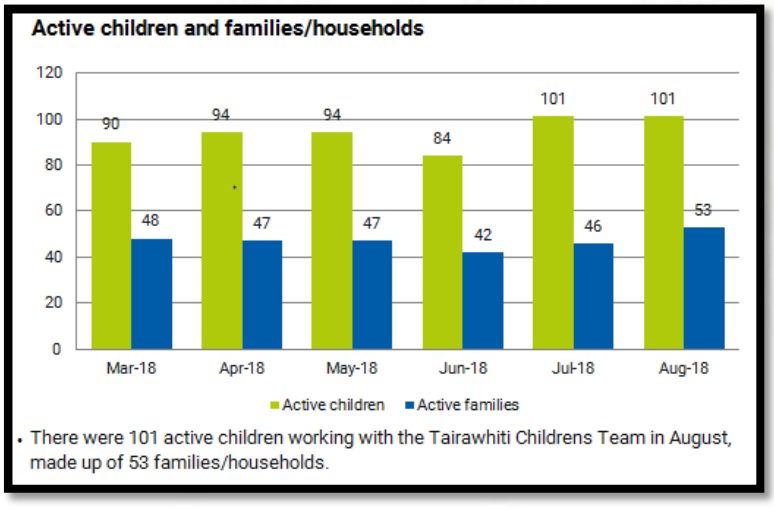
access to specialist health services, and enabled the school to be proactive and aligned to meet the needs of the pupil.

The Co-Ordinator and Practice Advisor roles are enabling capability building to occur across frontline trans-disciplinary team members, by the direct provision of coaching, mentoring and support on the elements and tools that give effect to this approach. These include holistic assessment, facilitated planning hui including with whānau, action planning, accountable interventions and mechanisms to support review processes, all captured in one information system accessible to stakeholder networks.

Data from Te Pā Harakeke Monthly Report for August 2018



Shows increase in health sector referrals in past three months.



Hauora Tairāwhiti

Te Kuwatawata

Gisborne health professionals have listened to a call for a more effective response to mental health and addiction distress that affects too many Tairāwhiti families.

Te Kuwatawata is a unique and groundbreaking response to that call. It is about applying indigenous mātauranga (knowledge/understanding) to reframe the way we talk about a person's experience and to find a pathway forward for people experiencing distress, says Mental Health Head of Department Dr Diana Kopua.

A groundswell of people – indigenous knowledge experts, local GPs, community groups and mental health professionals - have been learning about using stories to look at all the characteristics of Māori deities and how they interacted with each other. This helps us to understand our own interactions and behaviours.

"Mātauranga enables us to move away from only using western ideology to categorise distress while staying critical in our thinking as health professionals. We are not abandoning western psychiatric approaches; we are just putting other principles - such as relationships and community voice - forward as an immediate response. This helps us to respond quicker, closer to where people live and most importantly this makes people feel connected, rather than disempowered."

Te Kuwatawata has been supported by the New Zealand Ministry of Health with their "Fit for Future" Innovation Funding pool.

For more info on the programme: http://bit.ly/Tekuwatawata
For more info on Hauora Tairāwhiti: http://tdh.org.nz
For more info on the district: http://tairawhiti.gisborne.co.nz

Hauora Tairāwhiti

Hauora Tairāwhiti

Te Hiringa Matua

Te Hiringa Matua is an intensive programme of support to pregnant women and families with children under three, who have serious addiction issues. Its origins are a successful pilot programme run in Auckland.

However, in Tairāwhiti half the population are Māori. We have a high percentage of teenage mothers and generational addiction issues.

Therefore a uniquely Tairāwhiti approach to providing support and connection is being used. Mahi a Atua (using indigenous knowledge of Māori deities to make sense of a situation), is a way of working that has been developed in Tairāwhiti led by Dr Diana and Mark Kopua. It is the foundation of the Te Hiringa Matua service.

The service sees three Māori health providers; Tūranga Health, Hauiti Hauora and lead provider Ngāti Porou Hauora working collaboratively with the District Health Board Hauora Tairāwhiti.

The name Te Hiringa Matua is taken from a Te Oriori (lullaby) for Tuuteremoana. It is an ancient birthing prayer that describes the phenomenon of human procreation and the instinct to care for children.

For more info on the programme: http://bit.ly/TeHiringaMatua
For more info on Hauora Tairāwhiti: http://tdh.org.nz
For more info on the district: http://tairawhiti.gisborne.co.nz

Hauora Tairāwhiti

Te Hiringa Matua

'The Power to Parent'

Our Story

Capturing the knowledge of yester-year to make positive change for the future.

Recognizing and acknowledging the journey through colonization - we are addressing institutional racism through matauranga maori.

'The amount of engagement and education makes the whanau's journey easier. Having an artist as a peer helps with safety in your professional boundaries'.

- Paige Jordan (Mataora)

WANANGA

A consistent safe space that empowers by being deliberate in the collective knowledge shared that is contemporary and live.

MAHI-A-ATUA

Using Maori Narratives to understand our selves, our world and our way of healing.

WHANAU

Are the experts which is the focus of the service. Leading their pathway to healing through 'Wananga' from entry and throughout.

MATAORA

'Ue' help create an engagement through an Okawa and Wananga process.

'I feel safe and no one is there to judge me. The atmoshpere when you walk in is nice and warming and the Mataora are awesome and very caring.'

- Noelle Tangira (Mama/Whanau)

Co-designed with the support of the iwi and hapu - endorsed by our kaumatua.

Nga kawa me tikanga o te Tairawhiti is the essence of engagement and connection.

How could it work in other areas?

PARTNERS AND GOVERNANCE

Ngāti Porou Hauora

Hauora Tairāwhiti

Te Hauora o Turanganui a Kiwa Ltd
Turanga Health

Te Whare Hauora o Te Aitanga a Hauiti

Hapū Māmā Oranga Niho – Maternal Oral Health

Helping pregnant mums get good dental care has been shown to improve the birth weight of babies and supports whānau to take better care of their teeth.

A new service, Hapū Māmā Oranga Niho, has been trialled through Tūranga Health. In a first for New Zealand hapū māmā (pregnant mums) who are experiencing significant barriers can get free dental checks and some treatment.

More than 40 women have now benefitted from this program and the next phase is to evaluate the clinical effectiveness using the "Oral Health Related Quality of Life" measure.

The program started with a number of wahine not keeping their appointments but with support from our iwi providers and LMCs, we have now reduced the missed appointment rate.

Moana Reedy getting her teeth checked by Dr Nitish Surathu

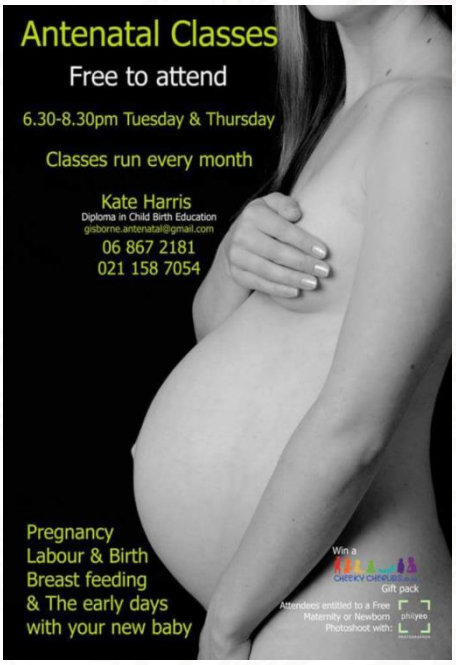
Mother of five Marina Te Maera was grateful for the opportunity to get her teeth checked out. Her precious, healthy baby boy was born in June.

"It is 20 years since I last went to see a dentist. I was nervous so it was good to have some support. That really made difference. Now I have had this opportunity I want to take better care of my teeth and set a good example for my whānau."

11.0 Supporting our Māmā & Pēpi

Antenatal Classes

Summary August 2017 – July 2018



The antenatal classes in the hospital cater for all families who choose to attend. The pregnant women who register for the classes are encouraged to bring someone with them, usually this is the other parent of the baby but if this is not possible I encourage them to bring someone else with them, preferably someone who will be with them during labour. People often bring a friend, their mum, or a sister / brother, instead of (or as well as) their partner.

It is usually the pregnant woman who contacts me to register for the classes. All the LMCs in town have my flier and they give them out to women early in pregnancy and encourage them to book early. I also advertise my classes on local Facebook pages (the local 'pre-loved' page with the largest audience, and a local parenting page). Women contact me via cell, email, and Facebook.

In the first session all participants fill in a form where they have the opportunity to tell me whether they have any specific needs that I should be aware of so that I can best suit the learning environment to these needs. This includes whether they have any specific learning needs, physical / learning disability, and if they are comfortable reading and writing in group situations. I do my best to accommodate for these needs.

Participants are also given the opportunity to tell me whether they have any specific cultural or religious (or other) practices that they would like me to know about, or that they would like to know more about themselves, so that I can discuss them in context throughout the course. For example, as part of a standard discussion about physiological labour and birth I include the following topics in every course: options for place of birth, water birth, using muka tie or braided cord tie, ipu whenua, optimal cord clamping, physiological and managed birth of the placenta, the significance of the placenta in sustaining the baby's life and also the significance / meaning of 'whenua' and of returning the whenua to the land, and that they can also take the placenta home if they want to and decide what to do with it later if they choose not to bury it. Often people also ask me to include extra discussion around topics such as: lotus birth, options for consuming the placenta, the option of taking any bodily products (used sanitary pads, used blueys etc) home with them, and ensuring the baby cries at birth. Some of these are cultural practices specific to Māori who make up approximately 23% of the families I see. I also have a similar number of women who do not identify as either Māori or New Zealand European and do my best to cater for their varying cultural practices also.

Most pregnant women who attend come with the father of the baby, however, my resources are inclusive of same sex couples, single women who come to the classes alone and single women who come to the classes with another support person. In these cases the 'Men only' session listed in the overview doesn't get called 'Men only', and the resources / activities are inclusive of everyone who is involved.

In the first session I ensure that all group members are aware that they do not have to actively participate in the activities or discussion if they would prefer to observe instead. Occasionally there is a person who chooses to listen rather than actively take part, however the environment is friendly and informal, and I find that almost everyone is enthusiastic to take part fully. I use a range of learning activities to cater for differing learning styles so that the learning environment is as effective as possible. These learning activities include: card matching activities, resources to read and then share with the rest of the group, whole group discussions, small group discussions, small activities in couples, brain storm activities, 'mini lecture' (i.e. just me talking), diagrams drawn on the whiteboard, photo resources, informal question and answer discussions, worksheets to fill in either during the session or at home, practical demonstrations, demonstrations using a pelvis model a doll and a placenta, and a very small role play (by me). There are a range of handouts and resources to take home for those who want extra information or to look back at notes later. People are also encouraged to take notes if they would like to. I also have an extensive parent library where families can borrow books (free) if they would like. The retention rate is good and the main reason for non-attendance is illness. I encourage participants to provide feedback verbally during the classes and written at the end of the course, so that the classes can be adapted and improved to meet the needs of those attending.

Examples of written feedback from participants:

- *Great tutor. Good info, relaxed delivery. We have a better understanding now and enjoyed the class more than we expected. Thank you.*
- *Lovely class. Caring and respectful educator. It was good that there were 'no silly questions' and I could contribute as much or as little as I wanted, no pressure. All parents should do it. Thanks.*
- *You are the best! I love and enjoy coming to this class.*
- *Very well run course. Thank you.*
- *Very informative and enjoyable.*
- *A+*
- *Classes were well thought out, presented and structured well. Critical information was presented in a well thought out and unbiased way. Tutor was highly professional and made a potentially awkward class comfortable.*
- *Often ran over time but was always interesting and engaging so didn't mind.*
- *I'm glad I came to the classes.*
- *Empowering and ++ educational classes, given in a fun and easy to listen to unbiased way. Kate, you are awesome.*
- *Really helpful and interesting. I think we both feel a lot more informed and prepared. Awesome to see all the Dads here.*
- *Excellent course. Loved it. Found it extremely helpful. Feel much more comfortable about labour now.*
- *I really enjoyed the classes and feel so much more comfortable with all the extra knowledge I have.*
- *Very helpful. Thank you so much.*
- *Awesome.*
- *Smaller room?*
- *Fantastic. Thank you*
- *Classes were easy going and very open. Loved them*
- *Length of classes at times challenging when they went overtime*
- *Great teaching. Have learned a lot. Will highly recommend to others / friends.*
- *Awesome classes! Thank you :-)*
- *Should be compulsory :-) Awesome!*
- *These classes have been extremely informative and have supported me to make informed decisions. Thank you!!*
- *Glad I came.*

Antenatal classes August 2017 - July 2018

	Total number of women / group	Number of primiparous women	Average gestation on entry	Nationality			Age		
				NZ European	NZ Māori	Other	19 or under	20 - 30	Over 30
August	7	6	29	2	3	2	0	5	2
September	5	4	31	3	1	1	0	3	2
October	11	9	30	6	2	3	0	6	5
November	5	5	30	3	1	1	0	4	1
December	7	5	30	5	2	0	0	5	2
January	8	7	32	5	2	1	1	5	2
February	13	11	33	7	3	3	0	10	3
March	12	9	30	9	1	2	0	6	6
April	8	7	30	7	0	1	0	5	3
May	7	7	29	4	0	3	4	0	3
June	5	5	31	2	3	0	2	3	0
July	5	5	33	2	3	0	1	3	1
Total for the year	**93**	**80**		**55/93**	**21/93**	**17/93**	**8/93**	**55/93**	**30/93**
Average	7.75		30.6						
Percentage		86.02 %		59.13%	22.58%	18.27%	8.60%	59.13%	32.25%

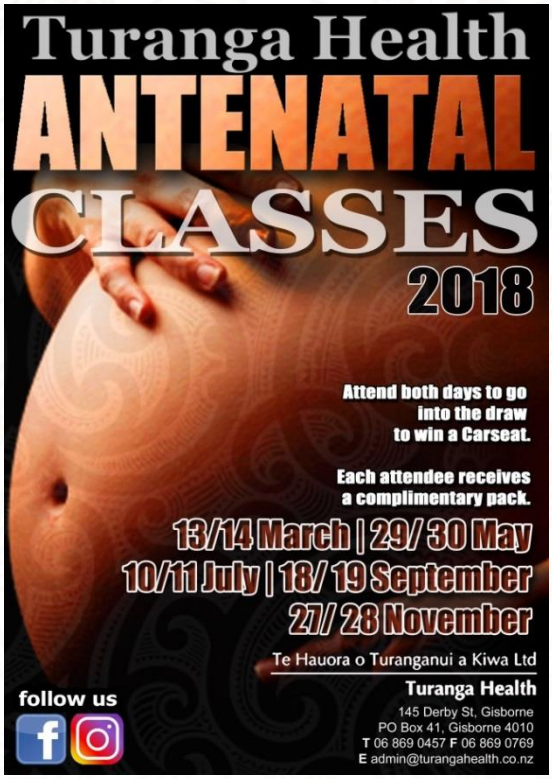
Antenatal course outline Tuesday and Thursday nights 6:30 – 8:30pm

Session 1	Session 2	Session 3	Session 4	Session 5	Session 6	Session 7
House keeping Introductions Group expectations Informed decision making Pelvic anatomy	Warning signs / pregnancy problems Signs of labour Labour overview	Understanding labour pain / sensations Natural pain relief	Maternity ward tour - Active birthing room - Birthing pool - Newborn characteristics - Post-natal room - Neo-natal ward	Breastfeeding	Newborn health - APGAR - Hearing screening - Vaccination - Jaundice - Metabolic screening	Safe sleep Newborn behaviour 3rd day blues & PND
Supper				Supper		
Capabilities of the pelvis Hormones of labour and birth Labour perceptions	Labour overview continued	Role of the support person Medical pain relief		Variations and interventions - Prematurity - Induction - ARM - Fetal monitoring - Ventouse - C section Unexpected outcomes	Women's only - Concerns - Perineal care - Pelvic floor - Lochia - Haemorrhoids - After pains - Constipation - Contraception - Birth positions Men's only	Responsive parenting Evaluations

Turanga Health Antenatal Classes – addressing the needs of our local population

Māmā & Pēpi Service

Te Hauora o Turanganui a Kiwa Ltd
Turanga Health



Turanga Health provides Antenatal wānanga every second month across two full days covering a variety of topics and interactive activities. Hapū māmā and whānau access the wānanga through a variety of sources including their LMC, social media, whānau and friends.

Each year 70 -80 hapū women and up to the same number of whānau attend the wānanga. 90% of those attending identify as Māori with the largest age group falling between 16 – 25 yrs.

Evaluation of the sessions shows "hands on" interactive activities are the most popular so we are constantly reviewing the wānanga to develop and include as many activities as possible.

All māmā who express an interest in attending are visited by a Māmā and Pēpi kaiāwhina, prior to the wānanga, to complete registration and an initial assessment. Māmā and pēpi service can be offered to the māmā at this time if she and /or the whānau would like more support with any concerns/needs they may have. For example a māmā may be referred to smoking cessation support, Healthy Homes kaiāwhina, Hapū māmā oranga niho programme and wahakura workshop. Whānau

can also learn about access to resources through E Tipu E Rea, the Child Restraint programme or from Little Sprouts.

The registration process also affords the opportunity to ensure all māmā are registered with an LMC, and a primary practice and that they have access to transport to appointments with their LMC or Obstetrician. If transport is a challenge the māmā may be able to access a pilot taxi programme. This programme is using E Tipu E Rea funds to provide a taxi from the māmā's home address to the LMC clinic. Work is currently being undertaken to expand this trial programme to include appointments with an Obstetrician at the hospital Antenatal clinic.

There is other mahi being offered that contributes to the Antenatal education and postnatal care space creating real time useful links and relationships between the primary and secondary space and processes that can have a positive effect. For example - we have a midwife from Hauora Tairāwhiti present at antenatal wānanga – she has current experience and the māmā/whānau may see her when they go to have baby. We have started offering Pregnancy Immunisation at Antenatal wānanga this year – to date 14 māmā have been immunised at Antenatal wānanga.

Janneen Kinney
Clinical Facilitator
Well Child/Tamariki Ora Nurse

Safe Sleep

The safe sleep champion in maternity and neonates provides education to staff, and women and their families, distributes pēpi-pods from within the unit, makes follow-up phone calls to the woman, liaises with the Director of Change for our Children, and enters data that links into the Midlands Safe Sleep Programme. To date, all midwives and nurses on maternity and neonates have been trained to distribute pēpi-pod. Training sessions have also been provided for all community midwives, Plunket and Tūranga Health who distribute Pēpi-pods in the community.

With each pēpi-pod issued, education on safe sleep, breastfeeding, shaken baby prevention, safe hands, general health and healthy eating is provided.

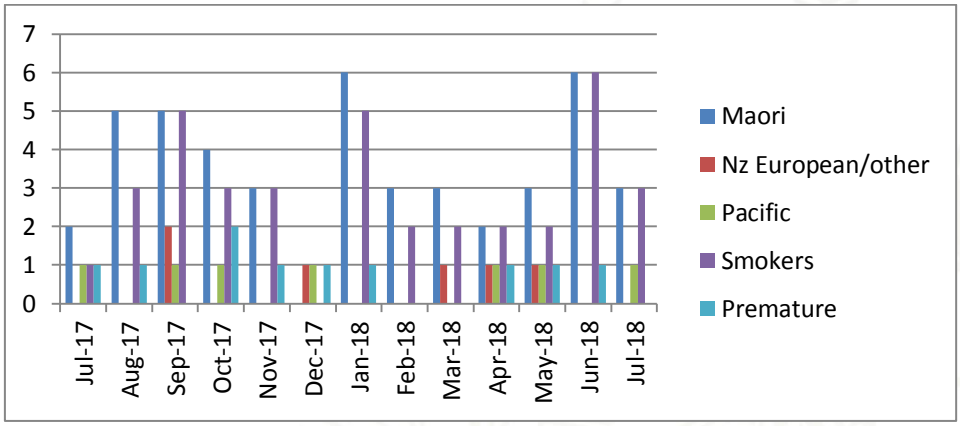
Puawai Aroha Maternity Unit Pēpi Pod Annual Report – July 2018

In the last 12 months we have issued 57 pods. These are given out by maternity staff and the māmā and whānau receive full education about how and why to use the pod. Other agencies such as Plunket and Turanga Health also provide Pēpi pods out in the community.

All maternity staff are trained in the education of whānau about the pēpi-pods and in the safe sleep/shaken baby information that we also discuss. We have folders with written information and videos that all women are offered to view.

Below is the report for all DHBs period July 2017-June 2018

Below is a table highlighting our pēpi-pod distribution and indicating the reason this was offered. As you can see from the graph below our pods go to a high percent of Māori and smokers.



All women are contacted when baby is a couple of months old and asked how they are finding the pēpi pod, whether baby is sleeping in it and if they want to keep it. This process can be time consuming as paperwork is not always completed well and women are often hard to contact but we know that getting feedback is an important part of the process and we try hard to contact everyone and feed the information into the national data base.

Education around Safe Sleep and gentle handling of babies (Shaken Baby Prevention) are priorities for us and we make sure all whānau have the information and support they need to raise a healthy and safe baby.

Sudden Death in Infancy (SUDI)

The first draft of the Tairāwhiti Mokopuna Ora Plan was written in 2016 following the Mokopuna Ora symposium. It marked the 10-year anniversary of the Wahakura Project led by Dr David Tipene-Leach and the Tairāwhiti Nukutere Weavers in 2006. One hundred Wahakura were woven as a Māori solution to Safe-sleeping Pēpi in response to the high rates of SUDI (Sudden Unexpected Deaths in Infancy) within Tairāwhiti at the time.

This updated version of the Mokopuna Ora Plan reflects the new discussions, information and introduction of the Ministry of Health (MOH) National SUDI Prevention Programme (NSPP 2017). The current SUDI rate in New Zealand is approximately 0.7 in every 1,000 babies born and 1.59 for every 1,000 Māori babies born. The NSPP aims to reduce the rate to 0.1 in every 1,000 births by 2025.

Refer to the appendix for the full Mokopuna Ora Plan 2017-2020.

Coping with a crying baby – shaken baby prevention

All babies cry and some babies cry a lot. We are committed to making sure that all mothers and whānau have the information they need to know what to do and how to get help when they feel they are not coping.

We support the Power to Protect: Never, ever shake a baby project by providing all women and whānau with the opportunity to watch the DVD and written information, while they are in Maternity.

We have worked hard over the last year to ensure that providing this information has become embedded in our daily routine within the maternity unit along with Safe Sleep advice. We audit this and now provide this information for 80% of women and whānau birthing in our unit. Some women go home straight after the birth and therefore their LMC midwife will provide this information to them and their whānau when at home.

Whānau with a baby in the neonatal unit also receive this information before they go home.

Some local well child providers have been trained in 'Shaken Baby Prevention Education' to ensure we work together as a community on prevention. This information is available to parents on line.

See link: https://www.kidshealth.org.nz/never-ever-shake-baby

Smokefree Pregnancy in Tairāwhiti

Smoking in pregnancy continues to be of great concern in our area with a prevalence rate for Māori hapū māmā of 41.5% for the year ending 31 July 2018. This is a slight reduction over the last two years but still an unacceptable inequity with the non-Māori rate at 6.7%. Support to quit begins early in pregnancy at first midwifery or GP appointment and now we have engaged support from the ultrasound services in the community and here in the hospital who refer women for ongoing support at the time of the first ultrasound. There is now an incentivised programme run by Pinnacle which gives women and whānau a financial incentive to quit.

Despite the improvement in prevalence and services, smoking in pregnancy continues to be one of our greatest challenges with only 37% taking up the offer of support and enrolling in the stop smoking

programme. We will continue to work on this challenge to improve the health of our hapū māmā, their babies and whānau.

Staying Well Programme Pinnacle Midlands Health Network

Report from Selena Batt, Staying Well Programme Lead for the Pinnacle Midlands Health Network.

Below is information relating to hāpu māmā referred to our stop smoking programme "Once and for all" in Tairāwhiti.

Tairāwhiti

QUARTER	REFERRED	ENROLLED	QUIT	QUIT RATE	# MĀORI	% MĀORI
Q1	16	11	7	63.60%	14	87.50%
Q2	31	9	5	55.60%	24	77.42%
Q3	15	3	0	0.00%	13	86.67%
Q4	14	5	2	33%	14	100.00%

Referral source

OTHER HEALTHCARE	**46**
Secondary	14
Self-referred	8
Primary	4
Referrals other	2
Other community services	1
LMC	2

We have a multitude of referral pathways and a break down is also provided of where all of those referrals have come from. "Other healthcare" refers to clients that are referred to the service by local quit coaches/providers, as you can see these make up around 59% of the referrals to the programme.

Our programme is a free incentive based programme which offers clients one to one, face to face behavioural support and free NRT over a period of 5-6 weeks. We use CO monitors to keep an eye on progress along the way and to validate at the end of the programme that our clients are smokefree.

Our non hāpu clients will receive a $50 voucher (Warehouse, Pak n save or BP) if they successfully quit. Our hapū māmā are offered an incentive of a $50 voucher when they sign up to the programme as we want to reward the behaviour and their positive decision for them and their baby. If they then go through the programme and are validated as having quit at the end, they will receive a further $250 in vouchers. Again this is to reward and recognise not only the accomplishment but the potential ongoing health benefits for mum and bub if she is able to stay smokefree.

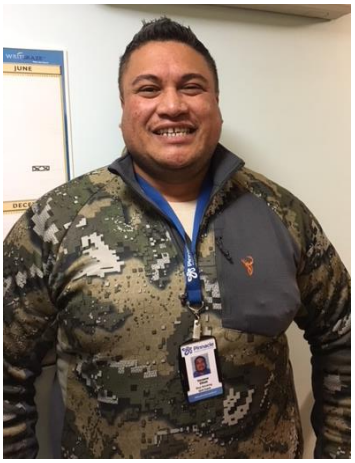
Our priority groups are Māori, Pacific and Hāpu so we are really pleased with the number of Māori Hāpu Māmā we are reaching, with around 85% of hāpu māmā referred in Tairāwhiti identified as being Māori. One of our quit coaches who worked primarily with Hāpu Māmā has unfortunately just moved out of the region. We are fortunate to have found an excellent replacement, Vereene Elliot who will continue to work closely with Hāpu Māmā and their Whānau.

We are very open to any ideas on how we might collaborate with any local services to increase awareness of the programme so if you know of any opportunities please let me know. It would be great to see more referrals coming in from Primary and LMC's. We are in the process of engaging 4 local LMC midwives as cessation providers along with some Ngāti Porou practices so we hope that we might see an improvement in these areas in the near future. We have also had an expression of interest from Hauora Tairāwhiti maternity consumers to become cessation providers too.

Mauri ora

Selena Batt | Staying Well Programme Lead

MoH: Smoking kills more people in NZ each year than road crashes, alcohol, other drugs, suicide, murder, drowning and earthquakes – all put together!



Pictured - Vereene Elliot
Stop Smoking Quit Coach

Lactation Consultant Service

The Hauora Tairāwhiti Community Lactation Consultant Service, Wai U Tairāwhiti, established in 2011, provides community-based Lactation Consultant support to women experiencing breastfeeding difficulty who require specialist care. Under the contract, referrals are capped at 240 per year, which currently meets demand and the availability of Lactation Consultants.

The previous report provided was for the year of 1st July 2016 to 31st July 2017. This report reflects data for a 6-month period of 1st July 2017 to 31st December 2017 but includes data from two previous years to show trends within our service. It was mutually agreed with Planning and Funding Hauora, Tairāwhiti that 6 monthly reports would be more efficient and provide more conclusive data for reporting.

The service is currently provided by two IBCLC's:

Janet McGuinness and Anne-Mieke Van der Zanden who are also both trained as midwives.

Our lactation service aims to meet the needs of Māori and Pacific Islanders as well as other New Zealanders. We always encourage referrals of Māori and Pacific Island mothers to our service and work with other services to improve access for these mothers as much as possible. Our intake of Māori mothers and babies to the service has increased over the last five years.

The average age of babies at referral is 4 weeks old with LMC's making up most of our referral base. Based on this we assume that breastfeeding issues are mostly being acted upon within the first 6 weeks of life. However, we do receive referrals for babies as old as 7 months. Most mothers and babies are under the care of our service for an average of 6 weeks or more.

Breastfeeding problems are most often complex and usually present with multiple connected symptoms which can eventuate in more than one diagnosis. Many problems are linked, with women often being referred for multiple reasons. Ankyloglossia (tongue tie) and lip tie, are the most common reason for referral and are the most commonly diagnosed cause of breastfeeding issues.

We meet women struggling to breastfeed due to several issues, sometimes late in the struggle and for some even after treatment and assistance it can be either physically impossible for them to exclusively breastfeed or the struggle is just too great. While we are not able to help all mothers to continue to breastfeed, we know from feedback received via our website that there are many mothers who have found the service to be extremely helpful in supporting their breastfeeding journey:

'It has enabled me to be able to now exclusively breastfeed my baby, wouldn't have been able to without this service'

'The consultant was awesome she gave me the best advice and my baby was better after one session. She also kept in touch to check up on how we were both doing, and I found that really helpful. I give 10/10 if it wasn't for the great support I would have stopped breast feeding'

Your advice and support is excellent. Gisborne is lucky to have such an amazing service providing our women and their families with up to date evidence-based research for them to make informed decisions about the care they receive.

Our website: "Wai U Tairāwhiti"
www.breastfeedingeastcoast.nz contains helpful breastfeeding information, informative videos, comprehensive breastfeeding care plans and tongue-tie treatment information.

All website content is IBCLC approved, adheres to relevant WHO codes and is freely available for health professionals and mothers to download, print or view online. It is also linked onto the 'BreastFedNZ' app. Business cards with the website address are provided to all WCTO providers, LMC's, and our IBCLC's to distribute to mothers in our area as required.

The 'Mother Friendly Tairāwhiti' Poster. To promote the 'norm' of breastfeeding in public, we developed the poster with over 30 businesses registered as being breastfeeding friendly with baby friendly facilities. The Poster is updated yearly, available on our website and circulated widely. All shops have an easily identifiable sticker on the front and the poster is being used frequently by mothers and even commented on via social media by visiting mothers from other cities.We greatly appreciate Hauora Tairāwhiti's commitment to the lactation service, and to supporting breastfeeding mothers in Tairāwhiti. We are delighted to have a further two-year contract which will enable us to continue to provide much-needed specialist care, support and advice for mothers struggling on their breastfeeding journey.

***Tamaiti kai wai u tenei ra, ka ora te tamaiti apopo*!**

Breastfeed children today so that they will survive tomorrow!

Link to website: www.breastfeedingeastcoast.nz

Link to BF friendly Tairāwhiti Poster: http://www.breastfeedingeastcoast.nz/breastfeeding-in-public/

A report written by one of the mothers who accessed our service in 2018:

Expecting my third child I had no prior concerns about my ability to breast feed. I had successfully breast fed my two older children and was proud of the awesome start I had given them.

But when my third child arrived, and I started to have breast feeding problems I realised then, even though breast feeding was a natural process, it could not be taken for granted.

Around the end of week 3, my settled new-born, had become the opposite: unsettled, crying inconsolably, unable to sleep for periods longer than 20 mins during the day. I couldn't understand what was going on, and queried colic and allergies. When she next got weighed there was a noticeable loss of momentum in her weight gain. That is when we realised it was a feeding issue. Plunket was able to refer us straight away to our local lactation consultant (LC). The LC responded quickly, and gave us access to equipment, information, and aids which allowed us to act immediately. After a full assessment the LC was able to identify the problem. A medication I had been put on during pregnancy was detrimentally affecting my milk supply. By this point, my milk supply had dropped off so much. I began thinking I had lost the ability to breast feed. But the next four weeks were vital. With persistence and support, slowly but surely my milk supply improved. During this time, I had frequent contact, feedback and advice from my LC to keep me on track.

Now I am glad to say that I am back to fully breastfeeding my baby, and she is gaining weight as she should be. I truly believe without this support and service I would not have been able to achieve this. I am truly grateful to the LC for making this a reality. As it is so important to me and my family that I am able to give her that awesome start, and I can have that special bond I have experienced with my older children.

Immunisation

Tairāwhiti Immunisation at 8 months

Indictor: Increased Immunisation 8 Months

DHB: Tairāwhiti

Reporting period: 01/04/2018 – 30/06/2018

Contact (role and name): Janine Brown – Immunisation Coordinator

Target Definition

Percentage of eligible children fully immunised at eight months of age for total DHB population, Māori and Pacific; achievement requires that the target is met for the total population and significant progress for the Māori population group (and where Relevant) Pacific population group has been achieved.

Summary of results: coverage at age 8 months

Target: 95%	Total	Māori	Pacific	Dep 9-10	Decline	Change: total	Change: Māori
Q1 2017/18	84%↑1%	85%↑2%	100%	83%↑2%	7.8% ↓2.1%	↑1%	↑2%
Q2 2017/18	86%↑2%	87%↑2%	88%↓12% (1 Child)	84%↑1%	4.1%↓3.7%	↑2%	↑2%
Q3 2017/18	84%↓2%	81%↓6%	50% (2) (1 Child)	82%↓2%	8%↑3.9 %	↓2%	↓6%
Q4 2017/18	87%↑3%	83%↑2%	80%↑30% (1 child)	82%≈	6% ↓2%	↑3%	↑2%

Progress Report:

- This quarter has been extremely frustrating. Our decline rate continues to fluctuate
- We have a lot of sick children in the community due to winter illnesses where families are delaying immunisation until they are well
- Small numbers continue to negatively impact on our percentages (see Pacific Island results above)
- Increase in the Outreach Immunisation Service (OIS) resourcing (short term project) has been relatively successful in clearing some of the back log of referrals and speeding up the OIS response to referrals. Project evaluation will take place when the project closes at the end of August.
- Referrals from practices are coming in a timelier manner.
- NIR administrator is doing NIR referrals to OIS on Overdue Reports that are not referred.
- Immunisation Coordinator and NIR administrator are providing intensive support to practices that need extra help advice with their pre-calls/re-calls, overdue reports and timely referrals to OIS.
- We have noted an increase in "GP unknown "at 6 weeks of age. These whānau are directly referred from NIR to OIS.
- Some whānau are declining OIS and electing to attend primary care in their own time (delaying). Education is given to whānau around timely immunisation however care is taken not to put them under pressure as we have had whānau who have elected not to immunise at all when not allowed to manage the timing.
- We have observed in some whānau that whānau members who have strong opinions around immunisations are influencing parents about their immunisation choices. This can be good but sometimes not.

MOH response:
The total infant immunisation coverage for Tairāwhiti DHB is 87% for this quarter which is a 7% increase compared to this time last year. For Māori tamariki immunisation coverage it is 83% similar to this time last year. While there is still a long way to go to the target, it is good to see progress being made and we hope that Tairāwhiti can build on this.
We note that the 2017/18 yearly immunisation rate average for Tairāwhiti DHB has decreased by 2% overall, with about a 1% decrease for Māori compared to Tairāwhiti 2016/17 average yearly rates.
In your DHB, the Midlands Health Network Primary Health Organisation (PHO) achieved 93% (9 babies not fully immunised) and Ngāti Porou Hauora Charitable Trust PHO achieved 82% (7 babies not fully immunised). Total PHO coverage is 3% more than the total DHB coverage. This may be due to the increased number of sick children Tairāwhiti have had over this quarter however we are confident that your follow-up of these missed children will result in them becoming fully immunised for their age.
We note that the number of missed children has decreased from last quarter and the number of opt/off decline has also decreased over this year and we hope that you are able to keep up the good work you are doing in this area.
You have outlined that the key barriers to achieving increased infant immunisation rate include service delivery constraints however it is good to see that you increased resourcing to OIS for a short period to clear up the back log.
We are interested in the initiatives that are working on for Tairāwhiti that meet the needs of the whānau and pepe of Tairāwhiti. We would like to have a conversation over the coming quarter to discuss the ways in which Tairāwhiti can be supported.

12.0 Maternity Technology Systems

Improving technology in maternity services

BadgerNet

After almost 4 years using a fully electronic record we are still on a journey of constant improvement and update. The use of the Maternity Clinical Information System (MCIS) is fully embedded in our daily routines but we are always looking for ways to improve the ease of input and quality of output. We remain one of only 3 DHBs using this system and are frequently called upon to provide feedback and advice on changes and improvements.

In the last 12 months we have seen many small changes and improvements. The two biggest items have been the inclusion of a Fluid Balance Chart (still in first draft form and being reviewed) and progress towards an interface with our CTG monitoring machines.

The CTG is the machine which records the baby's heartbeat and the mother's contractions to assess the wellbeing of the baby. This new interface will enable storage of this data in the MCIS where it can be viewed by clinicians who are not at the bedside. The data is currently stored on paper and filed in the hospital notes. We anticipate this will be fully functioning by the end of this year.

The Newborn Hearing Information Management System (NHIMS) is working well although we are still the only DHB currently using this. There is a lot of interest nationally now and others will be coming on board in the near future.

Also underway nationally is the link with systems used by the LMC midwives. Some of our LMCs use the Midwifery Maternity Provider Organisation (MMPO) electronic system which is a different view of the same MCIS record but many others are using other platforms which have no link to MCIS. These links will soon be made and we will be able to access booking data for women intending to birth in our unit.

We continue to have a voice nationally and contribute regularly to all forums relating to MCIS and its improvement and development. This development will be an ongoing process for some time to come.

Compiled by Judi Murphy (Project Coordinator/WCY)

The Growth Assessment Protocol (GAP)

GAP team at Hauora Tairāwhiti - Bridget Sparks (sonographer) Sean Pocock (obstetrician), Liz Lee Taylor (Director of Midwifery), Judi Murphy (Project Coordinator)

The Growth Assessment Protocol (GAP) is a comprehensive programme for the detection and management of fetal growth restriction in pregnancy. GAP was developed by the Perinatal Institute in the United Kingdom (www.perinatal.org.uk) where the programme has been associated with a significant increase in detection of fetal growth restriction and reduction in stillbirth (Gardosi, Francis, Turner, & Williams, 2018). It has been implemented by several New Zealand DHBs to date and a national programme is currently being planned as part of the ACC neonatal encephalopathy (NE) reduction strategy. GAP was introduced at Hauora Tairāwhiti in 2016 and interfaces with MCIS, which is our electronic records for all women and babies in maternity.

GAP is based on these key elements:

- Implementation of evidence based protocols and guidelines
- Training and accreditation of all staff involved in clinical care
- Rolling audit and benchmarking of performance
- Integration with MCIS and helpdesk support

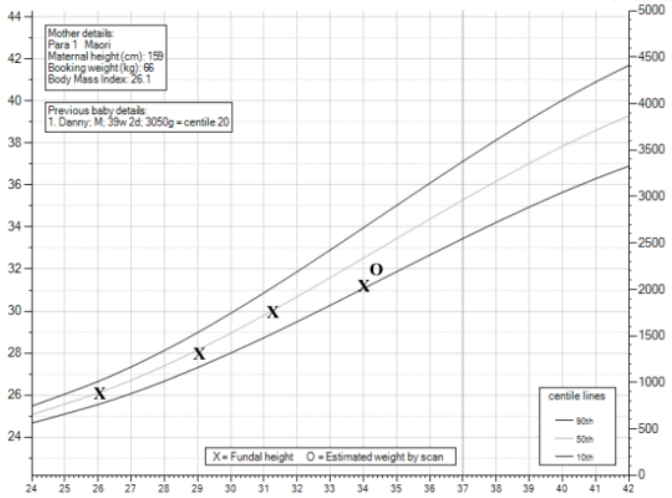


Fig. 1 GROW chart showing estimated fetal weight plotted as 2200gm after scan referral for slowing uterine growth indicated by reducing fundal height

Training and accreditation of all staff

Initial workshops for midwives and doctors were held by a GAP educator. Topics included risk factors and effects of fetal growth restriction, use of customised antenatal growth charts (GROW), follow up once growth restriction is suspected in pregnancy, and generation of a birth weight centile, with appropriate monitoring of growth restricted babies. At the completion of the workshops attendees demonstrated correct fundal height measurement and completed a written test.

A log is kept by the Tairāwhiti midwife educator recording which staff have completed the training and cascade training is available through the GAP team.

Following initial training there was a steady increase in referrals for suspected SGA as well as improved detection of SGA following ultrasound growth scan. It is pleasing to note that all women giving birth at Tairāwhiti have GROW charts, and midwives are consistently generating customised birth weight centiles following birth. This enables reporting of suspected and detected SGA babies with an appropriate referral and individual management plans agreed and implemented.

Integration with MCIS

GROW charts are embedded in the maternity clinical information system (MCIS) therefore fundal height measurements and estimated fetal weight from growth scans can be electronically plotted. Birth weight centiles are calculated through the MCIS and reports of SGA detection rates are generated quarterly for the GAP team to monitor progress.

Rolling reports and audits

Fig. 2 The following graph shows the sharp increase in detection of SGA over a 9-month period in 2017. The green line shows detection of SGA at Tairāwhiti, the blue line represents GAP user average

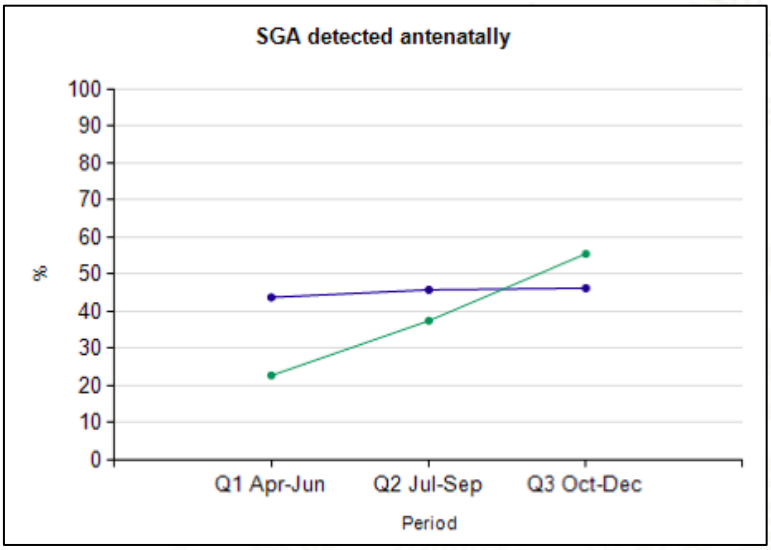


Fig. 3 The report below (for the same period) shows the numbers of babies detected as SGA.

Q1 Apr-Jun 2017/18						Q2 Jul-Sep 2017/18						Q3 Oct-Dec 2017/18					
SGA at birth[3]		Antenatal referral for suspected SGA/FGR[4]		SGA detected antenatally[5]		SGA at birth[3]		Antenatal referral for suspected SGA/FGR[4]		SGA detected antenatally[5]		SGA at birth[3]		Antenatal referral for suspected SGA/FGR[4]		SGA detected antenatally[5]	
n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%
22	14.4	9	40.9	5	22.7	24	17.1	10	41.7	9	37.5	18	11.8	10	55.6	10	55.6

To maintain this improvement in detection it is important that all staff providing maternity care continue to actively engage with the GAP program. For all GAP accredited staff, annual completion of e-learning is advised, to update with recent research and maintain skill with interpretation of GROW charts, referral protocol and management pathways.

Analysis of missed cases

While the improvement in detection of SGA is very positive, it would be good to further increase the detection rate, to consistently identify and provide optimal ongoing management in pregnancies where babies are not reaching their growth potential. An electronic tool is available to identify factors involved with missed SGA cases. Findings may be used for learning and development of action plans for quality improvement.

Guidelines

The New Zealand Maternal Fetal Medicine Network (NZMFMN) small for gestational age (SGA) guideline which is integral to the program, includes information about risk factors at booking, prophylaxis with low dose aspirin for those women at high risk of having a growth restricted baby,

and algorithms for follow up once SGA is detected on ultrasound scan. The guideline is used at Tairāwhiti and can be downloaded from: -

https://www.healthpoint.co.nz/public/new-zealand-maternal-fetal-medicine-network

Definitions

While SGA and fetal growth restriction are often used synonymously there is a distinction.

SGA refers to a fetus with an estimated weight (from ultrasound) below the 10th customised centile for gestation or a neonate with a birth weight below the 10th customised centile. Fetal growth restriction (FGR or IUGR) refers to a fetus or neonate who has not reached his/her growth potential (NZMFMN, 2014).

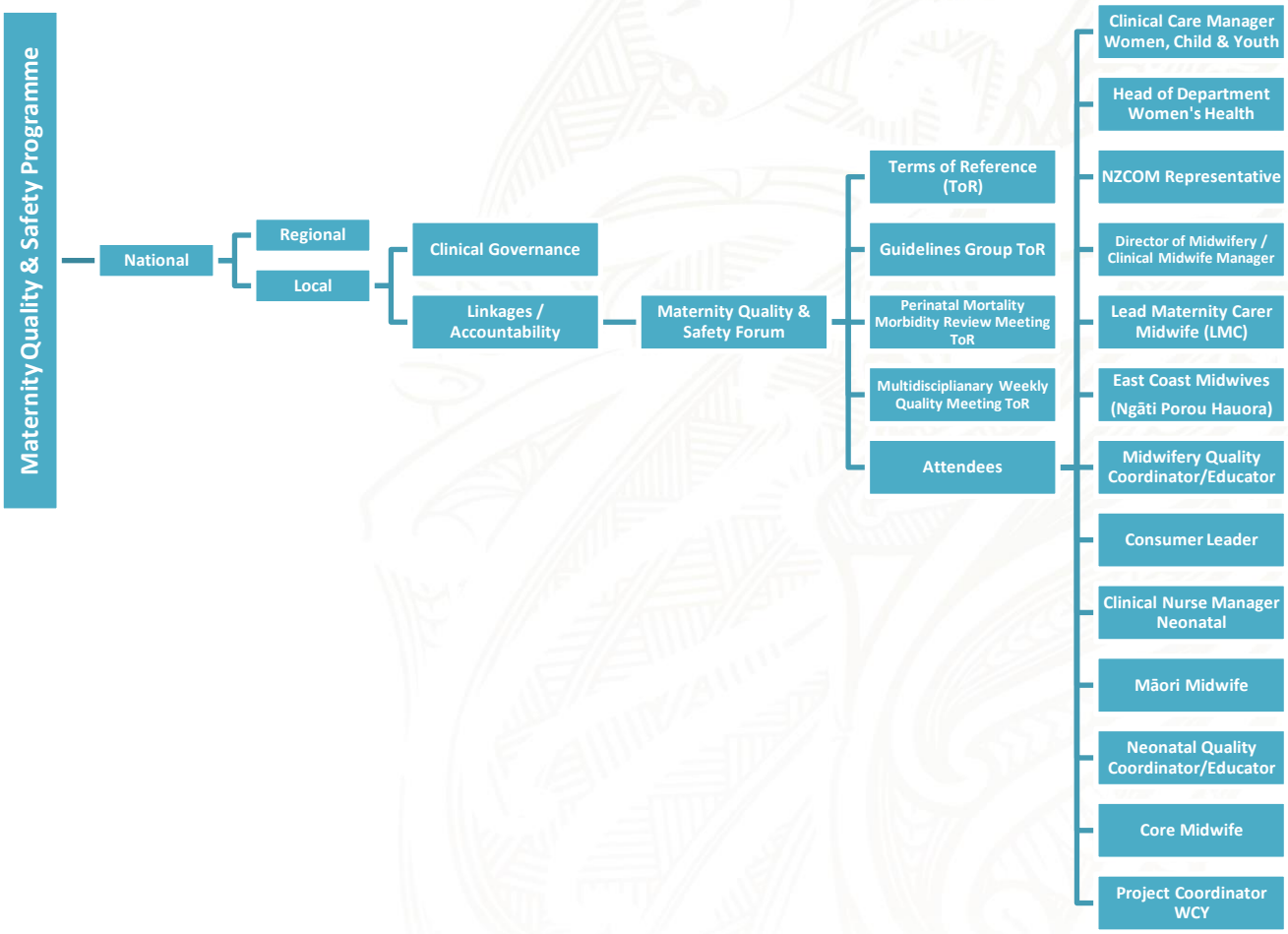
References

Gardosi, J., Francis, A., Turner, S., & Williams, M. (2018). Customized growth charts: rationale, validation and clinical benefits [Expert review]. *American Journal of Obstetrics and Gynecology, 218*(2), S609-S618. doi:10.1016/j.ajog.2017.12.011

NZMFMN. (2014). Guideline for the management of suspected small for gestational age pregnancies and infants after 34 weeks' getstaion [Guideline].

13.0 Quality

Governance Structure



Responsibility for Maternity Quality and Safety

Maternity Quality Safety Programme Committee

The Maternity Quality and Safety Programme (MQSP) Committee meets monthly.
The aim is to maintain and improve the quality and safety of the care we provide to all women, babies and their whānau. We will achieve this through our commitment to continuously drive forward by reviewing what we do.

The MQSP broadens our vision on what we can do as a community 'together', when we can do it, and what we can achieve now and in the future. Our main focus is on ensuring that our services are women and baby focused, equitable, accessible and engaging, starting from increasing the number of pregnant women who engage early with their Lead Maternity Carer (LMC) Midwives through to the discharge of a happy and healthy mother and baby.

The maternity quality and safety programme work is shared amongst managers, clinicians, consumers, community midwives and community agencies.

Members of the committee are:

- Women, Child & Youth Services Clinical Care Manager
- Women, Child & Youth Clinical Director
- Director of Midwifery & Clinical Midwife Manager (Group Coordinator)
- Midwifery Educator & Quality Coordinator
- Obstetrics Team
- Project Coordinator
- Maternity Consumer Leader
- Lead Maternity Carer (LMC) Midwives from Hapū Ora, Gisborne Midwifery and Ngāti Porou Hauora.

Hauora Tairāwhiti Quality & Safety Initiatives 2017-18

Throughout the year we collect information on what we have done well, what we have done not so well and how we can implement improvements. This information is gathered in many ways.

Multidisciplinary (MDT) Meetings

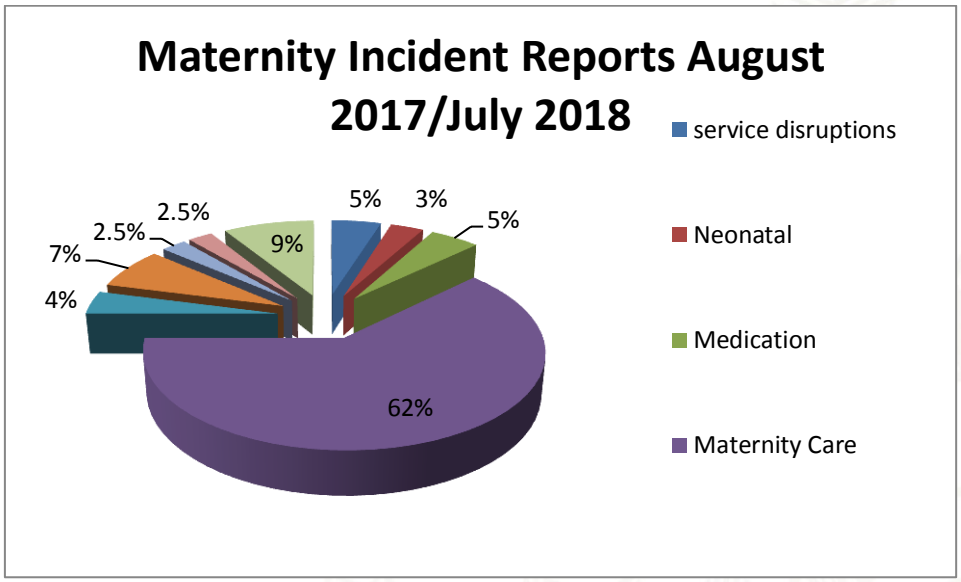
Multidisciplinary Meetings are held every Wednesday morning and include Obstetricians, the Director of Midwifery/Clinical Midwifery Manager, Midwifery Educator and Quality Coordinator, Core Midwives, Community Midwives, nursing and midwifery students, and sometimes guest speakers. At these meetings we discuss statistics for the previous week, significant incidents, the number of women offered support to quit smoking, share research articles and present any events which provide useful learning, such as cases which were well-managed and cases in which we could have done better. We also discuss any feedback from consumers. We make changes in our practice and amend our policies to reflect what we learn from these weekly meetings.

Case Reviews

In addition to the weekly meetings, significant cases are also reviewed by the interdisciplinary team and include the woman/whānau/family affected. We act on the learnings from these case reviews and report them back to the woman involved and also report significant findings to the Hauora Tairāwhiti Clinical Governance and Maternity, Quality and Safety committees and present learning outcomes at the Perinatal meeting.

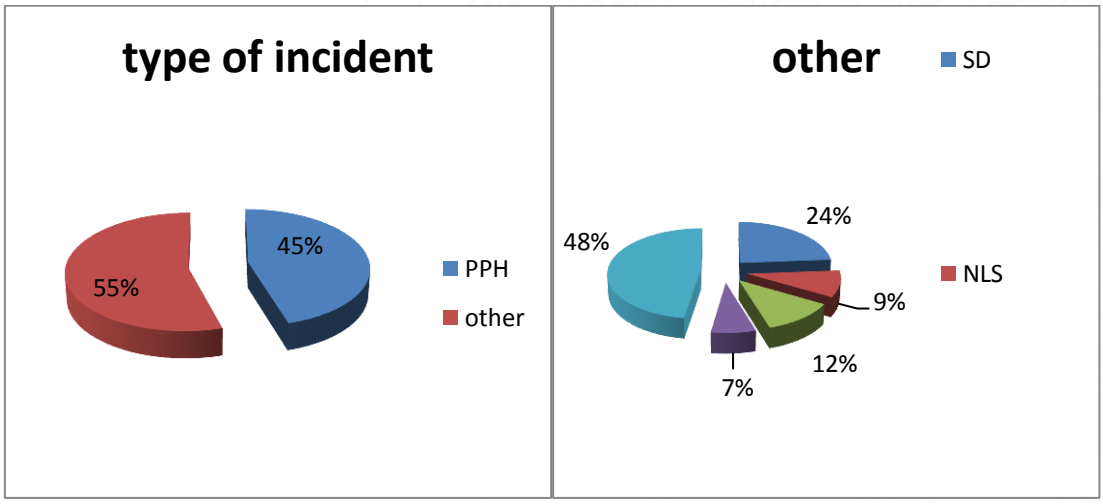
Clinical Incident Reports

Staff are encouraged to report all incidents which we could share and learn from. Last year there were 124 incidents reported for maternity. Anonymised details of incident reports and outcomes are shared during MDT meetings so that the learning points can be of use to the whole team.



These reports are also used to identify trends or issues which may require particular attention or quality improvement projects: one such example has been the post-partum haemorrhage (PPH) rates which prompted detailed review of PPHs and improvement initiatives like the PPH risk assessment tool, post-natal observations guidance and third stage management workshops which all core staff have attended.

Within the Maternity Care incident reports (which account for 62% of all maternity incident reports for the 12 months 1.8.17 to 31.7.18), the largest single issue identified was PPH.



Maternity Clinical Information System

Hauora Tairāwhiti was one of the first in New Zealand to adopt the new Maternity Clinical Information System (MCIS) which will eventually be used nationally. Instead of entering information about a woman's pregnancy on paper notes, this is a computer data collection system. Laboratory reports, ultrasounds results and notes about the woman's antenatal care, labour and birth are all recorded in her computerized record. The aim is to provide a centralized record of care across the entire pregnancy, which should improve outcomes. Records in MCIS can also be accessed for audit

purposes and quality control. The woman records can also be accessed at other DHBs who have also implemented MCIS should the woman attend there for care at any point in her pregnancy. We have already seen the benefit of this on many occasions.

Guideline Group

A group of Obstetricians, the Midwifery Educator and Quality Coordinator, a Core Midwife, a Neonatal Unit Nurse, Neonatal Unit Clinical Nurse Manager and a Community Midwife (LMC) meet monthly along with a consumer representative to update the evidence based guidelines which all of those using our Maternity Unit can follow. The group has worked hard with continued commitment to providing up to date evidence based guidelines and implementing national guidelines.

Neonatal Encephalopathy (NE) Taskforce

DOM and Project Leader were invited to join the NE taskforce working groups for Fetal Monitoring and Growth Assessment Protocol and are now active members of these groups working nationally.

Compliments and Complaints

We encourage consumers to feedback any comments they may have about their experience in our Maternity Unit. All these remarks, whether they are compliments or complaints, are fed back to the team during our Multidisciplinary weekly meetings and any issues identified are addressed straight away. By reviewing these and identifying themes we are able to inform decision making to improve our consumers' experience in maternity, such as changes we made this year – in discussion with kitchen and dietetic services – to the available menu choices for our inpatients: this quickly resulted in positive comments left by women in regards to the meals provided, which has not happened in the past.

The following are some of the comments shared by consumers over the year:

"I had a very positive experience thanks to all of you!"

"everyone was absolutely amazing and exceeded expectations"

"had a great stay, did not feel rushed to leave and everyone was amazing"

"felt well looked after and all staff were friendly, kind and helpful"

"Such a great team of unselfish people working together to give babies the best start in life and care for their mums. Each staff person had a special gift and as they rotated shifts we got to benefit from their individual skills and passion. They were very tolerant and supportive of mum's main support person eg. Husband (all hours 24/7) God bless you all! What could be done better: "Not having shared bathrooms in birthing suite or maternity suite would be much better!"

"family friendly, most nurses and staff are polite and kind, very patient and understanding. I like that everyone does their best to help the new mums who aren't so confident"

"Everyone is like an angel. Very caring and helpful. Happy atmosphere. This is my 4th stay here with my 4th baby. Thank you so much everyone for everything you've done for us! What could be done better: getting direct support (come and see in maternity) from the breastfeeding consultant (if) when we are having trouble."

"Everything made easing into motherhood such a pleasant and great experience, also incorporating family into the process, being able to have family stay and be involved to help also. Staff and nurses were absolutely fabulous, pleasant, helpful in assisting with mine and baby's and family's needs. It felt like home away from home. I didn't feel rushed to go home so was able to feel rested, until well both baby and myself till confident enough and healthy to leave. Follow up on health check-ups excellent.

What could be done better: Maybe just after hours meals once finished birthing baby, offered a snack (toast, milo) etc… as I was hungry but dinner had been served. But otherwise the nurse was very accommodating to get me something to eat"

"I came into maternity by myself and they made me feel like a family. Great support at my delivery from midwife [name] and nurse [name]. I like to thank all the ladies that helped and supported me through the morning and night with me and baby. Now I am off home to start my new motherhood." What could be done better: "Nothing! You rock and do a great job. Thank you to the maternity ward!! 100/100"

"the midwives, reception, cleaning and all other staff are amazing to deal with and there are no complaints. Fabulous service, thanks a lot".

"thanks to all staff that made our stay comfortable, thanks for helping my baby and I".
"You're all awesome, thank you so much".

"Everyone in maternity is awesome. Friendly service. Yummy kai, good to have a break from home. Larger portions would be awesome with kai […]"

"All staff are very helpful and lovely people really helped our time here a whole lot easier. I would just like to say thank you to all the staff at maternity for everything they done for me while I was pregnant to when baby arrived. Thank you very much. ☺"

"I felt so well cared for during all my monitoring visits and stays during my pregnancy, labour and post-natal care. All the midwives were fantastic and so helpful and supportive. The food was a bit hit and miss. More rooms for pre term mums to stay with babies in neonatal unit [would be better]. Thank you to everyone, for all the help, support and care. We felt we were in great hands."

Education Report

August 2017 to July 2018

Yet another busy year in Tairāwhiti with numerous education opportunities.

Hauora Tairāwhiti accreditation as an Education Provider for midwifery education was re-assessed this year and the Midwifery Council was overwhelmed with the quality and diversity of the education provided and the number of midwives engaging in this education, which is well over and above the minimum required. The usual yearly re-accreditation cycle was extended to three years in view of the calibre of education provided.

Over 25 education sessions were provided during this period including; Midwifery Emergency Refresher workshops, Epidural workshops, Infant Mental Health Seminar, Communication & Documentation workshops, a face to face RANZCOG FSEP workshop, as well as access to the online module, GROW protocol training, Datix Incident Reporting System training, Perineal Repair workshop. Breastfeeding (BFHI) workshops were provided by the Lactation Consultants, one full day live-streaming tongue tie symposium from Waitemata DHB and one two day live-streaming tongue tie symposium from Australia run by the Australasian Society for Tongue and Lip Ties (ASTLiT).

Education has also been provided at the weekly Multidisciplinary Quality Practice Improvement meetings, ward meetings, the PMMRC monthly meetings and via revised and new guidelines which have been introduced as well as at monthly short midwifery skills sessions provided to any interested midwives by the midwife educator.

Two core midwives were supported to attend the Biennial Joan Donley Midwifery Research Forum in Christchurch. One core midwife was supported to study and then register as an IBCLC (International Board Certified Lactation Consultant). The Midwife Educator successfully completed The Complex Midwifery Care PGCert and another core midwife has been supported to enrol in this course. Four staff between midwives and an obstetrician attended the Annual PMMRC conference in Wellington.

Iidil Merlini

Midwife Educator

Newborn Metabolic Screening in Tairāwhiti Continues to Improve

Each year the National Screening Unit reports on the performance of the Newborn Metabolic Screening Programme (NMSP) against the agreed set of national indicators. Regular analysis and reporting of NMSP data is a key tool in enabling continuous quality improvement of the programme. The aim of the NMSP is to reduce morbidity and mortality associated with specific congenital metabolic disorders by screening newborns to detect the conditions before life-threatening illness or developmental delays occur. Since 1969 almost all newborns in New Zealand have been screened by the programme. Currently the NMSP identifies about 50 newborns a year with a metabolic disorder and treatment is commenced. Over the past year Tairāwhiti has c achieved the following:-

- 99.2% of metabolic screening samples are of a satisfactory quality, this is the highest rate in New Zealand
- 83% of second metabolic screening samples are received by the National Screening Unit (or other appropriate follow-up occurred) within 10 days, this is the highest rate in New Zealand

The second half of 2017 has shown an improving track in performance reflected in an impressive 17% increase in quarter 3 (Jul-Sept) compared to the same period in 2016, and an outstanding 22.5% increase in quarter 4 (Oct-Dec). Simultaneously, there was a significant drop in the number of cards taking more than seven days to reach the lab. This is due to using the courier to now transport all samples to the National Screening Unit lab and means any of our pepi that may be affected by one of the conditions will now be able to access the treatment or care required.

The NSU emailed Tairāwhiti to say ‘Thanks to everyone at Tairāwhiti for your best two quarterly yet”.

Audit Outcomes

Evaluation of the screening pathway used for gestational diabetes mellitus at Gisborne Hospital in women currently pregnant or recently delivered

This audit was carried out to assess if the GDM screening pathway is being used efficiently in practice at Gisborne Hospital. The aim was to evaluate if women are seen in clinic within an appropriate time frame and to ascertain whether high risk women are referred directly for GTT (glucose tolerance test), or if unnecessary polycose tests are being carried out. Unnecessary testing may miss or delay diagnosis of GDM, subsequent follow up in antenatal clinic and therefore timely management of this high risk condition in pregnancy.

The Gisborne Hospital GDM screening pathway was evaluated in this audit. Two patient groups were analysed separately. Firstly, women with known GDM either recently delivered or currently pregnant were assessed for time to follow up in antenatal clinic and unnecessary polycose testing. Secondly, recently delivered women without GDM were assessed to see if women with risk factors received a GTT as per the screening pathway.

Overall, women who had abnormal GTTs were seen promptly in clinic. There were three women with follow up times of 91, 131 and 146 days. Poor patient engagement with antenatal services and demographic specific factors such as access to transport, isolation/living in rural areas, limited access to childcare and transient lifestyles affect many women in this community and may have contributed to the suboptimal follow up for these three women. 50% of women who had a polycose test should have been referred directly for a GTT as they had risk factors for GDM. Overall there was poor use of the screening pathway in recently delivered women. 35% of recently delivered women without GDM had risk factors. None were screened appropriately as they did not proceed directly to clinic or a GTT as per the screening pathway.

Recommendations

- Risk assessment at booking should include asking about family history of diabetes. It should be recorded in the risk assessment if the woman has two first degree relatives with diabetes.
- Polycose tests should be avoided in women who meet criteria for GTT (i.e. have risk factors for GDM).
- Both polycose tests and GTT should be avoided in women who meet criteria for direct referral to antenatal clinic based on risk factors (previous GDM or HbA1c $\geq$41).
- Improved screening would lead to an increased detection rate and would allow for better antenatal care. Consideration should be given to the likely number of diagnoses if the pathway is reliably followed and the impact this would have on antenatal services both in the community and in secondary care services.
- The use of the GDM screening pathway should be re-audited in the future to monitor potential changes in clinical practice arising from recommendations made in this audit.

Internal audit of Post-Partum Haemorrhage

The purpose of the review was to investigate the underlying characteristics of the women who had haemorrhaged at the time of birth, and the planned and actual management of the third stage of labour in these women. The aim of this was to identify any predictive factors which could be used to target at risk women for additional preventative treatment.

This review was carried out because the incidence of postpartum haemorrhage (PPH) was felt to be higher than anticipated towards the end of 2017. It was also felt that the severity of PPH was increasing. The PPH rate over the 6 months which were audited was 16.3% which was higher than the year as a whole. National statistics for PPH are not published and varying definitions have been used to audit in the past. This makes it difficult to benchmark but the local incidence of PPH of 500mls and above has increased from 12.6% in 2012 to 16.3% in 2017. According to the Australian Council on Healthcare Standards (2008), "postpartum haemorrhage (PPH) is a potentially life-threatening complication of birth that occurs in about 3–5% of vaginal births."

Recommendations

- Early recognition and recording of risk factors
- Advanced plan for management of the 3rd stage plan recorded.
- Contemporaneous risk assessment on admission in labour and again following the birth using the new PPH risk assessment tool
- Physiological management of the third stage should not be planned unless the woman has had a low risk pregnancy and labour and birth remains normal.
- When active management of 3rd stage is performed syntocinon should be administered as soon as practicable after clamping of the cord. An IV bolus is recommended in women with risk factors.
- Women should be examined soon after delivery to identify vaginal trauma and this should be repaired as soon as possible.
- Women who require suturing in theatre or removal of placental tissue are at high risk of major blood loss and actions to prevent blood loss and continued vigilance are essential.
- Women who refuse blood products should have careful counselling about their options and the risks involved should excessive bleeding occur. The prevention of anaemia, discussion about management of the third stage and documented confirmation of their wishes is essential.

Refer to appendix for full audit report.

External review of Post-Partum Haemorrhage at Hauora Tairāwhiti

The aim of this external review was to consider the increase in severe post-partum haemorrhages (PPHs) at Gisborne Hospital, by a process of meeting staff, looking at the operational workings of the clinical area and reviewing the records of recent PPHs. The reviewers tried to ascertain the reason(s) for the elevation in the rate of significant PPH and determine any initiatives to implement to reduce their frequency.

Summary of findings

The data showed that the women at the greatest risk of major and severe PPH were those women whose labour was induced, whose labour was augmented with oxytocin, who had chorioamnionitis, who had had a previous PPH and those women whose BMI was less than 18 or more than 35. It appears from the case notes that, in general, early identification of the PPH, good team work and adherence to the protocols for its management are normal practice. There was room for improvement in care planning, postnatal and post-event care with regard to observations and documentation.

See below for the new 'Traffic light PPH risk assessment tool', the 'PPH Review Findings' PowerPoint presented at two PMMRC meetings and the new recommended 'Postnatal Observation Reference Chart'.

Refer to appendix for full audit report.

DAA audit

DAA group surveillance audit completed with no actions required for maternity and services commended.

Breastfeeding

NZBA is contracted to provide the Ministry of Health yearly information on infant feeding at discharge from maternity facilities. For this, NZBA uses the Ministry of Health breastfeeding definitions: exclusive, fully, partial breastfeeding and artificial feeding. NZBA also provides data by facility type (tertiary, secondary and primary) and ethnicity.

Refer to the appendix for the 2017 Report for BFHI Annual Survey on Breastfeeding at Discharge.

Teenage pregnancies in Tairāwhiti are on the decline

We performed a random audit to assess the number of teenage pregnancies, we were pleasantly surprised to find that in 2016 there were 62 pregnancies in young girls under 20 year of old and in 2017 this has dropped significantly to just 40. The 16 and under has also fallen from 13 to 5 and the 17-19 has fallen from 49 to 35. This may be indicative of the excellent services we have in the local community clinic and the use of LARC. We are to implement a postpartum LARC program in Puawai Aroha Maternity unit in the next few months to help to reduce the number of repeat unplanned pregnancies for all women who birth in Tairāwhiti.

14.0 Tairāwhiti Maternity Quality & Safety Improvement Programmes 2018-2020

PROJECT ONE – SUSTAINABLE WORKFORCE

- NMMG recommendation – Staffing is an important issue that significantly impacts on quality and safety. A review of the midwifery and obstetric workforce is recommended to ensure that a safe and high quality service is supported
- PMMRC recommendation – Midwifery staffing ratios and staffing acuity tools enable active observation of mothers and babies who are undertaking skin to skin contact in the postnatal in-patient period and allow for identification of, mothers who have increased risk factors for SUDI
- NZ Workforce Strategy Group /MOH project

RATIONALE

- There has been a large increase in acuity in the services over the past 12months. Ensuring capacity meets the demand is an ongoing and serious issue with the current FTE workforce. This has huge implications for sustainability of the current workforce. Therefore this is a project that is of extreme high priority for Puawai Aroha Maternity unit. We plan to address this by undertaking the following:
- Undertake a review of the midwifery and obstetric workforce
- Review MERAS Safe Staffing – this provides evidence of midwifery staffing levels required (within next month)
- Review recommendations from the DHB Midwifery Workforce Information Report 2018 (to be published in September therefore reviewed by end of October)
- Trendcare to go live (October/November 2018) as all inter-rater reliability testing will be complete
- Obtain acuity reports from Trendcare quarterly
- Audit ward attenders weekly with monthly reports to commence October 2018
- Business case for increase in midwifery FTE to be completed by end of November 2018
- Review role of shift coordinator – review MERAS MECA by end of October
- Business case for shift coordinators financial recognition to be completed by end of November 2018
- Review recruitment and what we offer, to be completed by end of November 2018
- Liaise with WINTEC re: number of student midwives in Tairāwhiti and what support is required to improve retention during training and to match training with local requirements – to be completed by Feb 2019
- Review new graduate midwife recruitment, to be completed by Feb 2019
- Review obstetrician capacity and demand, to be completed Feb 2019
- Review changed workforce against capacity and demand by September 2019

PROJECT TWO – CHOICE, EQUITY AND ACCESS

Although we are tracking in the right direction if not leading in many of the NMMG Clinical Indicators there are areas in which we need to focus and work on to improve.

CLINICAL INDICATOR NO. 1

Registration with an LMC in the first trimester of pregnancy.

In 2016 it was reported that only 62.8% of women registered with an LMC in the first trimester. We understand this is possibly now higher following a recent consumer survey, which reported the number to be 66%. However, we remain under the national average of 71.9%. We continue to work on this with LMCs.

RATIONALE

To improve the number of women engaging with an LMC in the first trimester we will complete the following tasks:-

- Renew the 'Book with a Midwife before you are 10 weeks' leaflet so that it reflects the current LMC workforce and review the distribution list for wider circulation and accessibility for women. Include which LMCs offer free pregnancy tests. To be completed by November 2018 and reviewed annually.
- Revise our website so women can access a contact list for all local LMCs and provide basic information on recommendations for early pregnancy. To be completed by November 2018.
- Any new LMC to be encouraged to join the 'Find Your Midwife' website

https://www.findyourmidwife.co.nz/midwives/Tairāwhiti

- Organise an evening to update local GPs on care of women in early pregnancy and the importance of early registration with an LMC. To be arranged in 2019.

CLINICAL INDICATOR NO.2

Maternal tobacco use during the postnatal period.

RATIONALE

We continue to have the highest rate of women smoking in the postnatal period but also in pregnancy too. We also have the 3rd highest rate of pre-term birth which can be related to tobacco use in pregnancy. This is a huge concern and challenge for us and reflects the high population of Māori women in our community with 71% of the total number of births being to Māori women. The national average rate of maternal tobacco use during the postnatal period is 11.7%, ours is 29.2%. We have seen a very small decrease in our district but hope to achieve a higher reduction. To reduce the number of pregnant and postnatal women using tobacco we will complete the following tasks:

- Work closely with the smoking cessation providers and meet quarterly. To commence January 2019
- Consistency in our change from an opt-in referral pathway to smoking cessation services for all women to an opt-out. To be audited monthly from MCIS and reviewed 6 monthly commencing January 2019
- Review quarterly reports from the smoking cessation provider to confirm if what we are doing is having an impact or not. This has already been commenced.
- Review the outcomes from the LMC team who have just become smoking cessation coaches – March 2019 to enable them the opportunity to see the results

CLINICAL INDICATOR NO. 17 – ALSO PMMRC RECOMMENDATION

Preterm birth

Preterm birth is a significant contributor to perinatal mortality and morbidity, especially for babies born under 32weeks gestation. Spontaneous onset of labour, premature rupture of membranes, antepartum haemorrhage, multiple pregnancy and pregnancy induced hypertension are the most common causes of preterm birth. Management of hypertension and tobacco use may reduce the risk of preterm birth.

RATIONALE

Our percentage (10.5%) and our 95% confidence intervals both place us above the NZ average of 7.5% and the 3rd highest preterm birth rate in New Zealand, the other two units are tertiary units with NICU facilities. This is a change over the preceding two years and therefore we need to identify why this is happening and what we can do to address this and prevent any further increase. We have already identified that we have a declining teenage pregnancy/ birth rate. Preterm birth is also highlighted as an area to look at by the PMMRC report June 2018. We aim to reduce the rate of preterm birth by targeting the high risk groups and completing the following tasks:-

- Perform an audit of preterm births to identify any local contributing factors that are amendable and include ethnicity, socio-economic status and age to review equity and access to services. Complete by Feb 2019 and repeat Feb 2020
- Reduce rates of women smoking in pregnancy (see clinical indicator 1 for actions)
- Introduce the national hypertension guideline (addressed separately)
- Early registration with an LMC who can make a referral to smoking cessation provider, screen and treat any sexually transmitted diseases and/or urinary tract infections. This information can be included in the audits
- LMCs to refer women with risk factors for preterm birth to the consultant within the first trimester, this information can be included in the audits
- All women with risk factors for preterm birth who are referred to the consultant are to be seen within the first trimester – this can be included in the audits
- Review our prevention of preterm birth guideline to ensure this is current. Complete by November 2018
- Continue use of partosure for all women with signs and symptoms of preterm birth, so that preterm birth can be confirmed or excluded and a management plan agreed and implemented which will include corticosteroids and magnesium sulphate and early transfer to a tertiary unit if less than 32 weeks gestation. This can be captured in the audit. The NNMG have recommended auditing corticosteroid use, particularly looking at administration by ethnicity and age. This can be included as part of our audit. Complete by Feb 2019 and repeat Feb 2020
- Introduce a follow up service for women to be able to be seen and debriefed about their experience of preterm birth and outline recommendations for the next pregnancy and early registration with an LMC -

Complete by Feb 2019

NMMG RECOMMENDATION

Postpartum contraception options including long-term acting reversible contraceptives (LARC) should be discussed with all postpartum women. Women should be given a range of options, comprehensive information about risks and benefits and they should have equitable access to the contraception of their choice.

RATIONALE

Currently we can offer prescriptions for oral contraception or advice on attending their GP practice or the community clinic for other options. We have decided that we would like to offer the insertion of LARC to women prior to discharge home postnatally, which will be accessible to all women who have birthed in our facility. We currently have one obstetrician who is certified to offer this and midwives interested in learning to do this.

- Obtain stock of Jadelle which is easily accessible in maternity. Complete by Sept 2018
- Compile a competency package for those midwives interested in being able to offer this. To be completed by Dec 2019
- O&G to train the midwives. This will be on going depending on the opportunities available for midwives to train.
- All midwives to observe an insertion of a Jadelle so they can explain the procedure to women as part of their contraception advice prior to discharge. This will be on going.
- Audit 6 monthly the number of Jadelle insertions including ethnicity and age. First audit to be completed in March 2019.

NATIONAL HYPERTENSION GUIDELINE IMPLEMENTATION

The purpose of this guideline is to provide an evidence-based summary of best practice in screening, diagnosing and treating hypertension and pre-eclampsia in pregnancy. This includes identifying women at risk, followed by early detection, treatment and follow-up of hypertensive disorders in pregnancy, to promote best clinical practice for these women and their infants. The guideline is designed for health professionals to use to support their clinical judgement, knowledge and expertise and provide a consistent approach to management and treatment. Health professionals should use it with reference to the individual needs of each woman.

RATIONALE

This is a national requirement for the above reasons. The guideline does have implications for primary care involvement and therefore this is quite a large project.

- O&G team to review the guideline together to compare with what we have in place currently. To be completed September 2018
- Clinical Director, O&G team, Director of Midwifery and Midwifery Educator to meet to discuss implications on our services and primary. To be completed by October 2019. Include GP liaison in discussions.
- Meeting to take place with Planning and Funding to look at any additional resources required in the implementation of this guideline and how these can be met. To be completed by November 2018
- Provide education for all relevant health professionals including GPs. To be completed by May 2019
- Fully implement the guideline by May 2019

LOCAL: PROJECT THREE – HAPŪ WĀNANGA (ANTENATAL/BIRTH EDUCATION PREGNANCY AND PARENTING EDUCATION)

A review of all pregnancy and parenting education options will be completed to ensure there are equitable opportunities for women to access across Tairāwhiti.

RATIONALE

Tairāwhiti has a significant Māori population and has geographical challenges.
We are looking at future programmes in Tairāwhiti with an equity lens. We also want to explore the Hapū Wānanga programme that Waikato, Lakes and Taranaki DHB's have started running.

- Explore Hapū Wānanga programme in Midland – localise to Tairāwhiti
- Provide ongoing midwifery support to these programmes across the district
- Conduct an evaluation by the end of December 2019.

LOCAL: PROJECT FOUR – SUDI PREVENTION AND SAFE SLEEP

Development of Mokopuna Ora Plan (attached) included discussion and input from services and communities within Tairāwhiti.

RATIONALE

Service delivery needs to sit as close to whānau as possible to shift their understandings about risk, safe practices and safe sleeping places.

- Working with Midlands Regional DHB SUDI prevention and safe sleep group to progress regional SUDI plan
- Working with MoH funded national SUDI prevention coordination service provider Hāpai Te Hauora – informing the national plan (2 critical priorities: Smokefree Hapū Māmā and safe sleep programmes including Wahakura/Pēpi pods within DHBs, training the workforce)
- Continue to meet with local weavers across Tairāwhiti and progress their involvement with the programme. This will include a "Tairāwhiti" collective of weavers based within local communities working with service providers to support Wahakura which is the preferred safe sleep option for Tairāwhiti as outlined in the Mokopuna Ora plan.

15.0 Appendices

Work Programme 2017/18 Progress Report

"Established Programme"

INITIATIVE/RATIONALE:	MEASURE:	RESPONSIBILITY/TIMEFRAME:	UPDATE/WHERE WE ARE AT:
PERINATAL MATERNAL MORTALITY REVIEW COMMITTEE			
Reduce the rate of SUDI	Continued use of national guidelines – "Change for our Children" Audit pēpi pod use locally Use of national SUDI prevention tool kit for DHBs and health practitioners, with a focus on supporting vulnerable families at a high risk of SUDI Implementation of the approved Midland Safe Infant Sleeping - Birth to 1 Year policy to reduce Māori SUDI rates in alignment with indicator Implementation of MOH funded pēpi pod distribution	Monitored by Maternity Quality and Safety Programme locally and regionally National PMMRC Regional Coordinator Regional and local leads MOH pēpi pod distribution data collection June 2018	Pēpi pod Audit completed, appropriate distribution and follow up. Midland Safe Infant Sleeping- Birth to 1 year implemented. Mokopuna Ora plan signed off.
To identify any contributory factors to Perinatal or Maternal Mortality or Morbidity, in any internal reviews so that we can reduce the incidence of both mortality and morbidity	Organisational and /or management factors Factors relating to personnel Barriers to access and /or engagement with care Implementation of the learning actions recommended from the internal review Confirmation received that the learning actions have been completed and have been effective	Monitored by Perinatal Meeting presentations and Maternity Quality and Safety Programme WCY Clinical Care Manager WCY Clinical Director Director of Midwifery June 2018	All serious incidents/events are case reviewed with learning outcomes implemented, shared and presented at the PMMRC meetings. We have weekly meetings to review cases from the previous week as part of our continued maternity quality activities. We have good communication and excellent team work between core MWs, LMCs, obstetricians, paediatricians and anaesthetists. There is currently a trial supporting pregnant women to attend appointments who are registered with a Hapū Ora midwives. This is funded by E Tipu E Rea. This is to reduce the barriers to access/engagement with care such as scans and antenatal visits with their LMC in community. This is to be extended for women attending the hospital AN clinic which meet the E Tipu E Rea criteria but registered with any LMC. During 2018 we arranged to have an external review of our Post-Partum Haemorrhages (PPH) following an increase in massive PPHs. We also provided training, introduced a risk assessment tool and presented the findings at the PMMRC meeting and will re-audit PPH in 18 months.

INITIATIVE/RATIONALE:	MEASURE:	RESPONSIBILITY/TIMEFRAME:	UPDATE/WHERE WE ARE AT:
MATERNITY QUALITY & SAFETY PROGRAMME, GOVERNANCE AND CLINICAL LEADERSHIP			
DATA MONITORING			
Ensure population health messages are integrated for all families as required by the MOH and best practice	All providers supporting women and families with same information/messages – particularly around smoking cessation/safe sleep/breastfeeding/shaken baby prevention/MOH obesity strategy/immunisation/mental health screening. Documentation to support that these have been actioned can be audited from the woman's MCIS records.	Population Health teams/Medical Officers of Health – Hauora Tairāwhiti All Hauora Tairāwhiti and community providers Co-design/E Tipu E Rea/Children's Team Tamariki Ora Provider Primary Care June 2018	See below for smoking cessation. 80% of all postnatal women receive shaken baby prevention and safe sleep advice, the remaining 20% receive this from their LMC and/or well child provider. Childhood obesity steering group meetings took place during 2017, which led to a group focusing on engaging more children to drink water instead of unhealthy sugary drinks throughout Tairāwhiti. All women are offered the flu and boostrix vaccinations during pregnancy with a high uptake at the hospital AN clinic and now available within the maternity unit. Mental health screening occurs at booking by the LMC and again during any hospital admission or AN clinic attendance and postnatally as part of the discharge planning.
Reduce smoking in pregnancy to promote improved short and long term health benefits to mothers and babies and reduce the co-morbidities associated with smoking in pregnancy	90% of women will be offered support to 'quit' at first contact Barriers to accepting smoking cessation are identified and actions put in place to address this Women coming into the Maternity Unit or Antenatal Clinic are offered the use of the Smokerlyser and support to quit which is documented in their MCIS records which is auditable	Smoking Cessation champions/LMCs/ Pinnacle smoking prevention service /Primary care/all health professionals/ Taki Tahi Toa Manu smokefree coalition June 2018	Smoking in pregnancy continues to be of great concern in Tairāwhiti with a prevalence rate for Māori hapū māmā of 41.5% for the year ending 31 July 2018. This is a slight reduction over the last two years but still an unacceptable inequality with the non-Māori rate at 6.7%. Support to quit begins early in pregnancy at first midwifery or GP appointment and now we have engaged support from the ultrasound services in community and here in the hospital who to refer women for ongoing support at the time of the first ultrasound. There is now an incentivised programme run by Pinnacle which gives women and whānau a financial incentive to quit. 4 LMCs and the consumer leaders are to become cessation providers which we are hoping will make a difference, along with a new Māori quit coach for the area. MCIS audits show that consistently 100% of pregnant and post birth woman prior to discharge home are offered smoking cessation support. This is a weekly report. On the rare occasion that we do miss any woman, the staff who have provided care for her are informed, so we can avoid any further misses.
LMCs should follow MOH pregnancy guidelines for; diabetes screening; smoking cessation; family violence screening, mental health screening. Screening should be a routine part of maternity care and documented whether in the community or hospital setting Promote improved health benefits for mother and babies	All LMC's expected to screen for family violence and DHB to ensure screening takes place in the hospital setting and pathways for referral are regularly reviewed, updated and followed. The above is recorded in the women's MCIS records and is auditable.	LMCs Continue to monitor through Maternity Quality and Safety programme Supported by community programmes such as E Tipu E Rea MQSP monthly review Perinatal & Infant Mental Health Local Network Forum steering group June 2018	LMCs offer all women the recommended HB1AC diabetes screening test at booking and then a polycose or glucose tolerance test depending on their identified risk factors. The LMC will then refer the woman to the diabetes antenatal clinic where she will see the obstetrician, ANC midwife, diabetes nurse and dietician and a plan of care is agreed and implemented. An audit was undertaken 'Evaluation of the screening pathway used for gestational diabetes mellitus at Gisborne Hospital in women currently pregnant or recently delivered' which identified some areas in which we could improve. It is difficult to assess if all women have all the recommended AN screening e.g. smoking, family violence, mental health by their LMCs as we do not have access to this information unless they use /MCIS records. We can and do audit hospital records for women being

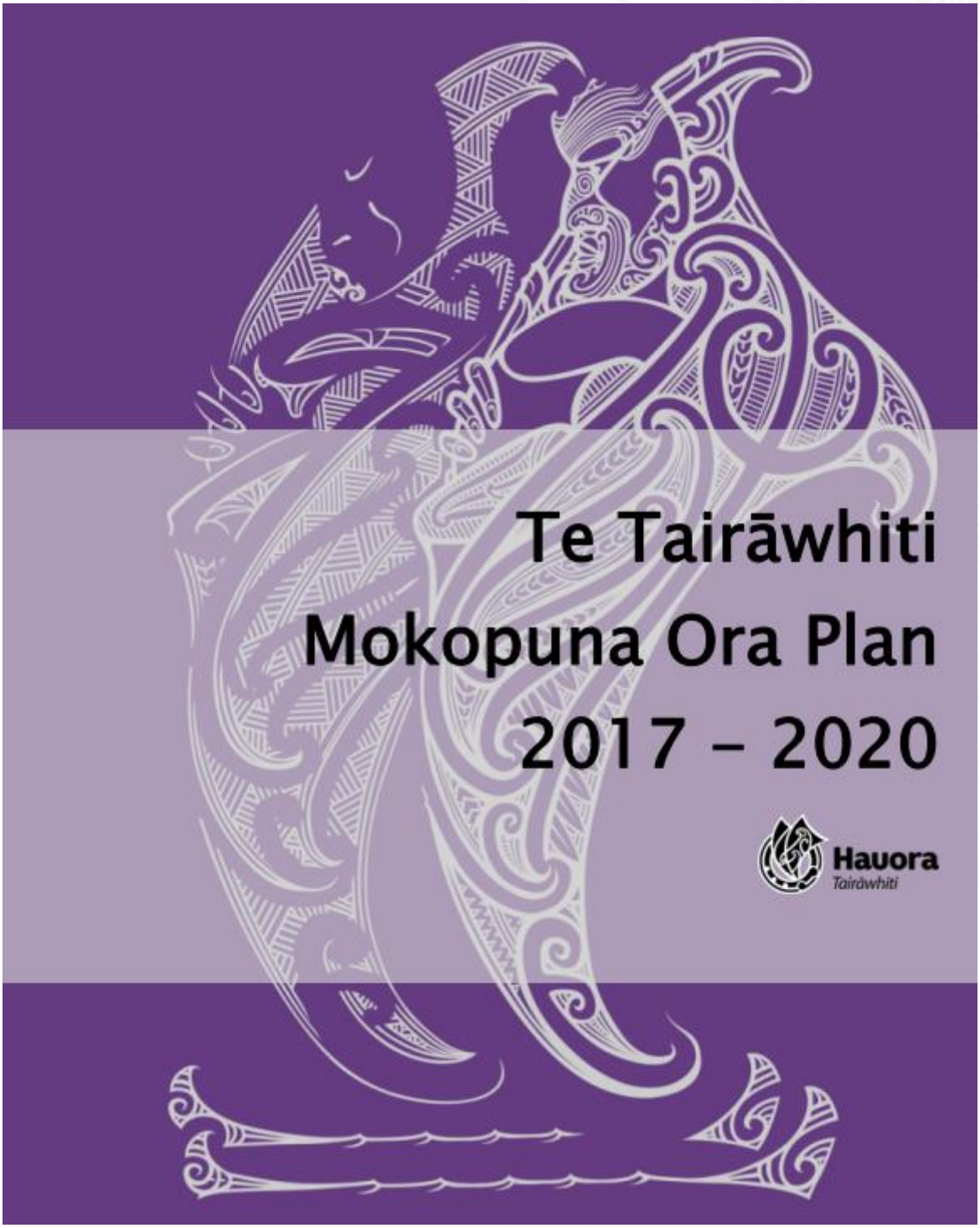
			screened and inform individual midwives if screening has not been completed before a woman is discharged home.
INITIATIVE/RATIONALE:	**MEASURE:**	**RESPONSIBILITY/TIMEFRAME:**	**UPDATE/WHERE WE ARE AT:**
PATIENT SAFETY			
To improve compliance with the Shaken Baby Prevention Project to prevent and reduce the incidence of Shaken Baby in Tairāwhiti.	Work with National Coordinator to implement Work with local team to ensure compliance with recommendations	Hauora Tairāwhiti – CCM/WCY as lead Evaluation/audit to be completed Dec 2018	80% of all women receive this information before being discharged from the hospital post birth. The remaining 20% receive this information from their LMC or well child provider or some decline this but it is not recorded as such. We have submitted an application for funding a portable TV and DVD player so we can have health education DVS playing whilst women are attending the AN clinic or waiting to be seen in the maternity unit.
Aim toward the MOH 2019 target for 80% of women to be registered with an LMC before 12 weeks to improve pregnancy outcomes by women receiving appropriate care and referrals	Resources put in place to address the identified barriers for not accessing care. Look at DHB statistics gathered by MoH. Refer to Ministry of Health. 2017. Report on Maternity 2015. Look at data collection from MCIS records. Strategies implemented to improve awareness of antenatal care services in isolated rural areas.	Monitored by Maternity Quality and Safety Programme and E Tipu E Rea (proxy indicators) and WCTO indicators Review complete by June 2018	Unfortunately we have not yet met this target but we are making good progress, particularly now that LMCs can provide a free pregnancy test . The 2016 Clinical Indicators report our rate as 62.9%, however a recent maternity services survey reported 66% of woman stating they had booked with an LMC before 12weeks. We aim to revise the "Book with a Midwife before you are 10 weeks pregnant" pamphlet and all local LMCs are on the 'Find a Midwife' website.
Maternity services to address risk of still birth or neonatal death in pregnancies to women younger than 20 years, as Tairāwhiti has one of the highest numbers of teenage pregnancies in New Zealand	The appropriate services available to young pregnant women receive referrals from LMCs/GPs/Hospital Services. Young pregnant women engage with these services. Young pregnant women receive the appropriate care and support during their pregnancy.	Monitored by Maternity Quality and Safety Programme Community Forums Monitor through E Tipu E Rea and Children's Team Governance, Te Aka Ora Teen pregnancy unit Report completed by June 2018	Our teenage pregnancy rate is falling. In 2016 there were 62 under 20s and in 2017 there were 40. The 16 and under went from 13 to 5 and the 17-19 went from 49 to 35. This is good news for us. We ensure all teenage hapū māmā engage with an LMC and are referred to appropriate services.
INFORMATION AND COMMUNICATION SYSTEMS			
Ensure maternal mental health services are integrated into maternity services and collaboration is maintained between maternal health, child health and mental health to improve access to care and outcomes as recommended by the MOH	Clinicians and LMCs conduct antenatal screening and document any mental health history to identify women who are at increased risk of mental illness Work locally and regionally to ensure women are supported Records demonstrate that the following have been completed: Screening and assessment Timely interventions including case management, transition planning and referrals Access to respite care and specialist inpatient care for mothers and babies Maternity have representatives on Perinatal & Infant Mental Health Local Network Forum steering group Consultant and liaison services within the health system and with other agencies; for example, primary care and termination of pregnancy services.	Monitored through Maternity Quality and Safety Programme Link to Maternity and Mental Health Governance Link to Tairāwhiti Suicide Prevention and Postvention plan Perinatal & Infant Mental Health Local Network Forum steering group Evaluation by December 2018	Over the past 12 months we have been making referrals to the new one point of access services 'Te Kuwatawata'. This is an ongoing collegial relationship so women are able to access care directly from these services. Maternity have a representative on the Perinatal & Infant Mental Health Local Network Forum steering group who meet twice a year and organise training which many health professionals attend including LMCs, core midwives, well child providers.
Interface between the Huntleigh Fetal Monitors and Maternity Clinical Information System (MCIS) so that the woman has complete records	Work with Clevermed, Huntleigh Representative, Director of Midwifery and IT department. Cardiotocograph traces stored within the women's MCIS records.	Director of Midwifery WCY Clinical Care Manager WCY Project Coordinator IT Manager Clevermed Within next 12 months	This has been a long and lengthy process with issues over contracts. We are hoping that Clevermed will now be able to work with us on this matter in the coming months.

INITIATIVE/RATIONALE:	MEASURE:	RESPONSIBILITY/TIMEFRAME:	UPDATE/WHERE WE ARE AT:
ORKFORCE DEVELOPMENT			
Continue to develop competencies of core midwives to upskill the workforce which is required to maintain a secondary service	Arrange Education , internal /external to meet required needs / seek learning environments across services / motivate staff to seek learning opportunities Clinical safety maintained / APC current / staff satisfaction with clinical management high / skill mix improves • Complete complex care paper • Education programme • Drills/scenarios • Case review – feedback • New Educator in position	Midwife Educator DOM/CMM Final report by June 2018	All midwives have a current APC. Please refer to the Midwife Educator and Quality Coordinators report to view the varied learning opportunities which have been available locally. Six midwives have been to the NZCOM conference (2 LMCs, 1 new grad and 3 core midwives). 2 Midwives went to the PMMRC conference plus the DOM and HOD O&G. Information is shared with the team from these valuable conferences. Each year we have one midwife complete the lactation course and one the complex care. The Midwife educator has been providing clinical support to increase the skills and competencies required to provide secondary care. More core midwives are now performing perineal repair. All are competent in caring for women on Magnesium Sulphate. There have been organised case reviews which result in recognition of good practice and teamwork but also learning outcomes which are shared and implemented.
Encourage remaining 40% of midwives to complete QLP so that the entire midwifery workforce is engaged in this professional development	Staff achieving pass with appropriate levels of QLP/ support and encourage staff with same.	Staff progression continues/ becomes valued culture within unit / favourable ranking within National framework Ongoing, final report by June 2018	We now have 81% of the eligible staff who have completed their QLP. The new grad will be submitting her portfolio at the end of her first year.
Encourage midwives to complete Lactation Consultant training to build expertise held in ward	Support one staff member per year to complete the course Link to community programme such as E Tipu E Rea and WCTO Quality Framework	Growing numbers of Lactation Consultants in maternity /NNU / community as clinical resource Ongoing, one midwife per year	We now have 4 midwives in maternity and 1 nurse in the neonatal unit who have successfully completed the lactation consultant's course. We are currently requesting expressions of interest for a 5th midwife to start the course later this year. As we do not employ a hospital lactation consultation it is important to build the workforce skills so that we have a LC trained midwife/nurse available every day to be able to provide support to breastfeeding women and the team. We work closely with the community funded lactation consultants.
CONSUMER ENGAGEMENT			
Ensure consumer satisfaction feedback is sought, collated and fed back, so we can implement any recommended changes to improve the service we provide	Feedback is received from vulnerable women by the community services Strengthen consumer rep role – confirmed pathway for women/whānau to feedback their experiences Consumer Leader roles filled Annual consumer maternity services survey completed – May 2018	Monitored by Maternity Quality and Safety Programme in conjunction with community programmes Monitored by Consumer Leaders Hauora Tairāwhiti Consumer Engagement Framework Evaluate feedback by June 2018	We have had a team of 3 consumer leaders this year with varying personal birthing experiences. They have engaged with many activities here in the hospital and in the community and developed a Facebook page. They led the Maternity Services Survey this year and have presented the results to t MQSP committee. Please refer to survey for results.
Identify the barriers to consumers assessing and engaging in care so that we can implement changes and decrease the number of women not accessing or engaging in the care they require	Barriers are identified through presentations of clinical case reviews, MDT/MQS forum meetings and Perinatal Meetings. Maternity services are engaged with E Tipu E Rea, Children's Team and community and Iwi agencies developing strategies to minimise the barriers to assessing and engaging in care.	Monitored by Maternity Quality and Safety Programme in conjunction with E Tipu E Rea, Children's Team and community and Iwi agencies Ongoing but final report by June 2018 on changes implemented	There is currently a trial supporting pregnant women to attend appointments who are registered with a Hapū Ora midwives. This is funded by E Tipu E Rea. This is to reduce the barriers to access/engagement with care such as scans and antenatal visits with their LMC in community. This is to be extended for women attending the hospital AN clinic which meet the E Tipu E Rea criteria but registered with any LMC. We now have a health broker working in the community who is making connections between all agencies/services so that women, babies and

			whānau have access to and receive appropriate care and support.
INITIATIVE/RATIONALE:	**MEASURE:**	**RESPONSIBILITY/TIMEFRAME:**	**UPDATE/WHERE WE ARE AT:**
QUALITY IMPROVEMENT			
Increase breastfeeding rates which will improve the health of babies born and/or living in Tairāwhiti	Progress towards a 5% increase of infants fully and exclusively breastfed, particularly amongst Māori, for babies at 6 weeks Ensure consistent training occurs in urban and rural areas Strengthen knowledge of existing workforce to deliver consistent messages through BFHI approved education Increasing number of midwives who have successfully completed the lactation consultants course Maintain BFHI accreditation Networking and sharing of resources occurs throughout Midland (e.g. breastfeeding app) Ensure Tongue Tie pathway is being followed	Monitored through Maternity Quality and Safety Programme and other community programmes (such as E Tipu E Rea and WCTO) BFHI certification Report to be completed by June 2018	Average exclusive breastfeeding at discharge from hospital has increased from 74.6% in 2016 to 81.7% in 2017. It has to be acknowledged however that a strong contributing factor to this marked increase in a 12 months period is the improved integrity of the information recorded by clinicians using MCIS. Increased access to BFHI standard breastfeeding education has allowed well child providers to update their breastfeeding knowledge in a multidisciplinary environment. Another core midwife has registered as International Board Certified Lactation Consultant in April 2018 and another will be undertaking the studies to achieve registration as IBCLC in 2019. BFHI accreditation is maintained. The tongue tie care pathway is being followed and was reviewed and updated in June 2018, this is in the process of being embedded within the Management and Referral of Tongue Tie guideline.
Identify small for gestational age babies to be able to provide the appropriate care in pregnancy and improve outcomes	Referrals received from the LMC to secondary care services for all women at risk of having a small for gestational baby or identified or suspected during the pregnancy by the LMCs Management plans in place for those women with identified risk factors in early pregnancy Growth Assessment Protocol (GAP) is utilised through the women's maternity clinical information records Audit of all small for gestational age babies undertaken and results shared with any learning actions implemented	LMCs Maternity Services Neonatal Unit Maternity Quality and Safety Programme PMMRC Task to be completed by January 2018	GROW charts are embedded in the maternity clinical information system (MCIS) therefore fundal height measurements and estimated fetal weight from growth scans can be electronically plotted. Birth weight centiles are calculated through the MCIS and reports of SGA detection rates are generated quarterly for the GAP team to monitor progress. We have the highest rate of detection in those DHBs who have implemented the GAP programme. This enables us to provide the care required for the women during pregnancy, planning the birth and postnatal neonatal observations. See the Growth Assessment report.
Ensure progress made against key indicators so that we can improve the quality and safety of the care we provide	The following planned audits are completed in Hauora Tairāwhiti: Small for gestational age babies Post-Partum Haemorrhage (PPH) Monthly medication chart audits MCIS audit BFHI annual audit Epidural audit Additional audits will be undertaken as indicated during 2017/18	O&Gs and Midwives and Community providers Monitored in Maternity Quality and Safety Programme All to be completed by June 2018	Please see Growth Assessment report for Small for gestational age babies. Please see PPH audit and review. Monthly medication audits continue which are sent to the Medication Committee. MCIS audits take place to look at compliancy with documentation requirements. There is continuing improvement but always room for more with regular reminders emailed to staff. Records are reviewed weekly when we review cases from the previous week with learning outcome shared if documentation errors or omissions are identified. BFHI annual audit continues to ensure we continue to meet the requirements with data now collected monthly. Breastfeeding update workshops referring to BFHI standards and local cultural needs are applied to clinical practice. We continue to offer one funded place each year to complete the LC course, therefore building our workforce to respond to breastfeeding problems and maintain the BFHI standards.

Mokopuna Ora Plan

Click this link to view the 2017-20 Mokopuna Ora Plan: [2017-20 Mokopuna Ora Plan]



2017 Report for BGHI Annual Survey on Breastfeeding at Discharge

Tairawhiti DHB

2017 Report for BFHI Annual Survey on Breastfeeding at Discharge

The New Zealand Breastfeeding Alliance (NZBA) thanks you for your continued hard work to ensure that mothers and whānau are supported to give their babies the best start in life by initiating breastfeeding.

NZBA is contracted to provide the Ministry of Health yearly information on infant feeding at discharge from maternity facilities. For this, NZBA uses the Ministry of Health breastfeeding definitions: exclusive, fully, partial breastfeeding and artificial feeding. NZBA also provides data by facility type (tertiary, secondary and primary) and ethnicity.

The collection of annual breastfeeding data at discharge is part of DHB's Baby Friendly Hospital accreditation. Data is collected annually per facility and is reported by DHB.

The influences on breastfeeding rates are complex and multi-factorial. Measures to improve breastfeeding rates require an integrated and collaborative approach from facilities, families, communities, services and government.

To assist DHBs to improve their breastfeeding rates this information should be reviewed and analysed alongside DHBs Policy Priority Report PP37 (for the Ministry of Health) and DHBs data in the Well Child Tamariki Ora (WCTO) Quality Improvement Framework.

This document summarises individual data for your facility and DHB, and provides a national comparison with facilities similar to your size and function. Copies of these reports have been provided to the Ministry of Health. At a DHB level, copies have been provided to Director of Midwifery; General Manager, Planning and Funding; Manager Maternity and Baby Friendly Hospital Initiative Coordinator.

From January 2018, NZBA introduced an on-line tool to assist DHB staff to collect breastfeeding discharge data. The 2018 reports will be available in March 2019.

Key points for 2017 for all of NZ

There continues to be a decline in breastfeeding rates over the last year:-

- the reasons remain multi-faceted.
- there is a continuing trend for Asian, Indian and Pasifika peoples to fall below the 75% exclusive breastfeeding criteria on discharge from a maternity facility.
- Māori women do achieve high rates of exclusive breastfeeding prior to leaving a maternity facility, but this rate drops off dramatically once at home. A compounding factor could also be that this group leave the birthing facility earlier, therefore giving a false high for exclusive breastfeeding at discharge.

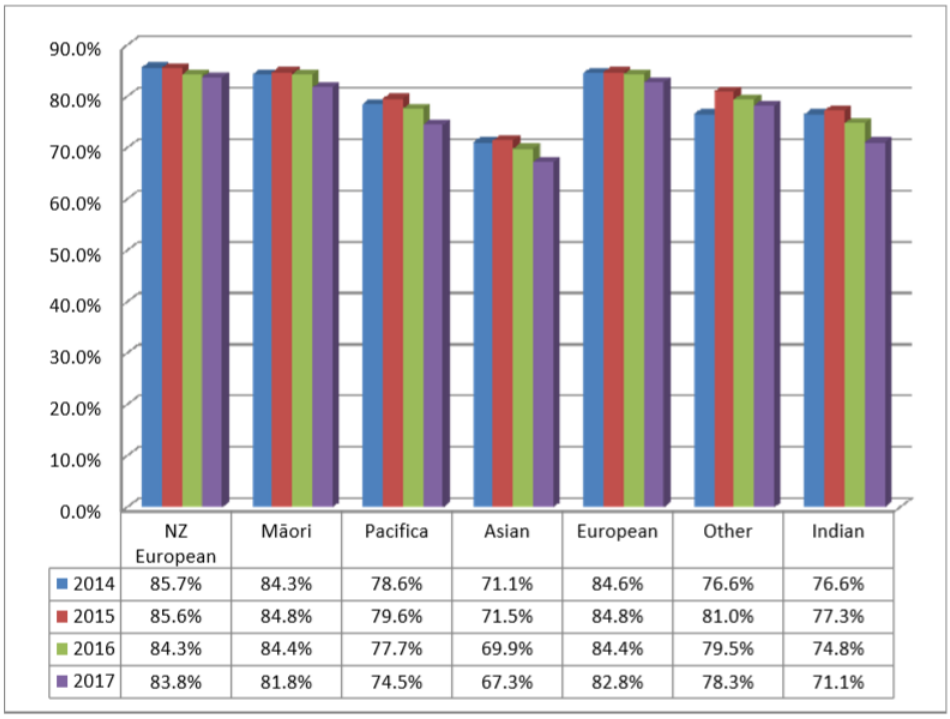
Exclusive Breastfeeding Trends by New Zealand Facility Type, 2012-2107

	National Average	Primary	Secondary	Tertiary
2012	83.0%	92.3%	84.3%	82.0%
2013	83.1%	92.2%	83.3%	81.0%
2014	82.3%	93.2%	82.9%	79.6%
2015	82.8%	92.4%	83.6%	78.8%**
2016	81.3%	91.5%	82.4%	78.0%*
2017	**79.8%** ⇩	**91.4%** -	**80.6%** ⇩	**76.6%** ⇩

**no data from Waikato Hospital

*no data from Middlemore Hospital

Exclusive Breastfeeding Trends by Ethnicity, 2014-2017



	NZ European	Māori	Pacifica	Asian	European	Other	Indian
2014	85.7%	84.3%	78.6%	71.1%	84.6%	76.6%	76.6%
2015	85.6%	84.8%	79.6%	71.5%	84.8%	81.0%	77.3%
2016	84.3%	84.4%	77.7%	69.9%	84.4%	79.5%	74.8%
2017	83.8%	81.8%	74.5%	67.3%	82.8%	78.3%	71.1%

There continues to be a marked drop off for Asian, Pasifika and Indian infants exclusively breastfed. We do know that for the Asian community many do not start well or exclusively, but they do breastfeed for longer once the milk supply is established. Unfortunately, we cannot see any co-morbidity that may be associated with the results, however as an example very low birthweights and conversely very high birthweights may be a factor in the Indian and Pasifika groups. These groups are also often supplemented because of gestational diabetes or risk of plummeting blood sugars.

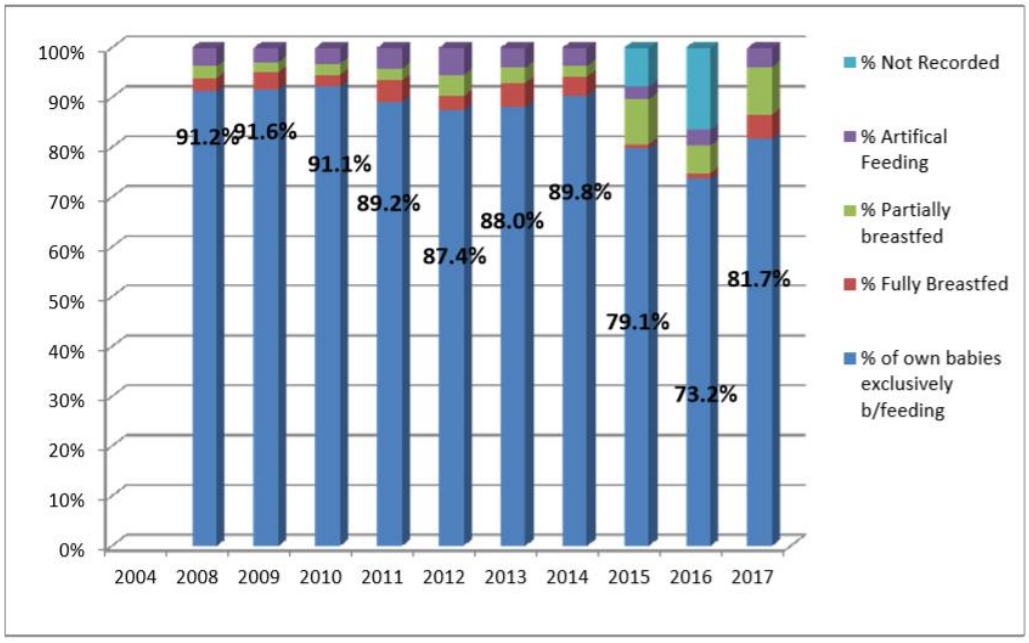
For community data refer to other sources such as Plunket:

https://www.plunket.org.nz/news-and-research/research-from-plunket/plunket-breastfeeding-data-analysis/annual-breastfeeding-statistics/

NZBA is working to ensure the protective effect of breastfeeding against lifestyle diseases, particularly obesity, is recognised in our health policies and strategies. Hence, the vital importance of collecting data at discharge, six weeks, three months and six months.

If you have any comments to make about this annual survey please do not hesitate to contact the team at NZBA.

Compiled Breastfeeding Data for Gisborne Hospital, 2010-2017



Puawai Aroha Maternity Unit, is showing a more complete set of data this for 2017 thankyou. The exclusive breastfeeding data is 1% above the national average and 8% above the previous year which may in part be contributed to better reporting on MCIS.

There were two months that dipped below the WHO criteria of 75% however data suggests that women and babies were supported to breastfeed even though supplementation was introduced, this is indicative of staff that supports women and babies to initiate and maintain breastfeeding. The artificial feeding rate on discharge is 4% and is approximately the national average for this category. Well done.

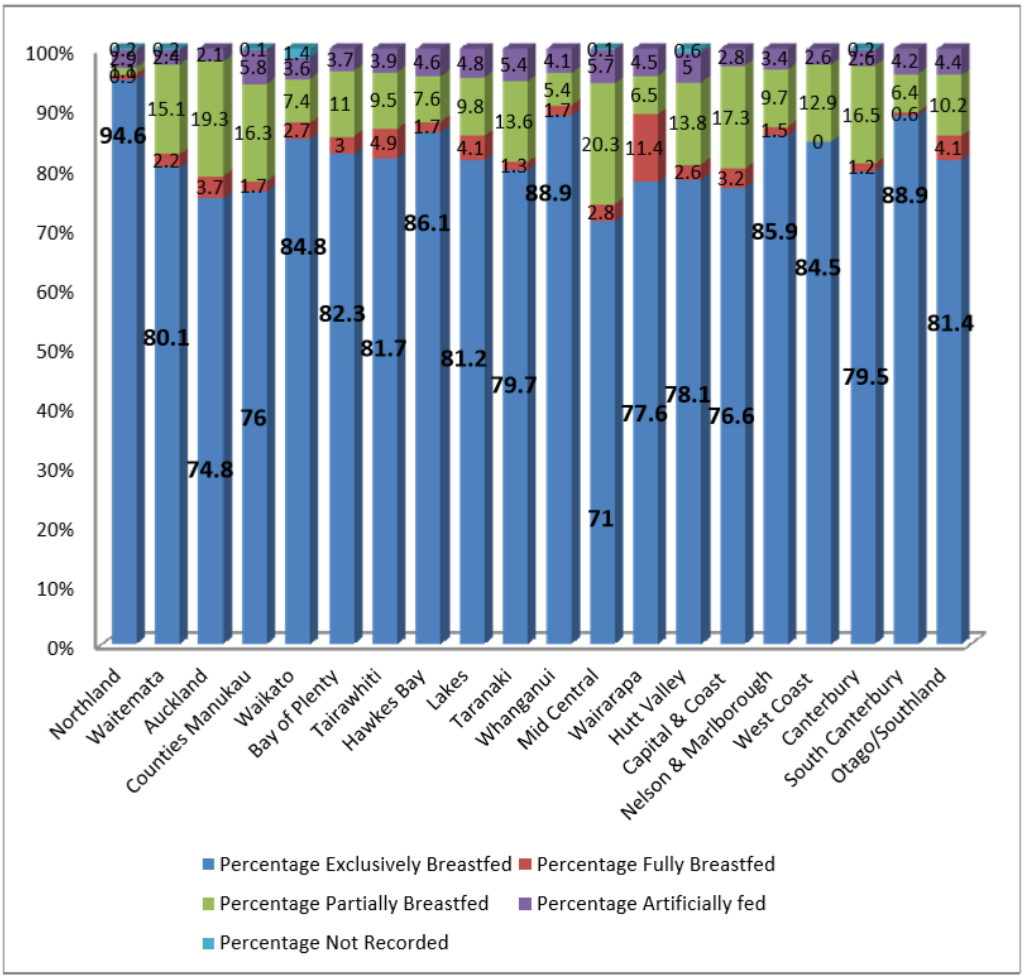
The highest use of formula amongst the ethnicities was in the Maori group 17%, this is an area of concern and we would suggest that more work could be done in the community and within the hospital, e.g. audits to what the reasons were for supplementation or no breastmilk at all.

No breastfeeding data provided by Te Puia Springs for 2017

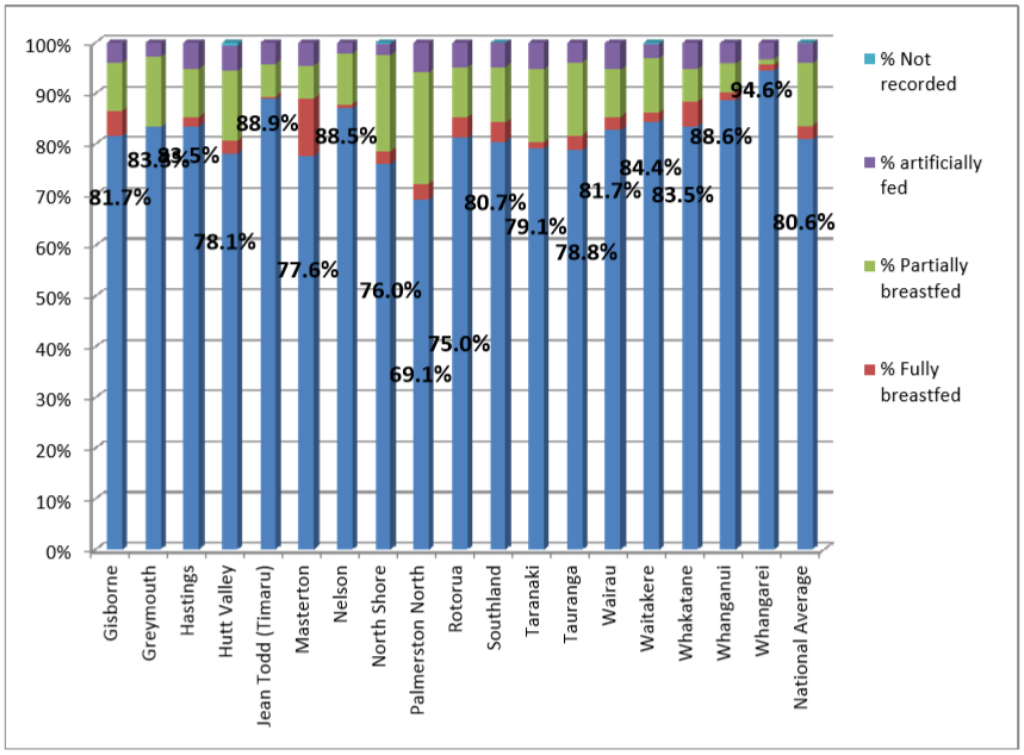
It is a requirement of Ministry of Health that all services submit their breastfeeding data to NZBA who collate this and send to the Ministry of Health in June of each year. It is also a requirement of BFHI that the data is submitted annually. Failure to do so may result in the BFHI certification being reviewed. Please see note at end of report for digital collection of data.

If any unit is closed for any length of time please notify NZBA directly.

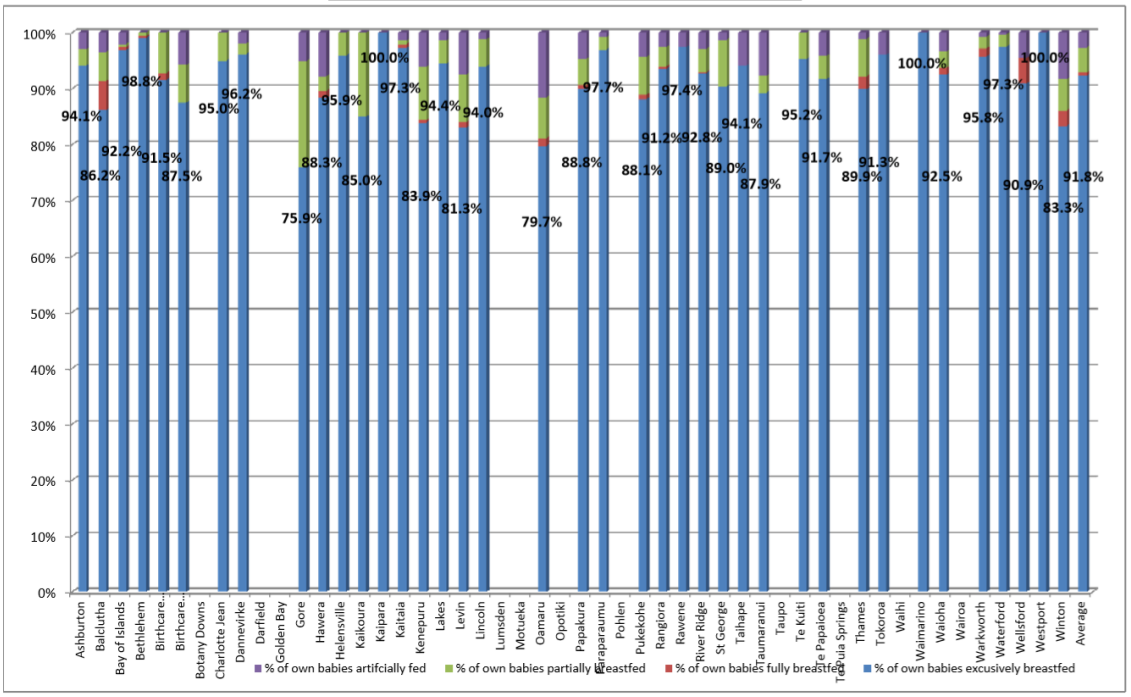
Breastfeeding Data by DHB, 2017



Compiled Breastfeeding Data for Secondary Facilities, 2017

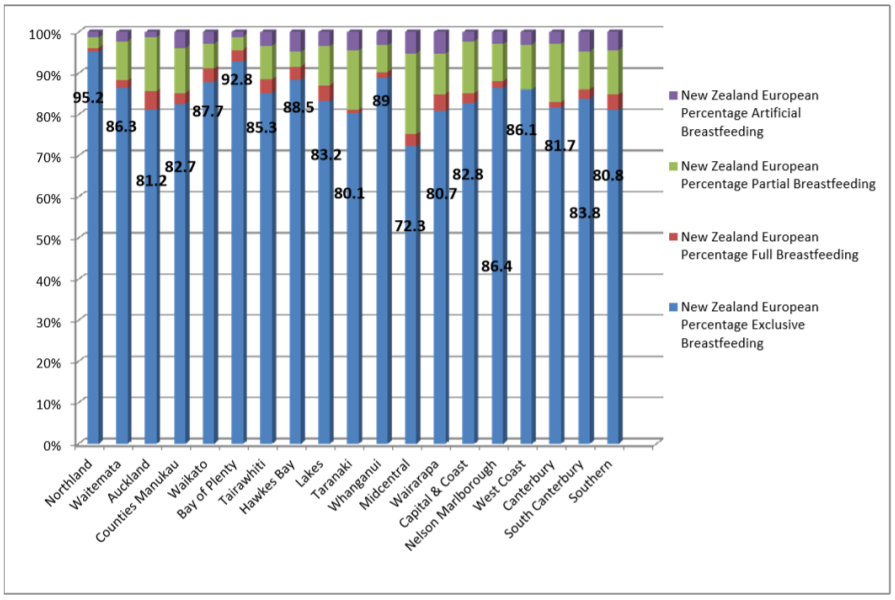


Compiled Breastfeeding Data for Primary Facilities, 2017

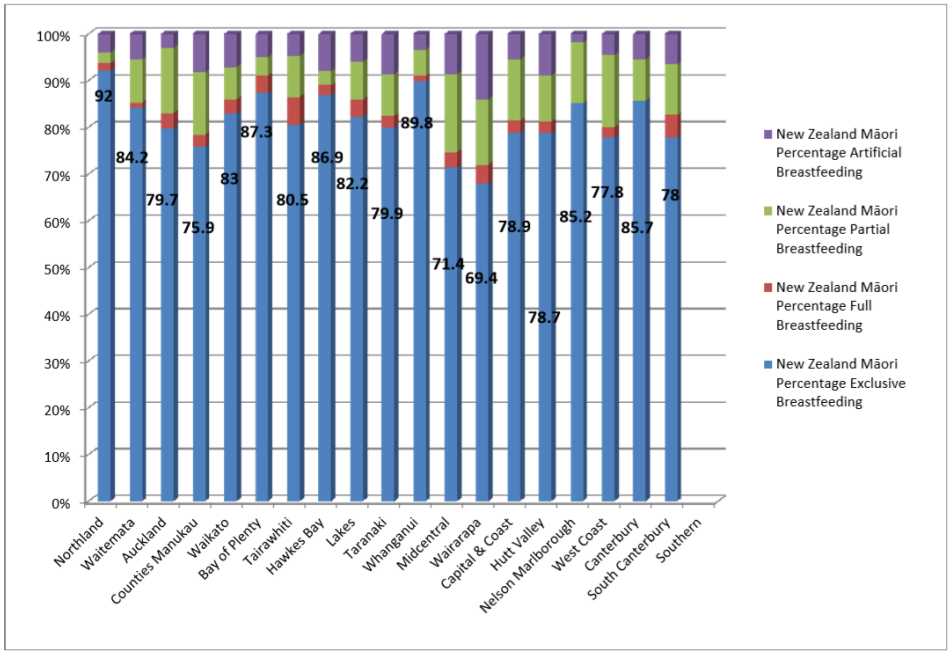


Breastfeeding Rates at discharge, by ethnicity and DHB, 2017

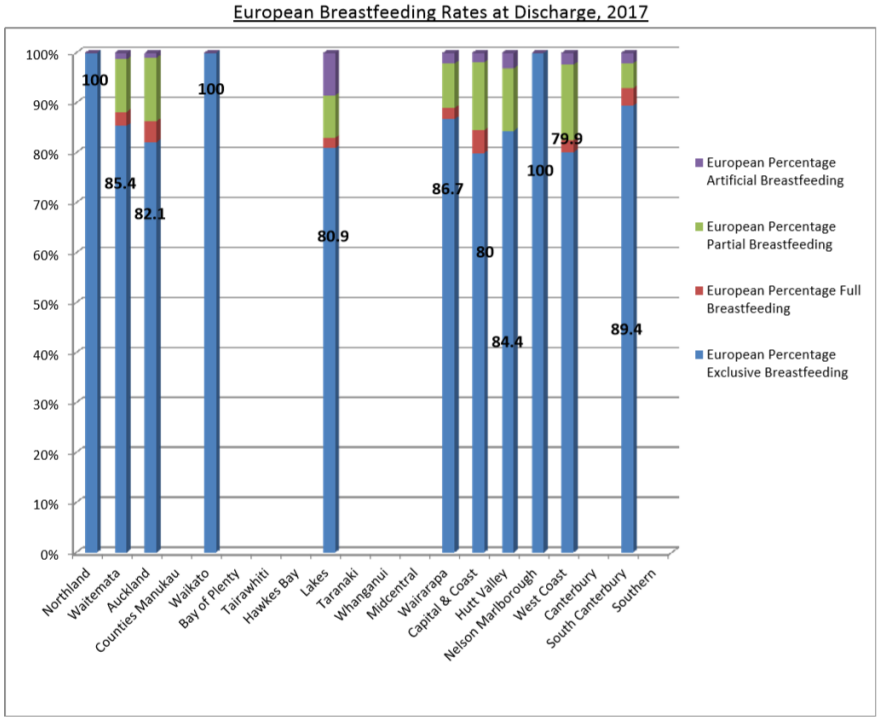
New Zealand European, Breastfeeding Rates at Discharge, 2017



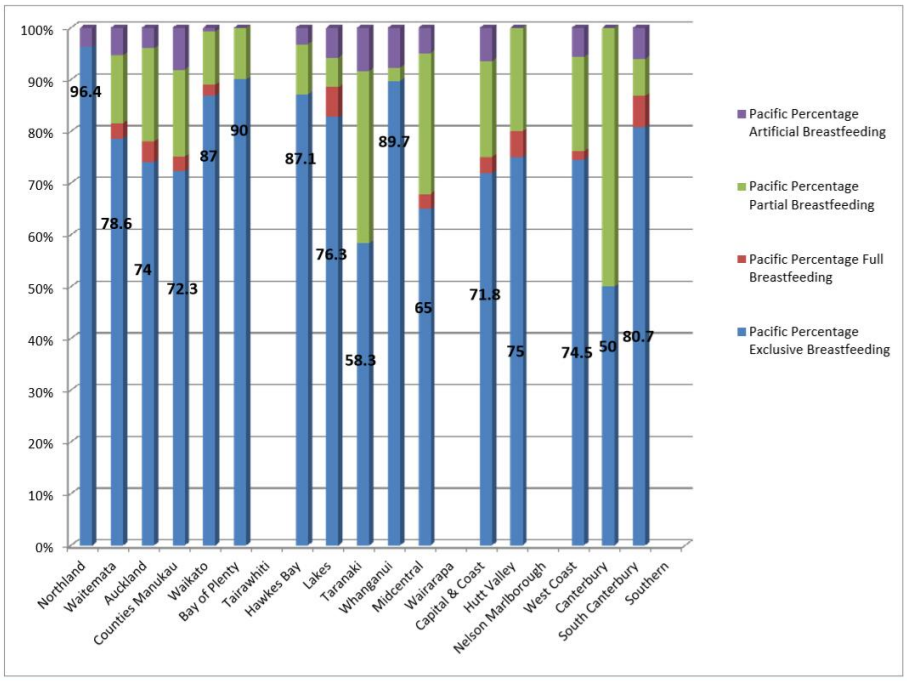
New Zealand Māori Breastfeeding Rates at Discharge, 2017



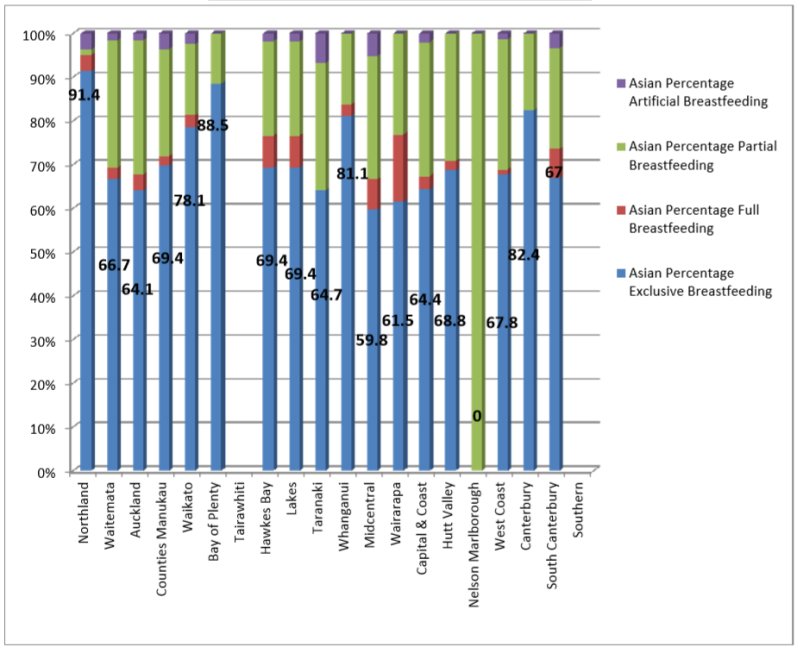
European Breastfeeding Rates at Discharge, 2017



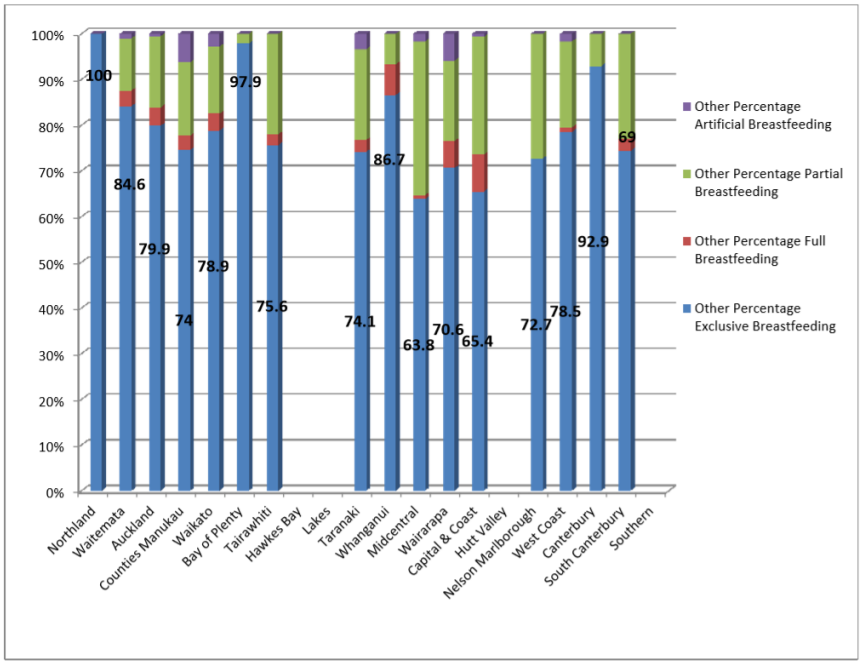
Pasifika Breastfeeding Rates at Discharge, 2017



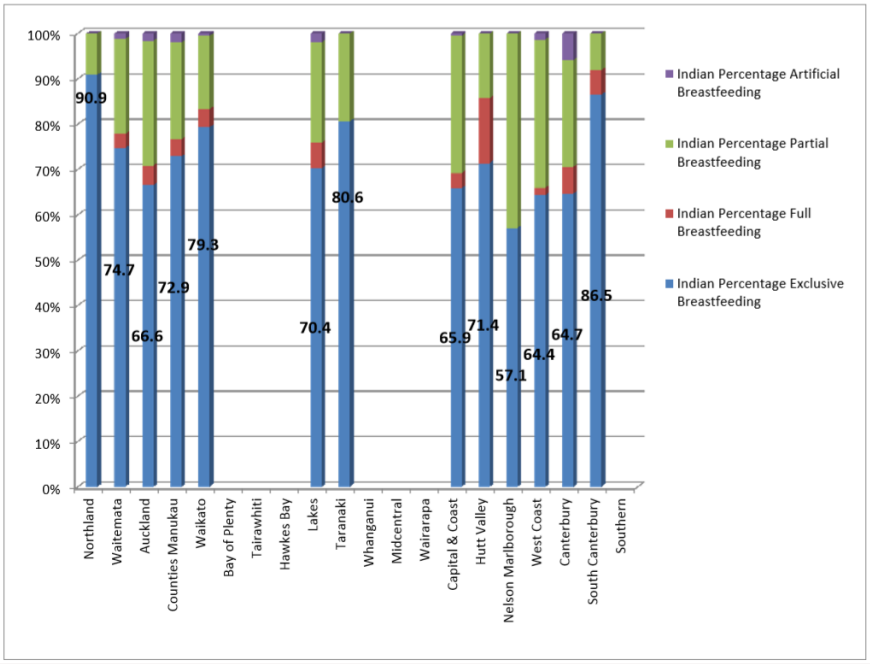
Asian Breastfeeding Rates at Discharge, 2017



Other Ethnicities Breastfeeding Rates at Discharge, 2017



Indian Breastfeeding Rates at Discharge, 2017



New NZBA breastfeeding data collection Tool

With the inception of the new NZBA data collection tool we envisage that all facilities will complete their data monthly. This will enable NZBA to complete the annual surveys in a more timely fashion at the beginning of each year and enable us to offer a more complete report to the Ministry of Health in June. It is a Ministry of Health requirement that all facilities submit a copy of their annual data to NZBA. If you have not registered to complete your data entry online please contact us ASAP.

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Internal Review of Post-Partum Haemorrhage (PPH)

Introduction

PPH is the leading cause of maternal death worldwide and is defined as a blood loss of 500ml or more within 24h of birth (WHO). It occurs most commonly within a few hours of birth and women are most at risk during the 3rd stage of labour (following delivery of the baby and before the delivery of the placenta) and soon afterwards.

The purpose of the review was to investigate the underlying characteristics of the women who had haemorrhaged at the time of birth, and the planned and actual management of the third stage of labour in these women. The aim of this was to identify any predictive factors which could be used to target at risk women for additional preventative treatment.

This review was carried out because the incidence of postpartum haemorrhage (PPH) was felt to be higher than anticipated towards the end of 2017. It was also felt that the severity of PPH was increasing. The PPH rate over the 6 months which were audited was 16.3% which was higher than the year as a whole. National statistics for PPH are not published and varying definitions have been used to audit in the past. This makes it difficult to benchmark but the local incidence of PPH over the last 10 years is shown below. According to the Australian Council on Healthcare Standards (2008), "postpartum haemorrhage (PPH) is a potentially life-threatening complication of birth that occurs in about 3–5% of vaginal births."

Table. PPH Rate 2012-2017

Year	PPH Rate >500ml for all births	PPH Rate > 500ml for vaginal birth and >1000ml for CS	Severe Haemorrhage Rate (>1000ml for all births)	Notes
2008		16%*	4%**	*Audit of 100 women- 16 cases of PPH. Highest blood loss 1250ml
2009			4%**	
2010			6%**	
2011				
2012	12.6%		7.3%**	9 months audit
2013	12.9%		4.6%	12 months audit
2014				Not known
2015	14.2%		5.9%	from MCIS
2016	12.4%		3.0%	from MCIS
2017	14.2%		4.4%	from MCIS
2017 Review	16.3%		5.4%	1/5/17-31/10/17 from MCIS

**unit stats, rate over 1000ml assumed

Management of the Third Stage of Labour

It is recognised that the risk of PPH can be reduced by the use of uterotonic drugs in the third stage of labour, early cord clamping and delivery of the placenta by controlled traction on the umbilical cord (CCT). This combination of interventions is generally known as active management of the third stage (AMTS). This definition was modified by the WHO in 2012 because delayed cord clamping was recognised as beneficial for the neonate. The WHO no longer routinely recommends early cord clamping and CCT is now regarded as optional. WHO 2012 Recommendations for the Prevention of PPH are appended (appendix 1). This is supported by the NZ College of Midwives who also make additional recommendations for AMTS (appendix 2).
AMTS is interpreted by varying authorities as set out below:

World Health Organisation; "the Guideline Development Group (GDG) considered the use of uterotonics as the main intervention within the active management of third stage of labour package" (Recommendations for the Treatment and Prevention of PPH 2012).

NZCOM states that "When there has been an identified intervention in labour or birth or when the woman has an increased risk of post-partum haemorrhage (PPH), active management of the third stage should be considered as the first option"

RANZCOG recommends "Active management of the third stage of labour (administration of prophylactic oxytocics and assisting delivery of the placenta) should be recommended to all pregnant women as this reduces the risk of PPH and the need for blood transfusion" (Women's Health Committee 2017)

RCOG recommends that "Prophylactic oxytocics should be offered routinely in the management of the third stage of labour in all women as they reduce the risk of PPH by about 60%" (Greentop Guideline 52, 2011).

Review Method

57 women with a blood loss of 500ml or more in the 6 month period between the 1st May and 31st October 2016 were identified from the electronic Maternity Care Information System. It is possible that there were more cases than this within this time period but unless the blood loss was recorded as 500ml or more these would not be reported by MCIS. The volume of blood loss and the mode of delivery were noted and the electronic case records examined to identify the presence or absence of known antenatal and intrapartum risk factors, any documented plans for the management of identified risk factors and for the third stage of labour, and to determine how the third stage was managed in each case.

Results

During the 6 months of the review 350 women gave birth and 57 women had a PPH giving a rate of 16.3% . 1 woman was excluded as her records could not be accessed.

Demographics

Age; range 18-43, median 28

Parity; 15 nulliparae, 2 grande multiparae

BMI; range 21-63, median 30. 38 women were overweight or obese (BMI>25), 18 women were morbidly obese (BMI>35)

Smoking; 17 smokers

Blood Loss

Of the 56 women reviewed, 37 had a blood loss of under 1000ml, 11 of whom had a CS birth. There were 15 CS in total, 2 ventouse extractions and 39 spontaneous vaginal deliveries (SVDs). Total blood loss is shown below.

Blood Loss	Number of Women	No as percentage of all deliveries
<1000ml	37	11
1000-1499ml	11	3.1
1500-1999ml	5	1.4
>2000ml	3	0.9
	56	16.3%

Management of the Third Stage of Labour

AMTS was defined for the purpose of the review as the administration of a uterotonic agent within 5 minutes of birth of the baby together with controlled cord traction to deliver the placenta.

In total 5 women had a documented plan for AMTS, and 24 of the 41 women who had a vaginal birth received it. The number who received AMTS would be 34 if women who received syntocinon within 15 minutes were included and 35 if CCT was also excluded from the definition.

Only 4 women were given syntocinon 15 minutes or more after the birth of the baby. The time was not documented in 2 further cases and 1 woman had physiological management of the third stage. In some cases the syntocinon may have been given earlier than documented on MCIS as the time of administration on MCIS was not crosschecked with the paper drug chart.

35 women had their placenta delivered by CCT. Of the 5 women who did not have CCT 4 were given syntocinon for the third stage and one had physiological management. 1 was not recorded.

Syntocinon was the only drug used for the third stage and 18 women received this as a 5iu IV bolus which has a quicker onset of action than the alternative of 10iu given IM.

Risk Factors

Caesarean Section

It is accepted that women who are delivered by Caesarean section (CS) have a higher blood loss than those who have a vaginal delivery particularly where this is performed intrapartum. Most authorities do not regard a blood loss of 500-1000ml as excessive at CS.

Blood loss at CS is increased in the presence of a previous CS scar, placental abnormality (such as praevia or accreta) or where CS is required during labour. Despite most women undergoing CS having at least 1 additional risk factor (only 1 woman had none) 11 of the 15 women who had a CS had a blood loss of under 1000ml and only one had a blood loss of over 1500ml. 9 of the women delivered by CS had had a prior CS, 1 had a placenta praevia and one had a placenta accreta (abnormally adherent placenta). 4 had an intrapartum CS (3 in the first stage). 7 were morbidly obese and 6 delivered macrosomic babies. The one patient who had a blood loss of over 2000ml had 4 risk factors for PPH (more than any of the others) and underwent a prelabour CS.

All CS in TDH are given IV syntocinon for the 3rd stage as well as a prophylactic postpartum syntocinon infusion.

Macrosomia was defined for the purpose of the audit as birthweight over 4kg and was suspected antenatally in 7 women. This was either recorded as a suspicion in the record, or the baby was identified as weighing more than 4kg on ultrasound, or was over the 90th centile on a customised growth chart. 15 women delivered a macrosomic infant in the current pregnancy making this the most common intrapartum risk factor. Having delivered a previously macrosomic baby is not a recognised risk factor for PPH but may be predictive of a subsequent macrosomic birth. This was a fairly common occurrence in the women who haemorrhaged (12 women) so was included as a risk factor for the purpose of this review.

Antenatal Risk Factors

The most common antenatal risk factors were obesity, previous CS, previous PPH (over 500ml), previous delivery of a macrosomic baby and suspected macrosomia.

Increased intrauterine volume (39%)

Of the 22 women who had previous or currently suspected macrosomia and/or polyhydramnios 13 had additional antenatal risk factors , 9 had a documented management plan for management of macrosomia/polyhydramnios and 5 had a written plan for AMTS including one who ultimately had a prelabour CS. A total of 5 women had a prelabour CS. 1 woman did not engage with her LMC and had very minimal antenatal care. 2 women had gestational diabetes (not included as a risk factor but associated with polyhydramnios and macrosomia) and there were no multiple pregnancies.

Morbid Obesity (32%)

9 women had a BMI between 35 and 39, and a further 9 had a BMI of 40 or more. 16 of these women had a documented management plan for obesity and 12 had additional antenatal risk factors. 9 women had prelabour CS and of the 9 women who had a vaginal birth 5 had a plan for AMTS.

Previous CS (18%)

10 women had a history of previous CS and all of these women had a management plan documented. 8 of these women had additional risk factors and 6 had a prelabour CS. Of the 4 women who attempted labour only 3 had a written plan for AMTS.

Previous PPH or retained placenta (14%)

8 women had a history of previous PPH or retained placenta and 5 of these women had a management plan documented. 7 of these women had additional risk factors and 3 had a prelabour CS. Of the 5 women who delivered vaginally 3 had a written plan for AMTS.

Advanced Maternal Age (21%)

There were 12 women over the age of 35, 8 of whom had a CS. Age was not associated with the severity of haemorrhage.

Other Antenatal Risk Factors

There was no management plan and no plan for AMTS in both two women who had stated that they would refuse blood products and both two grande multiparae (5 or more previous births). 5 of 7 women with anaemia were treated with iron and 2 of these had a plan for ATMS. The 2 untreated women did not have any additional risk factors. 3 women with a diagnosis of pre-eclampsia had a prelabour CS. There were no cases of chorioamnionitis or abruption.

Intrapartum Risk Factors

The most common intrapartum risk factors were delivery of a macrosomic baby, induction or augmentation of labour, prolonged 1st or 2nd stage of labour and a 2nd degree tear or worse.

Induction or Augmentation of Labour (38% of women who laboured)

12 women had labour induced. Syntocinon was used in all of these women and in an additional 5 who required augmentation. 1 woman who required augmentation had a first stage CS and one who was induced had a prolonged 2nd stage (4h07 minutes). 10 of these women had additional antenatal risk factors and 8 had additional intrapartum risk factors. Although there was a documented plan for AMTS in only 2 of these women, in fact all of these women were given IV syntocinon for the third stage and all had AMTS except 2 who were given syntocinon fairly soon (6 and 10 minutes) after the birth of their babies. Despite recognition of the risk of PPH and the high rate of AMTS there were 4 women in this group who had a blood loss of 1000-2000ml.

Precipitate Labour (23% of women with an SVD)

9 women who birthed within 60 minutes had PPH; only 4 had AMTS and 2 had IV syntocinon. 8 of these women had a blood loss of under 1000ml.

Prolonged Labour

Prolonged 1st Stage (7% of women who laboured)

This was defined as a 1st stage of over 10h as this is the definition used in MCIS. 3 women had a first stage of between 11 and 13h although this may be an underestimate as women may have laboured at home before arrival at hospital. All of these women had labour either induced or augmented with syntocinon, 2 had AMTS (although one of these had IV syntocinon at 6 minutes so narrowly missed this definition).

Prolonged 2nd Stage (7% of women who laboured)

1 multiparous woman had a CS following a second stage lasting over 4h. One parous woman and one nullipara had normal births after slightly prolonged second stage. Syntocinon was used in to augment labour in the nullipara. Both women who delivered vaginally received syntocinon within 5 minutes of delivery but the parous patient received this IM and did not have the placenta delivered by CCT.

Operative Vaginal Delivery (OVD)

There were only 2 women who had an OVD. Both were Ventouse extractions in otherwise low risk women, although one had also had labour induced. Both had AMTS.

Macrosomia (27%)

Of the 15 women who delivered a macrosomic infant 9 had additional antenatal risk factors and 6 had intrapartum risk factors as well. 6 received AMTS.

Vaginal Tears (32%)

None of the women who bled women had an episiotomy but 13 women had a 2nd or 3rd degree tear. 4 of these women had the tear repaired in the room within an hour of the birth, and only one within 30 minutes. 2 were repaired by the same LMC and 2 by medical staff. All the others were repaired by a doctor in theatre and were completed between 52 minutes and 3h 52minutes after the birth with a median time of 1h 7 minutes. In several cases the tear was not initially recognised.

Retained Products of Conception (POC). 7%

The placenta was retained in 1 woman who required manual removal in theatre. The third stage was just under 2h and she also required repair of a 2nd degree tear. This patient had a physiological third stage and received a uterotonic agent 48 minutes after the birth. 2 other women had retained POC following a third stage of under 30 minutes. A succenturiate lobe was removed from one of these women soon after delivery of an incomplete placenta but she went on to have removal of further POC in theatre 4h later despite an ultrasound scan which did not suggest any retained placental

tissue. She delivered in the pool and syntocinon was given 8 minutes after delivery. The other had AMTS but required suturing in theatre at which time a small amount of POC was also removed 1h47 minutes after birth of the baby.

Number of Risk Factors and AMTS following Normal Birth

4 women who birthed normally had no risk factors and none had AMTS.

28 women had 1,2 or 3 risk factors and 17 had AMTS.

7 women had 4 or more risk factors and 5 of these women had AMTS. All had CCT and IV syntocinon (but only 4 within 5 minutes).

3 women with 1 risk factor for PPH had a recorded plan for physiological management of the third stage.

1 woman who had 8 risk factors for PPH had no documented plan for the third stage but was given IV syntocinon (although the time of administration was not recorded) and the placenta was delivered by CCT.

There was no obvious correlation between the number of risk factors and the degree of haemorrhage.

Severity of Haemorrhage

Greater than 2000ml.

1 woman who had syntocinon augmentation had a prolonged 2nd & 3rd stage of labour. She received AMTS but the cord avulsed requiring medical intervention. Her blood loss was 2000ml.

A low risk woman birthed in the pool and was given syntocinon IM at 8 minutes but had a retained placenta which was removed in theatre. She was a parous woman who laboured rapidly and had a blood loss of 2750ml.

A woman with a BMI of 43, previous macrosomia and suspected macrosomia this time delivered a macrosomic infant by prelabour CS. Her blood loss was 2850ml.

Greater than 1500ml

5 women who delivered normally had a blood loss of over 1500ml; only 2 of these received AMTS. There were no CS or OVD in this group.

Birth of a macrosomic fetus was the most common finding amongst the 7 women who had a blood loss of 1500ml or more. 3 women in this group had a macrosomic baby, 2 of which were suspected antenatally and 1 of these women had previously delivered a macrosomic infant. One of these women had a BMI of over 40.

1 had a MRoP, 1 had labour induced with syntocinon and 2 women had a 2nd or 3rd degree tear, one of which was repaired in theatre.

1 woman who had stated that she would refuse blood products had a precipitate labour without AMTS.

1000-1500ml

There were 8 women who birthed vaginally in this group including 1 OVD, and 3 who had a CS. 4 had AMTS.

5 women in this group had a BMI of 35 or over, 2 had pre-eclampsia, 2 required syntocinon in labour and 2 had a 2nd or 3rd degree tear repaired in theatre.

1 low risk woman who laboured rapidly had a physiological 3rd stage, a retained placenta and a tear repaired in theatre.

500-999ml

25 women had a normal birth with 14 having AMTS and 1 had a OVD with ATMS. There were 11 CS in this group. 4 had no risk factors, and 11 only 1 risk factor. The majority of high BMI patients were in this group.

Conclusions

Despite the impression that the incidence and severity of PPH is increasing, comparison with the data from previous years suggest that although there is an increase from the previous year this is compatible with statistical variation. This perception may have been due to a temporary increase in the period which was audited, however there have been a high number of severe PPHs in the early part of 2018 and it may be the case that this is the beginning of an upwards trend. It is recognised that there is an increasing rate of medical complexity in the antenatal population particularly with rising rates of maternal obesity, maternal age and diabetes, and it is important that this is examined and measures put in place to mitigate the effect that this will undoubtedly have on adverse outcomes including PPH.

The majority of women having a vaginal birth had syntocinon for the third stage and CCT. The women who did not tended to be lower risk but included a number of women with multiple risk factors. Even women with only 1 risk factor are at risk of PPH.

The women who were delivered by CS were a particularly high risk group but in spite of this there were very few women who had a very high blood loss suggesting that the current regimen of postpartum syntocinon is effective.

It is expected that antepartum risk factors are highlighted in the electronic case record (MCIS) and that a management plan would be created for each. Risk factors were not always highlighted and when they were highlighted a management plan was frequently absent. When management plans was made they were generally written in the appropriate section of the records but in some cases

were only found in the body of the case notes making them difficult to find. A written plan for AMTS was found in only 19 women with antenatal risk factors.

The 2 risk factors most commonly associated with PPH were previous, suspected or actual macrosomia and obesity. 2nd or 3rd degree tears, syntocinon during labour, previous CS and prolonged or precipitate labour were also fairly common. A management plan was made in all women with a previous CS and most with morbid obesity but was inconsistent in women with other risk factors such as a history of PPH or retained placenta, and was found in under half of women with suspected macrosomia or polyhydramnios.

It seems to be generally appreciated that women with a previous CS and those whose labour was induced or augmented with syntocinon, or who had a prolonged labour or OVD were at increased risk of PPH as almost all received AMTS. This was not the case with women who had a precipitate labour or who delivered a macrosomic baby or had a 2nd or 3rd degree tear, only around half of whom received AMTS. The most recent UK confidential enquiry into maternal mortality (MBRRACE 2017) has emphasised the risk of a high cumulative blood loss in women with vaginal trauma or retained placenta mainly due to delays in definitive treatment and lack of recognition of slow ongoing bleeding. (Appendix 3). In Gisborne delays in the management of retained placenta are often unavoidable due to the limited availability of theatre and the need to call staff from home out of hours making it all the more important that efforts are made to prevent bleeding and to be vigilant of steady or recurrent bleeds.

It is particularly concerning that neither of the 2 women who stated antenatally that they would refuse blood products had a management plan and only one received AMTS. It is recognised that these women are at high risk of maternal mortality and it is vital that their risk of PPH is kept to an absolute minimum.

Comparison with Previous Audit in 2013

In the 2013 audit the overall rate of AMTS was 70%. AMTS was not defined in 2013 but in 2017 the rate was between 57% and 88% depending on the definition used. Rapid labour accounted for 60% of cases in 2013 but prolonged 2nd & 3rd stage and prolonged rupture of the membranes was also common. It was observed that risk factors were often not recorded in the notes when they were evident in the medical record. Recommendations included diligence in identifying at risk women, and anticipation and early management was felt to be critical. This has improved in the last 4 years with the introduction of the MCIS but could be improved further.

Recommendations

Recognition and recording of risk factors allows all staff to be aware of the woman's risk status and needs. A management plan should be recorded for all risk factors (avoiding duplication in the presence of multiple risk factors).

An advance plan for management of the third stage should be discussed with the woman and documented so that she can make an informed decision which will be understood and respected.

Physiological management of the third stage should not be planned unless the woman has had a low risk pregnancy.

PPH risk assessment should be carried out on admission in labour and again following labour and birth. It should be appreciated that all risk factors for PPH are important and that risk status may change during labour and birth. A single risk factor may be associated with significant bleeding and warrants AMTS. A traffic light system has recently been introduced for risk assessment on admission in labour and at birth. This should be further developed to ensure that all women receive a timely risk assessment and appropriate care during childbirth.

When AMTS is carried out syntocinon should be given as soon as practicable after clamping of the cord. An IV bolus is recommended in women with risk factors.

Women should be examined soon after delivery to identify vaginal trauma and, if a second or third degree tear is identified, this should be repaired as soon as possible. Second degree tears should be sutured in the birth room where possible to minimise blood loss. If this is not possible a vaginal pack should be inserted and the patients legs adducted.

Women who require suturing in theatre or removal of placental tissue are at high risk of major blood loss and actions to prevent blood loss and continued vigilance are essential.

Women who refuse blood products should have careful counselling about their options and the risks involved should excessive bleeding occur. The prevention of anaemia, discussion about management of the third stage and documented confirmation of their wishes is essential.

Appendix 1; WHO 2012 Recommendations for the Prevention of PPH

1. The use of uterotonics for the prevention of PPH during the third stage of labour is recommended for all births. (Strong recommendation, moderate-quality evidence)
2. Oxytocin (10 IU, IV/IM) is the recommended uterotonic drug for the prevention of PPH. (Strong recommendation, moderate-quality evidence)
3. In settings where oxytocin is unavailable, the use of other injectable uterotonics (if appropriate ergometrine/methylergometrine or the xed drug combination of oxytocin and ergometrine) or oral misoprostol (600 µg) is recommended. (Strong recommendation, moderate-quality evidence)
4. In settings where skilled birth attendants are not present and oxytocin is unavailable, the administration of misoprostol (600 µg PO) by community health care workers and lay health workers is recommended for the prevention of PPH. (Strong recommendation, moderate-quality evidence)
5. In settings where skilled birth attendants are available, CCT is recommended for vaginal births if the care provider and the parturient woman regard a small reduction in blood loss and a small reduction in the duration of the third stage of labour as important (Weak recommendation, high-quality evidence)
6. In settings where skilled birth attendants are unavailable, CCT is not recommended. (Strong recommendation, moderate-quality evidence)

7. Late cord clamping (performed after 1 to 3 minutes after birth) is recommended for all births while initiating simultaneous essential newborn care. (Strong recommendation, moderate-quality evidence)
8. Early cord clamping (<1 minute after birth) is not recommended unless the neonate is asphyxiated and needs to be moved immediately for resuscitation. (Strong recommendation, moderate-quality evidence)
9. Sustained uterine massage is not recommended as an intervention to prevent PPH in women who have received prophylactic oxytocin. (Weak recommendation, low-quality evidence)
10. Postpartum abdominal uterine tonus assessment for early identi cation of uterine atony is recommended for all women. (Strong recommendation, very-low-quality evidence)
11. Oxytocin (IV or IM) is the recommended uterotonic drug for the prevention of PPH in caesarean section. (Strong recommendation, moderate-quality evidence)
12. Controlled cord traction is the recommended method for removal of the placenta in caesarean section. (Strong recommendation, moderate-quality evidence)

Appendix 2; NZ COM Consensus Statement on facilitating the Birth of the Placenta 2013

- When there has been an identified intervention in labour or birth or when the woman has an increased risk of post partum haemorrhage (PPH), active management of the third stage should be considered as the first option.

- Controlled cord traction must NOT BE USED unless an uterotonic drug has been administered

To support neonatal transition and the equilibrium of blood volume the cord is not clamped and cut for at least 3 minutes following the birth

When cord clamping is delayed the optimal timing for administration of the uterotonic is currently unknown and the effect of the administration of an uterotonic on neonatal health when given prior to clamping of the cord is also unknown. Until further evidence to support practice is collated, it is advised that the uterotonic drug of choice be administered after the cord has been clamped and cut.

The placenta is born by maternal effort or controlled cord traction. Controlled cord traction is regarded as optional (except when syntometrine/ergometrine has been administered) and dependent on whether the woman and the midwife consider the small reduction in blood loss and small reduction in the duration of the third stage as important

If using controlled cord traction, wait for signs of placental separation. The uterus is supported suprapubically with one hand while continuous tension is applied to the cord in a downward direction following the pelvic arc.

Once separated the placenta may be caught in cupped hands or a container (a container that has held food may be culturally unacceptable).

The midwife can assist slow membranes to be born complete by holding the placenta in two hands and gently turning it until the membranes are twisted, then exert gentle tension to complete the birth [6] or by asking the woman to cough.

Appendix 3; MBRRACE, Saving Lives, Improving Mothers Care 2017

In women who are Jehovah's witnesses absolute clarity about which fractions of blood products are acceptable and which are not is required, and should be formally documented in the antenatal period.

Once a retained placenta is diagnosed obstetric review and transfer to theatre should be expedited and careful recording of observations should be performed as concealed bleeding can be marked and deterioration is likely.

External Review of Post-Partum Haemorrhage

at Hauora Tairāwhiti

April 2018

Dr. Ian Page &

Karen Daniells (MSc)

Contents

Aim

The aim of this external review is to consider the increase in severe post-partum haemorrhages (PPHs) at Gisborne Hospital, by a process of meeting some staff, looking at the operational workings of the clinical area and reviewing the medical notes of recent PPHs. The reviewers have tried to ascertain the reason(s) for the elevation in the rate of significant PPH and determine any initiatives to implement to reduce their frequency.

Background

Hauora Tairāwhiti District Health Board serves a population that is one of the youngest and most deprived in New Zealand, with a significantly larger proportion of Māori (50%) than those served by other District Health Boards. Families tend to be larger and nearly one third are single parent families. The Tairāwhiti population is also the most sparsely distributed on the North Island (Hauora Tairāwhiti, 2017).

Puawai Aroha is the secondary maternity facility at Gisborne Hospital. It has five birthing rooms, a birthing pool and eight antenatal/postnatal rooms. It is staffed by four obstetricians, 13.9 FTE midwives/nurse, a clinical midwifery manager and a midwifery educator. The staff are organized so that there are three core staff on the early shift, three staff on the afternoon shift and two staff on the night shift. There are ten Lead Maternity Care (LMC) midwives who use the Puawai Aroha facility.

Puawai Aroha has approximately 700 births per year and noted an increase in the number of severe post-partum haemorrhages (PPH), for which there was no obvious explanation, in 2017/early 2018. Gisborne hospital itself responded with its own analytical data showing a PPH rate of 15.76%. The multi-disciplinary team started to meet in April 2017 to look at these rates. By July a PPH work plan was set up. In response to this it asked the two reviewers, Dr. Ian Page and Ms Karen Daniells, to inquire into this.

Methodology

The two reviewers spent two days at Gisborne hospital, where they visited and met with the Head of Department Obstetrics and Gynaecology, and the Director of Midwifery. They also attended the weekly multidisciplinary meeting, which was attended by core and LMC midwives, obstetricians and the midwifery educator. Various hospital protocols, including the management of PPH, were also reviewed. The reviewers were also asked to comment on the proposed document 'Risk Factors for PPH', and reviewed the case reviews undertaken by the staff at Gisborne hospital.

Examining severe maternal morbidity is a recognized strategy for gaining insight into the weaknesses and strengths of maternity care systems (Lawton et al., 2014; Say, Pattinson & Gulmezoglu, 2004). Seventy three cases of PPH greater than or equal to 500mls from 1st April 2017 to 31st March 2018 were identified by the Tairāwhiti team using the Maternity Clinical Information System (MCIS).

Nineteen cases of PPH with losses from 1500mls to 3760mls were selected for review as they provided the most severe and more recent PPH cases at Puawai Aroha for the specified period.

Nineteen cases were reviewed using a template to cross-reference risk factors for PPH and accepted parameters of care that are consistent with the national consensus guideline for the treatment of PPH (Ministry of Health (MOH), 2013). Four cases, all with losses greater than 2000mls and requiring blood transfusion were reviewed in more depth by applying a modified version of the contributory factors table used by the Health, Quality and Safety Commission (HQSC) maternal morbidity review panels. The contributory factors table is used by the multidisciplinary team to methodically consider the systems, personnel and access/engagement issues that may have contributed to the severity of the morbidity being reviewed. The question underpinning the tool is not whether the maternal morbidity was avoidable, but whether the severity of the morbidity was avoidable (Appendix 1).

Results/Findings

Firstly the reviewers would like to acknowledge the efforts made by staff and management in recognizing this issue and for taking steps to improve maternal outcomes. The management of PPH when it occurs is very good. For some time measures have been put in place to obtain more accurate assessment of blood loss. This particularly involved efforts during the past twelve months to weigh the apparent blood loss at and after birth.

There are no national data comparing the rates of PPH between DHBs. The nearest Clinical Indicator is of blood transfusion following birth (Ministry of Health, 2018). Gisborne hospital had the lowest rate in 2016 (the latest data available nationally), continuing their trend of a low rate. Whilst not an absolute marker of the PPH rate, it is strongly suggestive of appropriate steps being taken to prevent, identify and manage PPH.

Review of nineteen case notes where the woman had had a PPH of greater than 1500mls (using MCIS) looked for the following risk factors:

RISK	N=	RISK	N=
Low Hb	1	P0	2
Platelets <80		P5 or more	2
BMI <18 or >35	6	Amphetamine use	
Previous LSCS	2	Chorioamnionitis/PROM	3
Previous PPH	3	Induction of labour	5
APH		Augmentation of labour	4
Placenta praevia		Prolonged labour	1
Polyhydramnios		Forceps or vacuum delivery	
EFW >4kg	2	Retained placenta	1
Multiple pregnancy	1	Acute LSCS	1
Fibroids >5cm			

We also rated the number of risk factors present in the women with a PPH:

Risk factors	0	1	2	3	4	5
Women	4	6	2	4	1	1

There was no correlation between the volume of PPH and the number of risk factors present, though this may have reflected the appropriate management of the risks.

We looked to see how well the risk factors had been identified, and whether or not a plan had been documented. We have not performed a sub-analysis of the cases where there was more than one risk factor to see if each factor had a plan made. In just under half of the cases reviewed there was no documented plan for third stage management despite the presence of at least one risk factor.

Number with risk factors	15
Number where risk factor was identified, and a plan documented	8

When the PPH occurred, we looked at the timeliness of its recognition, the request for extra help, making a diagnosis of the cause, whether or not appropriate treatment (including timeliness) was given and if an appropriate post-PPH management plan was documented and used.

Number of PPHs	Timely diagnosis made	Escalation made	Diagnosis of cause made	Appropriate treatment given
19	18	17*	17	15#

* in two cases the SMO attendance was belated despite being aware, and in another case this only occurred when the woman had a further bleed

in one case there was a four hour delay in getting to theatre, in one other case appropriate treatment was compromised by a failure to communicate the recent hypertensive history and treatment of the woman to the anaesthetists

Number of PPHs	Post-PPH plan documented	Post-PPH plan used
19	13*	12

*in one case there was no guide as to the observations required

We then reviewed fourteen case reviews already undertaken in the unit. These were thorough and clear learning points had been identified. The issue of incomplete fluid charts can be found in all DHBs.

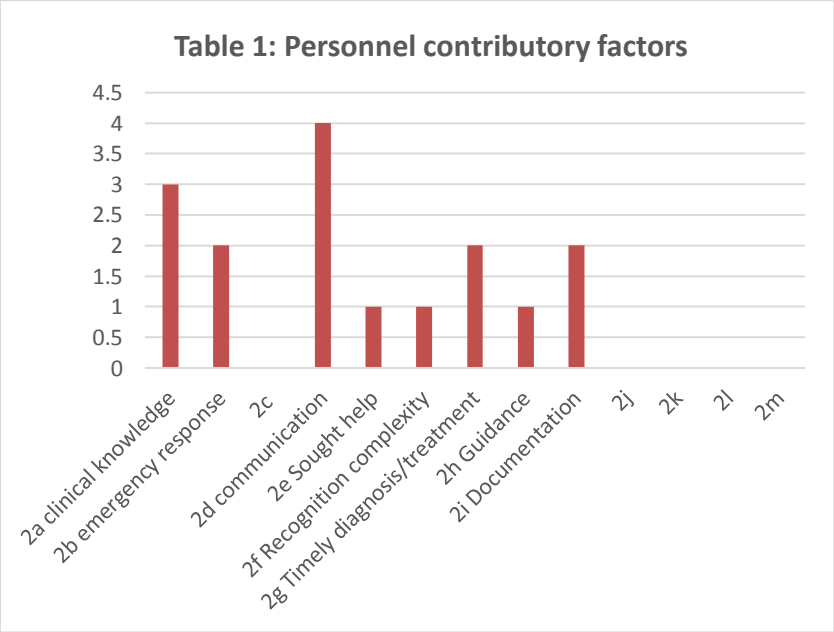
Issue identified	Delay in fluid resuscitation	Insufficient observations	Lack of indicated IV access	Failure to use active 3rd stage	Fluid chart incomplete
N=	1	6	2	1	6

There had also been a very comprehensive review of the PPHs occurring between 1 May and 31 October 2017 by Dr Klara Ekevall, Tairāwhiti obstetrician. In this audit, 91% of women who had

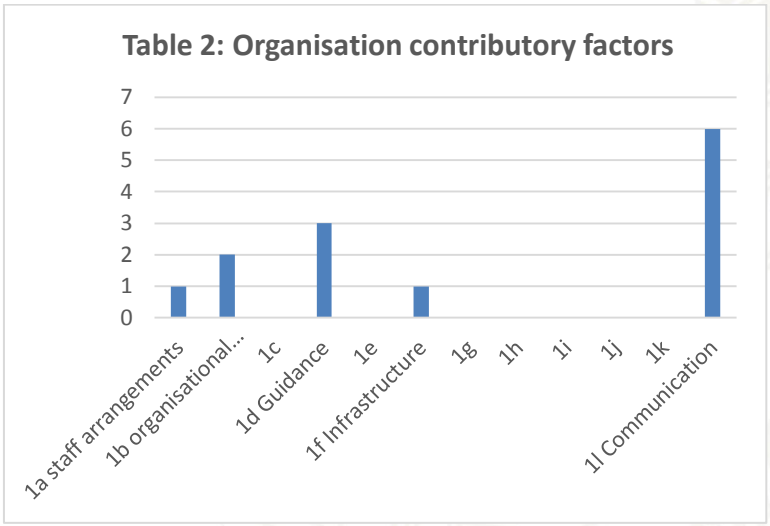
sustained a haemorrhage after vaginal birth did not have a documented plan for an active third stage and just over half of women who sustained a PPH after vaginal birth had received active management of the third stage. All women who had a caesarean section had active management of the third stage. The different definitions of active third stage management advocated by the New Zealand Obstetric and Midwifery Colleges was also highlighted. This had similar findings and reached similar conclusions to this review.

Four cases were reviewed using the modified contributory factors table. Of these, the severity of the postpartum haemorrhage may have been avoidable in three cases and unavoidable in the other one (Appendix 2). Of the contributory factors, personnel factors were the most frequent, followed by organizational factors. Barriers and access to care issues were the least frequent.

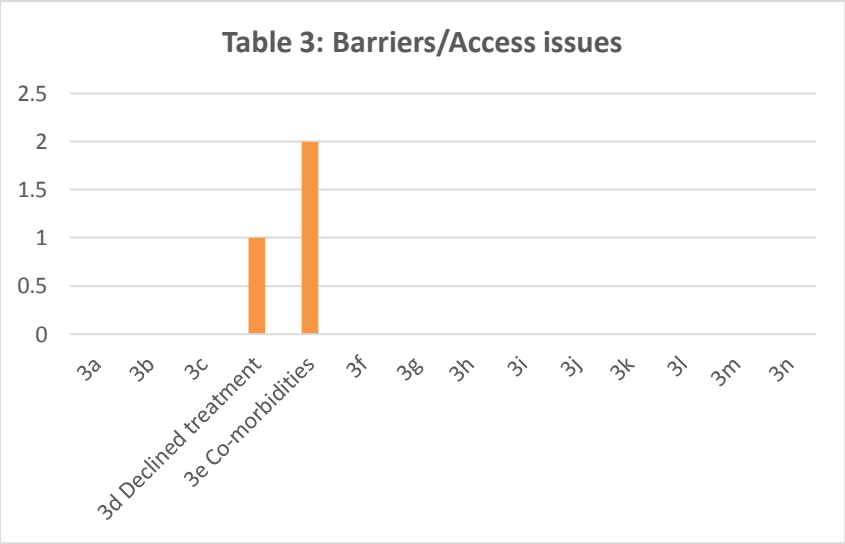
Of the personnel factors identified, communication issues were the most frequent followed by staff knowledge and then emergency response, timely recognition/treatment and documentation (Table 1).



Of the organizational contributory factors, communication again was the most frequent type of contributory factor, followed by guidance/policies and staff organizational knowledge (Table 2).



Of the Access/Barriers contributory factors maternal co-morbidities and declined treatment featured (Table 3).



Summary and Recommendations

The data showed that the women at the greatest risk of major and severe PPH were those women whose labour was induced, whose labour was augmented with oxytocin, who had chorioamnionitis, who had had a previous PPH and those women whose BMI was less than 18 or more than 35. It appears from the case notes that, in general, early identification of the PPH, good team work and adherence to the protocols for its management are normal practice. There was room for improvement in care planning, postnatal and post-event care with regard to observations and documentation.

The rate of induction of labour is the only one of the risk factors that is modifiable by a change in clinical practice. However, Tairāwhiti has an induction rate for the standard primigravida (MOH,

2018) that is the median for the country. If this is reflective of its general induction rate, it may not be particularly amenable to change without incurring other risks.

There is no standard schedule of observations for women post-vaginal birth or post-PPH at Puawai Aroha, although there is one for women post-caesarean section (Hauora Tairāwhiti, 2018). The development and implementation of a suitable schedule may help to ensure the continued timely recognition of PPH and consistency of care. During the review it also became apparent that there is significant variation in the way drug usage is recorded in MCIS, and this should continue to be addressed.

There were delays in escalation in two of the nineteen cases, with delay in access to theatre in one case. The latter problem is probably not avoidable, given the limited theatre resources in all smaller DHBs. Acuity and escalation issues were also identified in two of the four contributory factor analyses undertaken. In addition to reinforcing the importance of early escalation, an explicit resource escalation policy or variance management plan may assist staff in predicting clinical capacity/demand issues, make real-time maternity resource issues visible to the department/ organization and help mobilize the clinical resource required for emergent events.

Another theme that was detected in the contributory factors analysis was the clinical risk incurred when there was a lack of clarity in the roles and responsibilities of core and LMC midwives, especially when there was a transfer of clinical responsibility to the obstetrician. Developing a formal, localised process to delineate the transfer of clinical responsibility and allocate core midwife and LMC midwife roles may be helpful. While midwifery care can be transferred from LMC midwife to core midwife, clinical responsibility is usually transferred between LMC and obstetrician unless the DHB is booking women for primary midwifery care.

Finally, we were shown the proposed introduction of a traffic-light system that uses antenatal and intrapartum risk factors to inform the management of the third stage. This is a positive initiative to prevent PPH rather than improve its emergent management. It also encourages clinicians to continually assess risk factors throughout the continuum of pregnancy, labour and the postnatal period. This system is not entirely evidence-based, so it may be beneficial to introduce and review its performance using pre-identified measures of success, at designated intervals, for example 18 months, as part of an improvement cycle (Institute of Health Care Improvement, 2018).

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APPENDIX 1: Rapid Multidisciplinary Maternal Morbidity Review: Classification of Contributory Factors

Case number: **Type of case:** **Diagnosis:**

Facilitator: **Team:**

Brief summary:

Were any contributory factors present?		**YES**	**NO**			
1 Have any organisational and/or management factors been identified?						
		YES	**NO**		**ISSUES**	**RECOMMENDATIONS**
a	Organisational arrangements of staff e.g acuity, adequate skill mix, Trendcare, staff fatigue					
b	Clinical and organisational knowledge of staff available eg locum, junior, new staff					
c	Policies, protocols or guidelines e.g accessible, used, up to date multiple versions					
d	Escalation, ability to respond to fluctuating acuity					
e	access to senior clinical staff / adequate supervision clinical staff					
f	Treatments and diagnostics e.g organisational infrastructure supports appropriate, timely referral, diagnosis, treatment e.g availability of USS, theatre					
g	Response to emergency					
h	Systems and processes for sharing clinical information between services					
i	Access to test results/accuracy of results					
j	Access to appropriate equipment e.g available equipment, adequate maintenance, quality of equipment, staff training for new equipment					
k	Building and design functionality (e.g. space, privacy, ease of access, lighting, noise, power failure, remote theatre location, woman in appropriate clinical setting					
l	Communication e.g between providers, departments,					

	hospitals,					
m	Other: If other, please state or provide any comments:					
2. Have any Personnel factors been identified?						
		YES	**NO**	**CONTEXT**	**ISSUES**	**RECOMMENDATIONS**
a	Clinical and organisational knowledge and skills of staff during episode of care					
b	Emergency response by staff e.g timeliness, appropriate					
c	Up to date practice, knowledge and skills					
d	Communication between staff e.g clear, appropriate chain of responsibility					
e	Sought help, supervision					
f	Recognition of complexity or seriousness of condition by care givers					
g	Appropriate, timely diagnosis and treatment					
h	Policies, guidance, best practice followed					
i	Documentation e.g clear, decision making and rationale evident					
j	Other If other please state or provide any comments:					
3. Have any access or engagement factors been identified?						
		YES	**NO**	**CONTEXT**	**ISSUES**	**RECOMMENDATIONS**
a	Woman's experience of events available					
b	Engaged with antenatal care					
c	Infrequent care or late booking					
d	Declined treatment or advice Informed decision made and clearly documented					
e	Maternal co-morbidities that impacted on optimal care e.g obesity					
f	Barriers to access/engagement with care related to Substance use					
g	Barriers to access/engagement with care related to Family violence					
h	Barriers to access/engagement with care related to Lack of recognition by the woman or family of the complexity					

	or seriousness of condition					
i	Barriers to access/engagement with care related to Maternal mental illness					
j	Barriers to access/engagement with care related to Cultural factors					
k	Barriers to access/engagement with care related to Language barriers					
l	Social determinants – e.g barriers to access free care related , food and housing security, race, gender					
m	Barriers to access/engagement with care related to Environment e.g. isolated, long transfer, weather prevented transport					
n	Other: If other, please state or provide any comments:					

Was the ICU admission/ severity of morbidity potentially avoidable?

Yes/No

Which contributory factors, if absent, might have potentially prevented admission/severity of illness?

Organisational/management Personnel Barriers

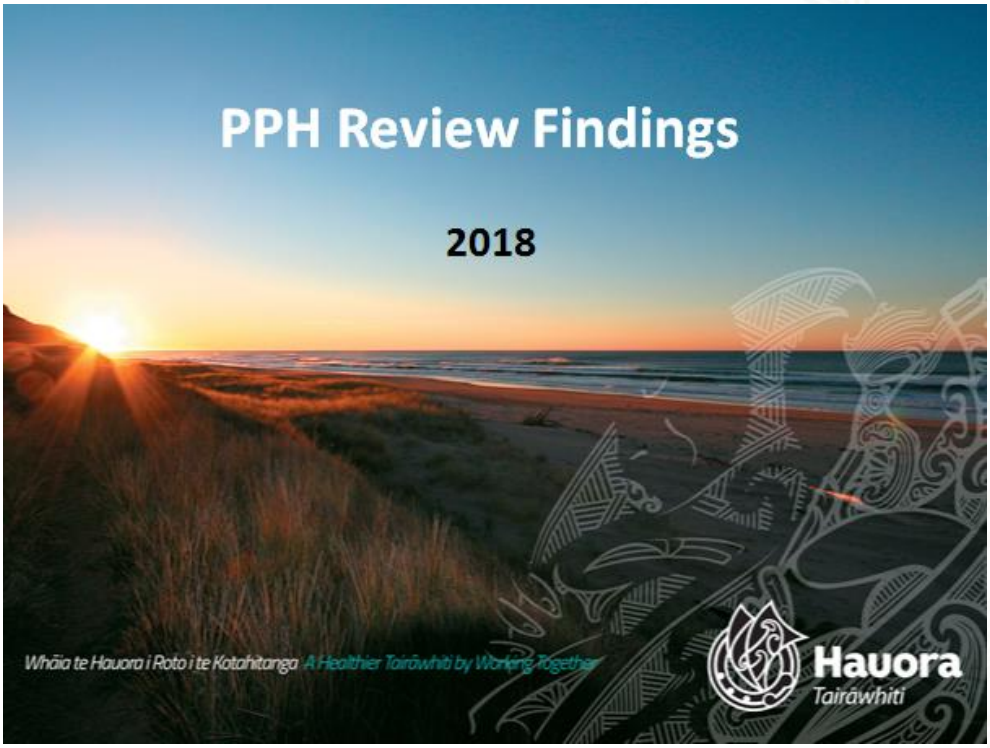
If severity of morbidity was not avoidable, were there any improvements in care identified by the review

Yes/No

Specific Recommendations related to case

Hauora Tairāwhiti

Presentation on findings from the PPH review



Background

- Increase in number of severe PPHs noted with no obvious explanation
- Overall PPH rate 2017/18 15.76%
- 3rd highest rate in NZ in the Health round table stats
- 73 identified PPHs between April 2017- Mar 2018

Clinical Indicators 2016

- Number and percentage of women giving birth by caesarean section and undergoing blood transfusion during birth admission
  Gisborne 3.4% (NZ average 2.9%) 8th highest in NZ

- Percentage of women giving birth vaginally and undergoing blood transfusion during birth admission
  Gisborne 0.9% (NZ average 1.9%) Lowest rate in NZ

Quality activities and actions implemented prior to review

- Memo to all staff with regular updates on situation
- CCM/CD/CEO/Clinical Governance informed
- Weighing all blood loss
- PPH risk assessment tool developed and implemented
- Syntocinon infusion ready for use
- Early recognition and emergency call bell use
- Reminder on use of PHH tab for documentation in MCIS and incident reporting
- PPH audit commenced
- HOD/DOM reviewed all PPHs cases
- Any PPH≥1 litre was case reviewed formally
- Cases and learning outcomes shared at weekly MDT
- 3rd stage management education updates for all health professionals
- PPH guideline updated
- External review organised

Review process

- 2 external reviewers here for 2 days
- Met with HOD & DOM
- Attended MDT
- Reviewed PPH guideline & related guidelines
- Reviewed 'Risk Factors for PPH' assessment tool – traffic light system
- Reviewed PPH cases & learning outcomes
- 19 cases 1500-3760mls reviewed which were the most recent/most severe cases

Results/Findings

- Acknowledgment of the efforts made by staff & management in response to increased massive PPHs – pro-active approach

Review of nineteen case notes where the woman had had a PPH of greater than 1500mls (using MCIS) looked for the following risk factors:

RISK	N=	RISK	N=
Low Hb	1	P0	2
Platelets <80		P5 or more	2
BMI <18 or >35	6	Amphetamine use	
Previous LSCS	2	Chorioamnionitis/PROM	3
Previous PPH	3	Induction of labour	5
APH		Augmentation of labour	4
Placenta praevia		Prolonged labour	1
Polyhydramnios		Forceps or vacuum delivery	
EFW >4kg	2	Retained placenta	1
Multiple pregnancy	1	Acute LSCS	1
Fibroids >5cm			

Number of risk factors present in the women with PPH:

Risk factors	0	1	2	3	4	5
Women	4	6	2	4	1	1

There was no correlation between the volume of PPH and the number of risk factors present, though this may have reflected the appropriate management of the risks.

In just under half of the cases reviewed there was no documented plan for third stage management despite the presence of at least one risk factor.

Timeliness of PPH recognition, the request for extra help, making a diagnosis of the cause, whether or not appropriate treatment (including timeliness) was given and if an appropriate post-PPH management plan was documented and used

Number of PPHs	Timely diagnosis made	Escalation made	Diagnosis of cause made	Appropriate treatment given
19	18	17*	17	15#

- in two cases the SMO attendance was belated despite being aware, and in another case this only occurred when the woman had a further bleed

in one case there was a 4 hour delay in getting to theatre, in 1 other case appropriate treatment was compromised by a failure to communicate the recent hypertensive history and treatment of the woman to the anaesthetist

Post PPH management

Number of PPHs	Post-PPH plan documented	Post-PPH plan used
19	13*	12

*in one case there was no guide as to the observations required

In comparison the PPH audit May to October 2017 found that 91% of women who had a PPH had no record of the plan for the 3rd stage in the MCIS records

Just over 50% of women who had a PPH had had active management

14 case reviews reviewed

Thorough and clear learning points had been identified.

Issue identified	Delay in fluid resuscitation	Insufficient observations	Lack of indicated IV access	Failure to use active 3rd stage	Fluid chart incomplete
N=	1	6	2	1	6

4 cases reviewed using modified contributory factors table

- Severity of the PPH may have been avoidable in 3 cases and unavoidable in the other 1

Contributory factors:

- Personnel factors (communication, staff knowledge, emergency response, timely recognition/response and documentation)were the most frequent
- Organizational factors (communication again, guidance/policies, staff organisational knowledge)
- Barriers and access to care issues were the least frequent (maternal co-morbidities and declined treatment)

Hauora Tairāwhiti

Summary of findings

- Women at greatest risk of PPH or severe PPH were women whose labour was induced, augmented with syntocinon, had chorioamnionitis, previous PPH, BMI <18 or > 35
- Early identification, good team work, adherence to protocols are normal practice here
- Room for improvement in care planning, PN & post-event care – observations and documentation

Recommendations

- Rate of IOL – only modifiable risk factor found
- Need a standard schedule for post VB and post PPH observations
- Consistency in documenting drug usage in MCIS is required
- Early escalation
- Clarity in roles/responsibilities between core and LMCs - TOC
- Traffic light system – positive initiative to prevent PPH, enables continuous risk assessment as tool can be used during pregnancy, labour admission and PN
- Not entirely evidence based – important to monitor performance using pre-identified measures of success over an 18months period

Traffic light PPH risk assessment tool

This is visible in every birthing room and the main office for easy access.

RISK FACTORS TOOL FOR PPH

All women to be assessed on admission in labour with continuous reassessment throughout labour and delivery

Antenatal Risk Factors

Anaemia (Hb<90)	
Platelet count <80,000	Known abruption or recent APH
Refusal of Blood Products	Abnormal placental implantation (praevia)
BMI <18 or >35	Prior uterine surgery
Multiple pregnancy	Uterine fibroids >5cm
Current or previous macrosomia	Five or more previous births
Polyhydramnios	Previous PPH

Intrapartum Risk Factors

Chorioamnionitis/PROM	Augmented labour
Prolonged prodromal phase	Precipitous labour & birth
Prolonged 1st or 2nd stage	Instrumental delivery
Emergency LSCS	Retained placenta

RECOMMENDATIONS:

If No identified risk factors	Active 3rd stage unless physiological requested by woman and labour has remained physiological including having had no narcotics
If 1/2 present:	Active Management -IV sited with CBC and group and hold 5 units Syntocinon diluted in 9.5mls NSaline IV after delivery of infant Syntocinon infusion 40 units/1litre saline at 250mls/hr
If 3/4 present:	Add syntometrine 1ampoule IM at delivery of placenta (if contraindicated contact O&G for discussion of plan to prevent PPH)
If >4 present:	Contact O&G for discussion of plan to prevent PPH

WW,KE, ELT 13/04/2018 version 5

New Postnatal Observations Reference

Maternal Postnatal Observations:

The following is the general expectation for observations; individualised management plans may require additional or more frequent observations

Vaginal birth, no risk factors:

- Immediate post-birth full observations. Blood loss and fundal tone assessed every 15 minutes for the first 2 hours. Full postnatal assessment at least daily while inpatient including (but not limited to) full observations including temperature, blood loss, perineum, output (bladder and bowel), breasts etc...

PPH (following any kind of birth):

- during PPH and until haemostasis achieved – 5-10 minutes BP, P, RR, SpO2, blood loss running total
- Once PPH under control and woman stable – full observations (BP, P, RR, blood loss, fundal tone, and output) half hourly for 2 hours, hourly for 4 hours and then 4 hourly until discharge. Temperatures 4 hourly for first 24hrs post PPH, and then at least once per shift throughout the woman's stay in maternity. Fluid balance chart for at least the first 24hrs post PPH.

PET:

- during stabilisation of moderate/severe hypertension follow "Management of Hypertensive disorders on the Maternity Unit" guideline
- During administration of magnesium sulphate follow "protocol for administration of Magnesium Sulphate" within the "Management of Hypertensive disorders in the maternity unit" guideline
- Once stable – 4 hourly observations to continue until discharged (including BP, P, and output).

Intrapartum fever/sepsis:

- For monitoring in the intrapartum period refer to "Fever (intrapartum)" guideline
- During stabilisation of fever/sepsis postnatally, half hourly observations are required (including BP, P, T, RR, SpO2, fluid balance) until pyrexia and overall condition is improving.
- Once stable – 4 hourly observations to continue until discharged (including BP, P, T, RR, SpO2, and output)

Post-operatively:

- Follow "STANDARDS EXPECTED FOR POST OPERATIVE WOMEN IN MATERNITY (REGARDLESS OF TYPE OF SURGERY i.e., Elective/Emergency LSCS)" which is appendix 1 in the "Post-operative immediate care of women and babies following caesarean section" guideline.

6th August 2018
Iidil Merlini