Huttmaternity Quality and Safety Programme
Annual Report 2018

We would like to acknowledge the contribution to the report from:

- Abby Hewitt, Primary Team Midwife: Hapū Ora
- Alison Grant, Lead Maternity Carer
- Louise Grieve, Maternity Liaison Maternal Green Prescription
- Chris Mallon, Director of Midwifery
- Christine Heiss (PMM Coordinator)
- Dan Taylor (IT) for photography
- Debra Betts, Acupuncturist
- Elaine Newman, QLP Assessor
- Eleanor Martin, Educator
- Elle Ratcliffe, Admin Support, MQSP
- Han Truong, Consultant Anaesthetist
- Hutt Valley DHB Primary & Community Midwives Team
- Jade Walker, Maternal Mental Health Specialist
- Janelle Clare, Social Worker
- Jodi Caughley, Strategy and Outcomes
- Karen Daniells, Clinical Midwifery Manager
- Kylie Byrne, Consumer representative
- Lolohea Tukia, Thriving Core Well Child Tamariki Ora Provider
- Lynn O'Toole, Violence Intervention Programme
- Maternity Clinical Governance Group members (see pg. 81)
- Meera Sood, Clinical Head of Department, Obstetrics and Gynaecology
- Megan Telfar-Yates, Consumer Representative
- Nanai Mua'au Thriving Cores, Well Child Tamariki Ora Provider
- Natasha Jelbert, RN Early Pregnancy Assessment Unit
- Nicky Jackson, MQSP Coordinator
- Sandra Hoggarth, Newborn Hearing Screening
- Sarah Ashill, BirthEd
- Sharon Morse, Business Information Analyst, Hutt Valley DHB
- Tamariki Ora, Well Child Tamariki Ora Provider
- Tracey Mancktelow, Oranga Tamariki Hospital Liaison Practice Leader
- Vicki Jewson/Anne Marie Richardson, Hutt Valley DHB Lactation Consultants
- Vida Rye, Consumer Representative
- Vince Bailey, Quality Service Improvement and Innovation
- Wirangi Luke, Te Runanganui o Te Atiawa

Thank you to the staff and families who have so generously agreed to us using their photos in this publication. Special thanks to Amanda Ashcroft for the cover design.

All care has been taken in the production of this publication. Data was accurate at the time of release, but may be subject to change over time as more information is received. Huttmaternity welcomes comments and suggestions for future reporting.

Published by Hutt Valley DHB June 2019

Message from Maternity

In our 2018 Maternity Services Annual Clinical report, we are pleased to report on the progress of our Maternity Quality and Safety Programme (MQSP) as part of our commitment to providing high quality care to women and their whānau in our region.

Our consumer members have a strong quality focus and a real commitment to improving primary birthing and representing all groups in our maternity community. We are pleased to have expanded our consumer representation to four. Our consumers meet with management every second month, represent consumers on the maternity clinical governance group and have input into other projects. In this reporting, timeframe engagement with other consumers and community groups has been achieved by ongoing drop in coffee groups. We are grateful to this dedicated group of women.

Despite workforce shortages, highlights in 2018 include our initiatives to increase uptake of immunisations in pregnancy through our community clinics, ongoing improvements to reduce our intervention rates and removal of barriers for Māori wahine to engage early with a lead maternity carer. We have also had Board sign off for a long overdue refurbishment and creation of a low intervention birthing room complete with a birthing pool.

We continue to look critically at our performance by placing our service in the context of others through the National Clinical Indicator results (Section Five). Alongside recommendations from the National Maternity Monitoring Group (NMMG) and Perinatal and Maternal Mortality Review Committee (PMMRC), we have identified the areas of our service needing improvement. Our revised two-year plan reflects this with actions to meet our objectives (Appendix Six).

Chris Mallon, Director Of Midwifery

Karen Daniells, Clinical Midwifery Manager

Dr Meera Sood, Clinical Head of Dept, Obstetrics and Gynaecology

Nicky Jackson, Quality Facilitator MQSP

Lay Summary

Quality and Safety @ HUTTmaternity

Hutt Valley Maternity Care

HUTT VALLEY DHB

"Our aim at Huttmaternity is to support the provision of quality maternity care which is woman centred, safe and equitable for all mothers and babies and their whānau"

Our Visions

Ia rangi haere ai tātou ki te mahi me te whakamahara ki a tātou anō he aha te mea hira rawa o tēnei ao.

He kōhungahunga hauora
He kōkā hauora
He whānau hauora
He hapori hauora

Ko ta mātou mahi, he āwhina kia waihanga whānau hou met te whakarite tī matanga tino pai rawa atu mā te reanga kei Aotearoa e haere ake nei.

Everyday we come to work and remind ourselves what is really important in life.

Healthy babies
Healthy mothers
Healthy families
Healthy communities

We help to create new families and the best start for the next generation of New Zealanders.

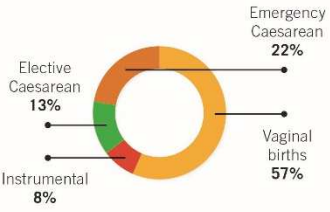
Our Region

Hutt Valley DHB birthing population 2018

1691	732	959
Births	Ist time mothers (Primiparous)	Second or subsequent time mothers (multiparous)

Ethnicities

Births at Huttmaternity 2018



Consumer Survey

1163	426	36.6%
Women surveyed by email 2018	Responses by women	Response rate

OVER 90% **women were satisfied or very satisfied with the care from birthing unit staff during labour and birth.**
(Hutt Maternity Consumer survey)

Workload 2018

1321	3279	1490	1691	3490
Early Pregnancy Assessment	Secondary Care Clinic	Maternity Assessment	Birth Events	Community Team Visits

Feedback

"Staff (midwives and delivering obstetrician) were so caring and warm and responsive. It felt like highly personal care".

"The ward staff were very friendly and made me feel comfortable to ask questions and seek support"

"Level of care given by all staff for Gestational Diabetes right through to delivery I felt very well looked after"

"Provided the best care possible to both myself and my baby and providing the same carers where possible"

Improving our environment

Whānau room makeover and painting supported by Bunnings

Makeover organised by consumers to improve the waiting area for whānau. The makeover included new furniture, curtains and painting. There is also a noticeboard with photos of babies born at Huttmaternity.

Pop up immunisation clinics

This initiative was created to increase the uptake of Flu and Whooping cough vaccinations for pregnant women in the Hutt Valley, by taking pop-up clinics out into the community. The service was set up by the Early Pregnancy Assessment Unit staff, with the support and involvement of Regional Public Health, and involved setting up informal clinics once a week, in public spaces distributed from Upper Hutt down to Wainuiomata. We also attended Te Rā o Te Raukura, a local health promotion festival which has been running annually for 23 years. We plan to go bigger and better in 2019, with a specific focus on reaching our Māori and Pasifika women in local Marae and community centres.

Marae based clinic

Hapū Ora - A service designed in collaboration with Te Runanganui o Te Atiawa and Hutt Maternity. This is a drop in clinic based at Waiwhetu marae. The primary aim is to increase early engagement with a lead maternity carer in the first trimester as this is known to help reduce inequity in maternity care. Hapū Ora also offers women long acting reversible contraception in the postnatal period and links into other services such as Tamariki Ora and breastfeeding support based at the marae.

Maternal Mental Health Awareness

Education on our maternal mental health for midwives held to improve understanding of the pathway and services for women experiencing maternal mental illness. This included dealing with trauma and a cultural view of mental health.

For women we produced posters to encourage them and their family to get help if they are feeling low.

From our Consumers

During this reporting period we were sad to lose Clare from the consumer team. However, two new consumers joined us, Tiare and Kylie, who have brought fresh and different perspectives.

The Whānau Room makeover that we were given the go ahead on in early 2017 was completed in the first half of 2018 with help from our local Bunnings store. It was a slow and frustrating process, but the room is now a much more pleasant space for whānau to use. We have received lots of positive feedback about the makeover and the current consumers are checking up on the room when they can, to restock it with toys and make sure it is kept tidy and as fresh as possible. We also put out requests for photos of babies that have been born at Huttmaternity, and have a noticeboard with these displayed in the Whānau room. This is another way of connecting with whānau and sharing in the joy of the arrival of their pēpē/baby.

We have continued to work on various methods of gaining consumer feedback. We held another morning tea, this time at Greenstone Doors in Lower Hutt. We have also met with a mama who had raised with Huttmaternity the many challenging and distressing issues which she experienced during her birth and beyond. We are supporting her to share her story more widely for professional development purposes.

The collection of women's feedback is a main focus of our group because it is through this that we know Huttmaternity can offer better support to the women and whānau in our community. It is clear to us that there is still a lot of work to be done. Huttmaternity is working on improving the way follow ups to the feedback surveys are done. There are some areas that we would particularly like to focus on, such as breastfeeding, birth trauma and pregnancy/baby loss.

The idea of creating a "Friends of Huttmaternity" group came about in 2018, but has not progressed any further because it is dependent on there being someone who has the time to drive this.

The Birthing Unit Design Spatial Evaluation Tool (BUDSET) was carried out again (after having been first carried out in 2015). It was apparent that not many changes had been implemented so we hope to see the majority of these recommendations actioned in the very near future.

While we have been fully supported by the staff within Huttmaternity, the MQSP Facilitator and Administrator, Clinical Midwifery Manager and Director of Midwives, we however feel we need to address the fact that those at the executive and Board level within the DHB may see our consumer contribution as merely "ticking a box". This has been somewhat frustrating and has had some of us questioning our position.

Vida, Megan and Tiare, Kylie

Meet Tiare

My family consists of my devoted partner and father of my children Joe and our four beautiful children (two boys and two girls). Kayden is my eldest and is now nearly 18. My eldest daughter Amber is 16 turning 17 soon and then my youngest girl Aria-Praise who is nearly three years old. Jovani is my youngest and is currently 15 months.

I was encouraged by my most recent midwife Abby Hewitt to become a consumer voice for which I am very privileged. I too, alongside other consumers, feel strongly that all expectant mothers should have support from all services available as pregnancy journeys are wonderful but from experience, they can be very difficult and emotional. I feel with my experience from all my pregnancies, labour and post-natal, that I can bring value to improve some of the services that are currently available. And that by having a voice for all the mothers who feel they aren't listened to, as it is quite important to empower them. I do hope my input can help make all women from all different walks of life and cultures feel that there is support and someone speaking on their behalf.

I have some ideas for our consumer group to look at consent for partners staying and also making a postnatal DVD with all the required information. Maybe information on a USB stick so people can look at it in the privacy of their own home. Maternal mental health is so important, if it goes undiagnosed it's terrible, it can break relationships and sometimes it can all be fixed with support.

Meet her whānau

"Ko te whaea te takere o te waka."

(Mothers are like the hull of a canoe, they are the heart of the family.)

Hutt Valley DHB Vision, Mission and Values

Our Vision

Whānau Ora ki Te Awakairangi

Healthy people, healthy families and healthy communities

Our Mission

Working together for health and well-being

We commit to work cooperatively, as an active part of the health sector and the Hutt Valley community.

Our Values

Huttmaternity Vision

Everyday we come to work and
remind ourselves what is really important in life:

healthy babies
healthy mothers
healthy families
healthy communities

We help to create new families and the best
start for the next generation of New Zealanders.

HUTTmaternity
Hutt Valley Maternity Care

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a tātou anō he aha te mea hira rawa o tēnei ao

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He hāpori hauora

Ko ta mātou mahi, he āwhina kia waihanga whānau
hou me te whakarite tīmatanga tino pai rawa atu mā te
reanga kei Aotearoa e haere ake nei.

HUTTmaternity
Hutt Valley Maternity Care

Contents

Executive Summary

It is a privilege to present our sixth report of the Maternity Quality Safety Programme (MQSP) at Hutt Valley District Health Board.

In 2018 we moved forward with several work streams reflecting localised needs and with consideration to the priorities and recommendations from both the National Maternity Monitoring Group (NMMG) and the Perinatal and Maternal Mortality Review Committee (PMMRC).

Highlights have been the ongoing support of Hapū Ora run by our Community Midwives Team. This was set up in partnership with the Rununga in an effort to reduce inequity for our Māori wāhine and whānau. Hapū Ora facilitates timely referral to other services such as Lead Maternity Carers and Well Child Tamariki Ora, and aims to optimise outcomes for wāhine and her pepi. The increased number of women accessing long acting reversible contraception and immunisations in pregnancy for influenza and pertussis are good examples of taking services to an accessible place for wahine. Outreach pop up immunisation clinics at local supermarkets, malls and libraries and WINZ offices have improved our uptake of immunisation and are planned for the next flu season also.

We have delivered on a broad range of our MQSP objectives including raising awareness of our pathway for maternal mental health through education to our midwife community. A sub-regional poster campaign promoted the need for women to address antenatal and postnatal distress and who they could contact. Consultation with a consumer who shared her journey informed this campaign which was communicated through our social media.

Our review of the 2018 clinical indicator data identifies our induction and caesarean section rates for standard primiparae (low risk first time mothers) as ongoing areas for investigation but some interventions showing a downward trend. Other streams include ongoing work on improving the journey for women with high BMI's through our service with the development of a new model of care to support healthy weight gain in pregnancy.

Huttmaternity is an incredibly driven and supportive team who have worked tirelessly this last year despite compounding stressors, particularly whole of maternity workforce shortages. They have still remained focussed to provide the best care for women and their whānau. Whilst challenging, this has provided opportunities to explore different ways of working and we are proud to be members of this team.

I look forward to 2019 and to see how maternity quality sits within the new work plan being undertaken by the Ministry of Health so that we may continue to improve and develop the outcomes in our maternity service for our women, their babies and whānau. It is pleasing to see that addressing workforce issues is a high priority at Ministry level also.

Chris Mallon
Director of Midwifery

Meera Sood
Clinical Head of Department

Purpose

The purpose of the Huttmaternity Maternity Quality Safety Programme (MQSP) Report is to:[1]

- Assess and report on our performance over the previous year.
- Provide information about the quality improvement work underway in the Hutt Valley area for women living and birthing in our district as well as the maternity workforce.
- Provide the Ministry of Health with the contractually required information as set out in Section 2 of the Maternity Quality Safety Programme (MQSP) Crown Funding Agreement Variation.
- Demonstrate self-audit of the New Zealand Maternity Standards.
- Provide feedback to the NMMG on their recommendations.
- Benchmark against New Zealand Maternity Clinical Indicators.
- Document Huttmaternity's progress towards meeting the MQSP Work Plan objectives in 2019.
- Describe the work planned to improve the quality and safety of maternity services delivered in the 2018-2020 period.

1. 17th Omnibus Variation to the 2012/13 Crown Funding Agreement, July 2017 Ministry of Health Wellington.

Section One: About Hutt Valley District Health Board

Our Population

Te Awakairangi is spread across 916 square kilometres, covering the Lower Hutt City and Upper Hutt City local authorities. For the 2018/19 years, Hutt Valley District Health Board has a projected population of around 149,680 people, with 17.4% of our population identifying as Māori, 7.9% as Pacific, and 11.7% as Asian. This is a slightly higher proportion of Māori and Pacific people compared to the national average and fewer people in the 20-39 age group. (MOH 2019)[1]. There are recognised health disparities for several population groups due to accessibility, social determinants of health, cultural responsiveness and current models of care. Women can find it hard to access services or to know how to manage their health if services are not culturally competent. We acknowledge our responsibility to design and deliver maternity services that are accessible and responsive to our population's needs, in line with the New Zealand Health Strategy.

1. http://www.health.govt.nz/new-zealand-health-system/my-dhb/hutt-valley-dhb/population-hutt-valley-dhb *Accessed 6/5/19*

Quality - at the heart of what we do

Our District Health Board (DHB) continues to strive for the highest quality health and wellbeing services for our local population. The Clinical Services Plan sits alongside the Wellbeing Plan, Pacific Health Plan and Māori Health Strategy to inform Our Vision for Change. These documents focus on addressing the wider determinants and environmental factors that impact on wellbeing for our community and the commitment to accelerating Māori and Pacific health equity.

We would like to acknowledge the above information has been sourced from the Hutt Valley DHB Clinical Services Plan 2018- 2028.

Full copies of the Hutt Valley DHB Clinical Services Plan can be found at: http://intranet.huttvalleydhb.org.nz/resources/reports-publications/hvdhb-clinical-services-plan-20190213-v15-web.pdf

Section Two: Maternity Service Configuration and Facilities

Maternity Services

In 2018, Huttmaternity was the only birthing facility in the Hutt Valley until July 2018 when we welcomed the opening of the new primary birthing unit (PBU) "Te Awakairangi'. Hutt Valley DHB provides both primary and secondary care facilities for a largely urban population of approximately 149,600[1,2]. Huttmaternity supports approximately 1700 births per year. The following data relates to the DHB facilities only.

https://profile.idnz.co.nz/upper-hutt/population-estimate accessed 7/5/19
https://profile.idnz.co.nz/hutt/population-estimate accessed 7/5/19

Our facilities include our Birthing Suite, Antenatal & Postnatal Unit, and a Maternity Assessment Unit. We also provide a community based midwifery service.

Table 1: Births in New Zealand and Hutt Valley by DHB and PBU 2014-2018

	2014	2015	2016	2017	2018
Births in NZ (NZ Statistics) [1]	57242	61038	59430	59610	58020
Births at Huttmaternity	1791	1856	1871	1848	1691
% of all NZ births in Hutt	3.1%	3.0%	3.1%	3.1%	3.1%

Lead Maternity Carers (LMCs)

Until January 2018, women in the Hutt Valley DHB could choose a midwife or private obstetrician LMC. However, the three obstetrician LMCs ceased taking new private clients in early 2018, meaning Hutt Valley women wanting an obstetrician LMC must now travel to the neighbouring CCDHB. Current Hutt Valley LMCs have an access agreement to use the facilities at Huttmaternity and/or Te Awakairangi (Primary birthing unit). For women unable to access the services of a LMC midwife or private obstetrician, the DHB Huttmaternity midwifery team provide this service (there are no GPs practising obstetrics in the Hutt Valley).

LMC midwives: At the beginning of 2018 there were thirty-five community based case-loading midwives with primary access agreements providing lead maternity care. Over 2018 there have been nine LMC midwives leave practice for reasons varying from family, sustainability of the nature of 24/7 practice, remuneration or moving out of the area.

LMC private obstetricians: In this reporting period there was one LMC obstetrician (also employed by the DHB). For women who chose a private obstetrician as their lead maternity carer, midwifery care was subcontracted either by the hospital and/or community based midwives, or by private arrangement with LMC midwives.

Women requiring secondary care services received clinical oversight by hospital obstetricians with midwifery care from LMC midwives or our community midwifery team alongside, as outlined in the Guidelines for Consultation and Referral (MOH 2012).

1. https://www.stats.govt.nz/information-releases/births-and-deaths-year-ended-december-2018 *Accessed 30 April 2019*

Workforce

In our midwifery workforce, there continues to be a reciprocal flow between those in LMC practice and those employed by our DHB. This enhances a collaborative working environment and develops important skill sets across the midwifery workforce.

The core midwifery workforce has come under particular pressure over the past few years. It is estimated the vacancy for midwifery staff in 2018 was 8.6 full time equivalent (FTE) which is below comparative secondary care DHB maternity services.

A staged solution was initiated that enabled Huttmaternity to deliver the midwifery care components of its secondary maternity service specification where historically community based self-employed midwives had been fulfilling this. Handover to the secondary team has increased however secondary care midwifery FTE allocation needs to be reviewed to support this change. A creative solution involved the establishment of a Theatre Midwifery Team (see pg.86) and the Primary Intrapartum Care Team to cover the increased workload over the December/January period. This is a national trend as LMC midwives take on fewer women over this holiday period.

The maternity service includes the following clinical staff:

- Director of Operations, Surgical Women's and Children's
- Clinical Head of Department, (CHOD) Obstetrics and Gynaecology
- Director of Midwifery (DOM) 0.5FTE
- Clinical Midwifery Manager (CMM) 1.0FTE
- Associate Clinical Midwifery Managers (ACMM) (four) 3.0FTE
- Midwifery Educators (two) 1.0FTE
- Lactation Specialists (two) 1.5FTE
- Obstetrics and Gynaecology Consultants (six), Registrars (five), Senior House Officer (one)
- A core DHB employed team of approximately 42 Midwives, three Registered Nurses, two Enrolled Nurses giving 27.0 FTE and nine Healthcare Assistants 6.6 FTE
- Casual pool of 20 Midwives and one Nurse
- Administration 2.9FTE

2018 Administration staff enjoying morning tea after winning……. from left to right
Jill Gagley, Liz Train, Karen Daniells (Clinical Midwifery Manager), Ngarie Roil and Michelle Hoare.

A unit such as ours could not function without the support of all staff hospital wide, from supplies to building services, catering and our wonderful cleaner Lovey, to name but a few. Special thanks to our administrative team for their hard work and support managing all our bookings and clinics. In 2018 we farewelled Liz Train after 27 years of service and welcomed Rachel. We couldn't do it without you.

Karen Daniells, Clinical Midwifery Manager.

Maternity Unit

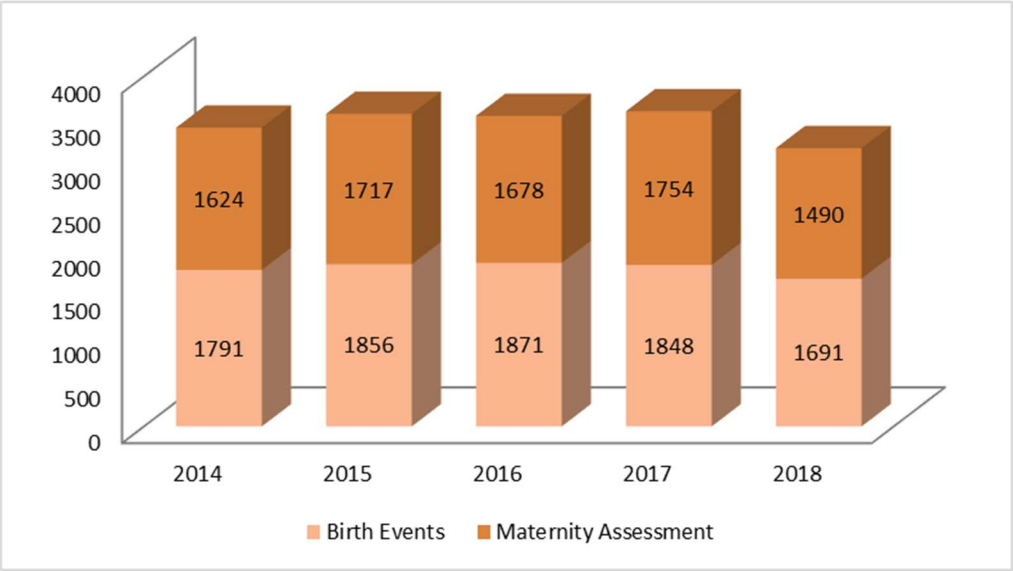
Birthing Suite

Birthing suite is staffed by core midwives providing midwifery care for DHB primary and secondary care women, as well as those women under a private LMC obstetrician. The midwives provide emergency care 24 hours a day, seven days a week and support LMC midwives as required. Medical staff, consisting of a Consultant Obstetrician, Senior Registrar or House Officer are rostered to cover an on call system 24 hours a day. We aim to have one more Senior Medical Officer to comprehensively to support our services.

Table 2: Births at Hutt Valley DHB Facility

	2014	2015	2016	2017	2018
Single Liveborn	1752	1823	1843	1818	1666
Single Stillborn	12	13	7	11	7
Twin Liveborn	27	20	22	17	17
Twin Stillborn				2	1
Total births at facility	1791	1856	1871	1848	1691

Figure 1: Maternity Unit and Birthing Suite Maternity Assessments[1] and Birth Events



[1] Maternity Assessments are acute, non-delivery assessments in pregnancy, undertaken within the birthing unit environment (excludes assessments undertaken in the Maternity Assessment Unit MAU on the ground floor).

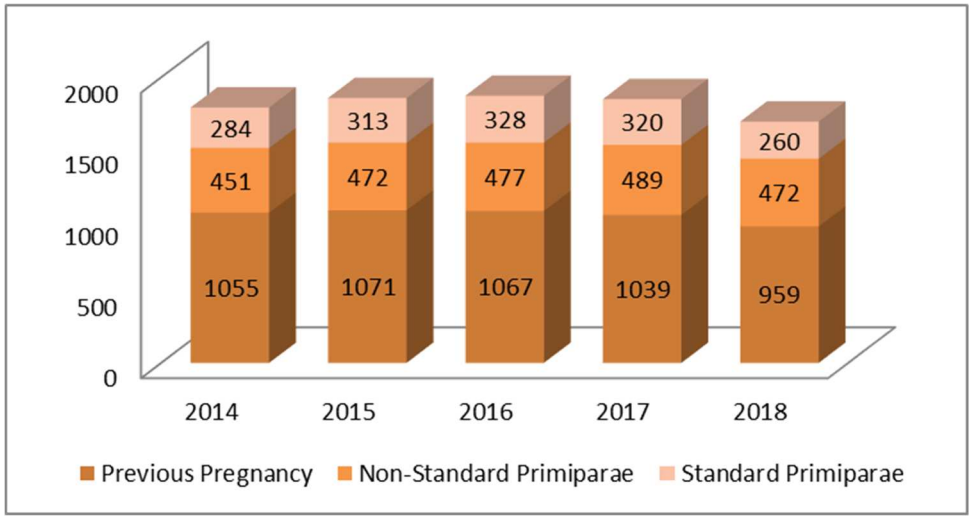
Our analysis of the data by parity, age and ethnicity show little change in the demographic of the birthing population at Hutt Valley DHB. Our birthing population by DHB consists of NZ European 42.3%, Māori 22%, Asian 8%, Pacific Island 9.6%, Indian 9.2% and Other 8.9%.

The number of women who can be categorised as Standard Primiparae[1] has decreased since the introduction of the primary birthing facility in our region as women who are low risk choose to birth there. The definition are women who meet all of the following criteria:

- No previous pregnancy of 20+ weeks, and
- Maternal age 20-34, and
- Cephalic presentation, and
- Singleton, and
- Term gestation, and
- There have been no recorded obstetric complications (that are indications for specific obstetric interventions).

[1] Ministry of Health. 2019. *New Zealand Maternity Clinical Indicators 2017* Wellington: Ministry of Health pg. 8 accessed 15 May 2019

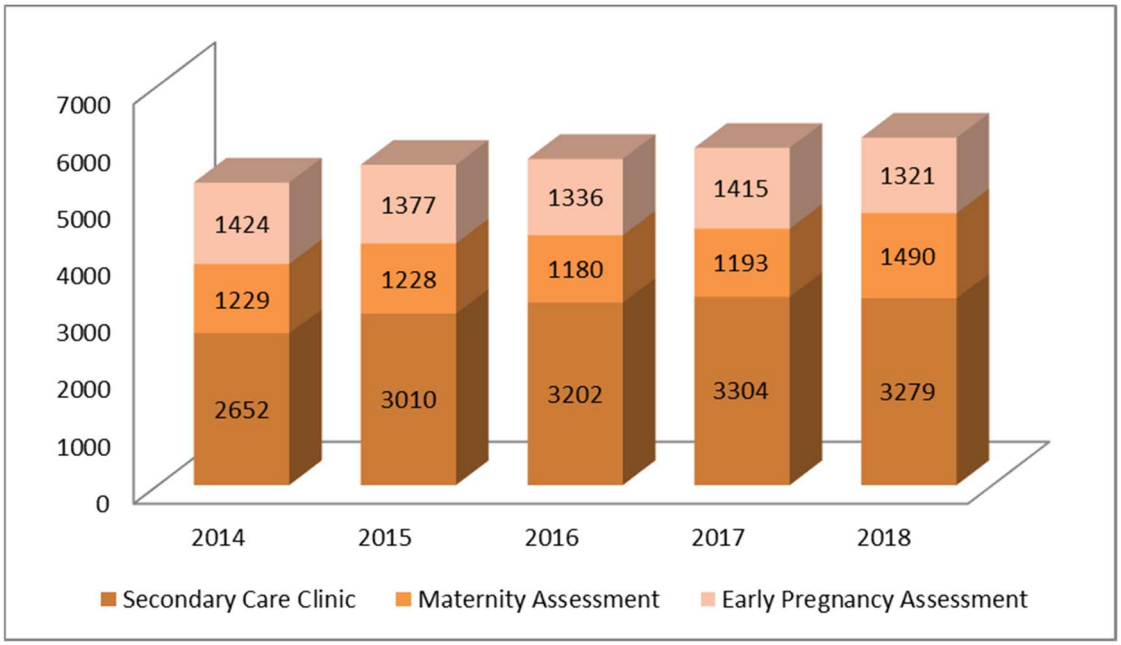
Figure 2: Births in Hutt Valley DHB Facility by Parity



Maternity Assessment Unit (MAU)

MAU is an acute assessment area, open Monday to Friday, as well as an outpatient facility. The unit incorporates the Secondary Care Obstetric Clinics, Maternity Assessments and an Early Pregnancy Assessment Clinic (EPAC).

Figure 3: Maternity Assessment Unit (MAU) Total Events



Maternity Assessments in the MAU include acute assessments of women who are stable enough to be seen in an outpatient setting. Those that require assessment outside of MAU hours or need a higher level of care are assessed in the Maternity Unit on level 2 and are included in the Figure 3 statistics. Examples of this include women with pre-eclampsia for day case assessment, women with reduced fetal movements, or those requiring Anti D administration etc.

Early Pregnancy Assessments include women experiencing pain and/or bleeding in early pregnancy who are seen for assessment and management, less than 20 weeks' gestation.

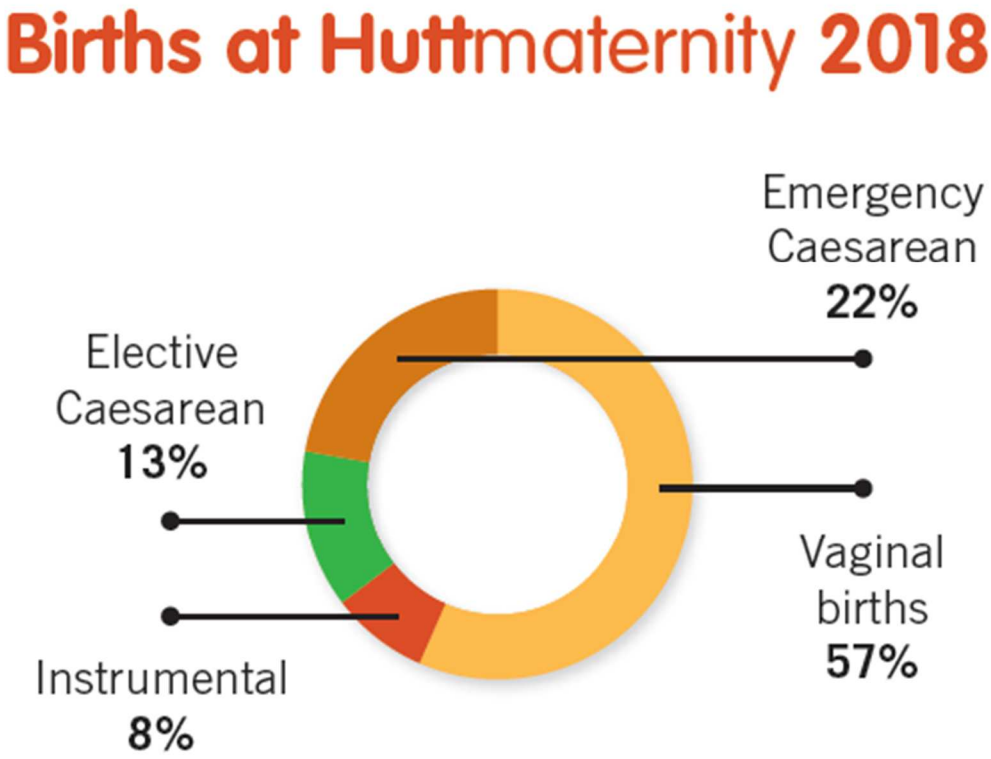
Secondary Care Clinic episodes refer to women seen by a member of the Obstetric Team in the Obstetric Clinic in MAU. These women have been referred under the Guidelines for Referral and Consultation (2012) for an obstetric opinion.

There continues to be an increasing trend of referrals to the Secondary Care Clinic. Childbearing women have increasingly complex maternity needs including those associated with increasing rates of maternal diabetes (MOH 2014)[1], advanced maternal age (MOH 2015)[2] and elevated Body Mass Index (OECD 2014)[3]. This may in part account for this increase.

Births by Type of Delivery

The following figure breaks down the births in 2018 by type of birth. Our rate of caesarean section is increasing and we have incorporated this in our Maternity Quality and Safety plan projects. Please see page 112 for further detail.

Figure 4: Births by Type of Delivery



Te Awakairangi primary birth unit

In the new birthing unit there were 98 births between July and December 2018. Ten women were transferred to birth at Hutt Maternity.

Huttmaternity Community Midwives Team (CMT)

In response to a fluctuating population and midwifery workforce needs in the community, our service continues to include primary community maternity care. The antenatal care is provided in home or clinic with the intrapartum service being provided by core midwives in the birthing suite. The team also provides some antenatal and all postnatal care for those women under our Secondary Care Obstetric team without an LMC midwife. The team is referred to as our Community Midwives Team (CMT) or our Primary Midwives Team (PMT).

I wanted to get the Hutt Hospital team. I thought I would feel more looked after and put at ease and I thoroughly enjoyed all of her knowledge and how she approached me. I felt extremely comfortable. The reassurance was really good and really involved right through, especially at the end. She was always checking up on me and asking about my mental health as well and always informing about all the services and what I could do. I felt really informed.

Our client demographic:

The CMT provides a maternity service for some of the most vulnerable women in our community. Wider ranging social complexity increases their obstetric risk and requires additional resources to enable timely access to care. Additional effort is also required to arrange multi-disciplinary professional input and develop plans that deliver wrap around services involving cross sector collaboration. The CMT attend our fortnightly Vulnerable Women and Unborn Baby Group Meetings as able.

Other women come to the team for various reasons which include:

- Lack of available LMCs

Preference for Hutt Valley DHB midwives over LMCs:

- Lack of eligibility for free maternity care due to residency status
- English as a second language
- Late booking
- Lack of engagement with other maternity or health care
- Vulnerable women with complex social needs

The CMT endeavour to remove barriers to women accessing robust and holistic maternity care. We hold our clinics within the communities we serve, as well as offering home visiting when required. Women are provided with continuity of care whenever possible throughout their antenatal and postnatal period.

Hapū Ora:

Abby Hewitt, Primary Maternity Team Midwife at Hapū Ora

Hāpu Ora remains an unfunded service, but continues to meet the goals of the National Health Strategy by providing better access to maternity care for hāpu mama and pēpi in Te Awakairangi (Hutt Valley).[1] Over the last year the service has gained visibility within the community and is now offering a Jadelle insertion service (long term contraception) and a regular immunisation clinic. Strong relationships have been developed with Tamariki Ora and other Māori social service providers. Hāpu Ora has developed the ability to offer joint visits with the Maternal Mental Health service when required. Due to increasing clinical and social complexity in our population and a 25 percent decrease in LMC workforce locally, the Community Midwifery Team has experienced an overall increase in workload.

They have also experienced extraordinary peaks in workload due to the abrupt loss of LMC midwives and lack of LMC availability during holiday periods during 2018. Dedicated funding is required to maintain and grow this early intervention service. We are currently in the process of developing feedback avenues that would work for the demographic that attends Hāpu Ora. There is potential to grow this service in both hours available and other locations, but it would require a funding commitment to improving maternity care outcomes for Māori in Te Awakairangi.

Of the 136 new contacts over the months of January to December 2018, 84.5% were with women who identified as Māori or Pasifica, with Māori 79% of all contacts. Also of note, 74% were under twenty-five years old. The following table shows the activities and referrals to local providers.

[1]Minister of Health. 2016. New Zealand Health Strategy: Future direction. Wellington: Ministry of Health. Pg. 16

I saw Abby at Hāpu Ora. It was comfortable, you'd walk in and it was almost like a home with the couches in the reception area and they had a receptionist there that was very welcoming. It was quite relaxed which was really good.

Table 3: Hāpu Ora activities and referrals to local providers

Pregnancy tests	2
Pre-conception advice	
Folic Acid/Iodine given	12
Iron therapy given	8
Nutrition/Activity advice discussed	10
Smoking cessation referrals	9
NET referrals	10
Kokiri Marae Social Services referrals	1
Lactation Support Services	5
Well Homes Referrals	4
Connected to Tamariki Ora	15
Contraception advice	20
Depo Provera given	1
Jadelle inserted	7
Condoms given	5
Linked to a LMC	4
Referred to GP	4
Immunisation Services	13
Safe Sleep Education	20
Pregnancy education referral	4
Power to Protect training	
Car seat safety discussion	12
Antenatal check	130
Postnatal check	3
Greenstone Doors referral	2
NRT given	4
Bloods done on site	15

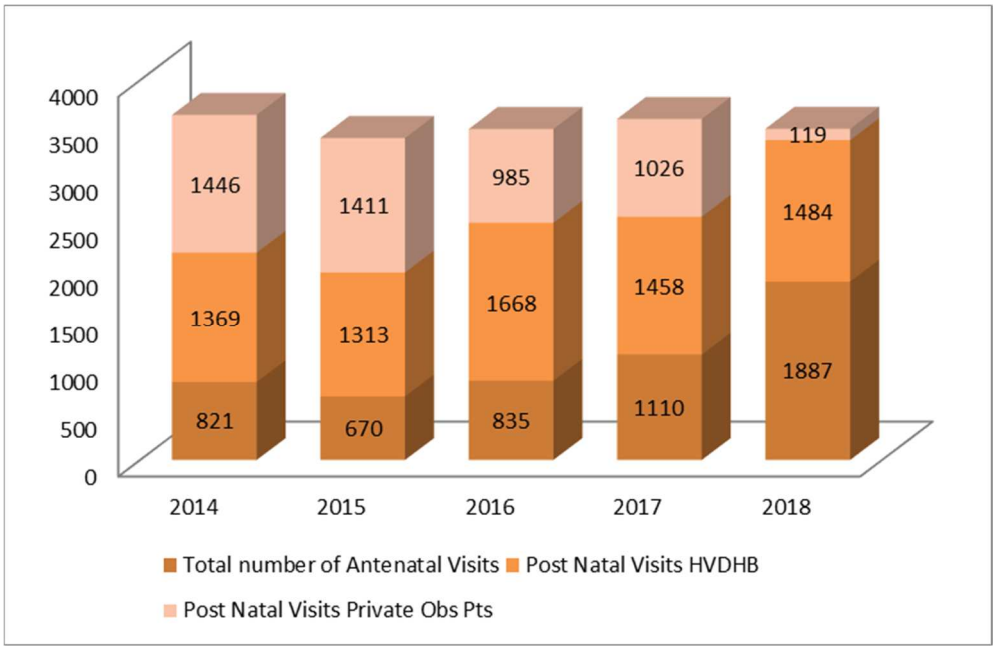
Community Midwives Team Workload:

The figures below give an indication of the number of women booked with the CMT each month because they do not have a LMC midwife. This includes women under the PMT and Secondary Care Team.

The following table demonstrates the actual visits by our Community Midwives Team. Antenatal Visits include full Community Midwives Team LMC cases and bookings.

To note:
a) Not all women continue care postnatally with the Community Maternity Team. Some women move out of area, or are not within our catchment for postnatal care. Some women may also have transferred to a private LMC midwife for postnatal care
b) There is a fluidity of the population base between Hutt Valley DHB and our neighbouring DHB's (Capital Coast DHB and Wairarapa), and also women who reside outside our DHB domicile. This means there is a fluctuating number of women who may commence care here, but end with another provider outside the area, or transfer into our services part way through their journey.
c) Hapū Ora clinic events as above are not included in this workload.

Figure 5: Total number of Community Midwives Team Visits



"The hospital midwives were fantastic, holding bubs while I showered and supporting me emotionally when times were tough."

SUDI Prevention Programme on the Postnatal Ward

The development of a SUDI prevention programme to be implemented on the postnatal ward is currently in development. This quality improvement initiative was supported through the Fundamentals of Improvement course offered by the DHB. It was co-designed with staff from the maternity unit as well as the Moe Ora mō ngā pēpi programme coordinator. The programme will offer First Days Pepi-Pod to all woman on the postnatal ward to use as needed for their stay. It will also identify eligible babies and then provide them with a wahakura or a Pepi-Pod to go home with. This programme will launch in July 2019. The aim of this programme is to ensure no at risk babies leave the postnatal ward without appropriate protection from SUDI.

Lactation Service

The service offers breastfeeding support to mothers and babies on the Postnatal Unit, Special Care Baby Unit, and also within the main hospital campus as requested from General Surgical and Gynaecological Ward, Children's Ward and ED. In 2018 we had 31 referrals from other departments. All clinics have had significant increases.

Table 4: Lactation Consultant workload by Clinic Type

	2015	2016	2017	2018
LSINPT – Inpatient Assessment	557	560	320	406
LSOPD – Outpatient Assessment	354	353	264	369
LSOTH – Assessment other DHB Department	23	11	15	5
LSSCBU – Special Care Baby Unit Assessment	164	104	123	362
OBANKL – Maty Ankyloglossia	258	171	64	37

Breastfeeding Support Clinic

The BF support clinic is available to any mother and baby with BF difficulties. Outpatient appointments are offered up to six weeks postnatal. We accept written or email referrals from the LMC (Lead Maternity Carer) or self-referrals. We also see women antenatally who have had previous BF issues. We saw 406 outpatients, of which a third were follow-up visits which were arranged at our discretion based on clinical need.

If breastfeeding issues are thought to be related to the presence of a tongue tie, we have an assessment pathway to determine whether intervention is necessary. At Huttmaternity our frenotomy rate is low; 1.5% over the 2018 year.
Huttmaternity are pleased to report we are operating well within the accepted incidence of tongue tie which has a quoted incidence of 2-5% [1,2]

I was also referred to the breastfeeding support 'cos it was huge for me as well. Annemarie, I saw her at the hospital. I saw Rachel at Hāpu Ora. Abby said "Hey Rachel is here today." I struggled with all my babies, actually not Kayden. She was really good and showed me how.

[1] Hogan M, Westcott C, Griffiths M. Randomised controlled trial of division of tongue tie in infants with feeding problems. J Paed Child Health 2005 41
[2] Ballard JL, Auer CE, Khoury JC. Ankyloglossia; Assessment, incidence and effect of frenuplasty on the breastfeeding dyad. Paediatrics 2002 110

Baby Friendly Hospital Initiative

We are continually working towards the next accreditation date to maintain our BFHI. We are due to be audited by the New Zealand Breastfeeding Alliance in 2020.

This is ongoing in respect of education for all staff including doctors. We submit monthly statistics online to the NZBA. As well as BF classifications on discharge from hospital, they monitor our CS rate and late pre-term/low birthweight babies managed on the postnatal ward. In 2018, our exclusive breastfeeding rate at discharge was 78%.

World Breastfeeding Week

Vicki Jewson and Anne-Marie Richardson, HVDHB Lactation consultants

Breastfeeding Education to Women

Over 2018 we put time into rewording and updating our BF Quick reference guide, The Orange Card and our flip chart, all containing useful and relevant information for mum and the family about breastfeeding.

In line with current evidence, we have introduced the Thompson Method of positioning and latch. This physiological, less medicalised method works very well and is contributing towards more comfortable feeding, with less nipple trauma.

We have created a new breastfeeding/expressing room for hospital staff to use. It is a comfortable, private and relaxing space with a lockable door.

In August it was World Breast feeding week. This year's theme was "Breastfeeding, the Foundation of Life", focusing on the prevention of poverty and the health and economic benefits of breastfeeding. We set up a display in the main hospital foyer with interesting and motivational breastfeeding stories, photos and factual information reflecting the theme.

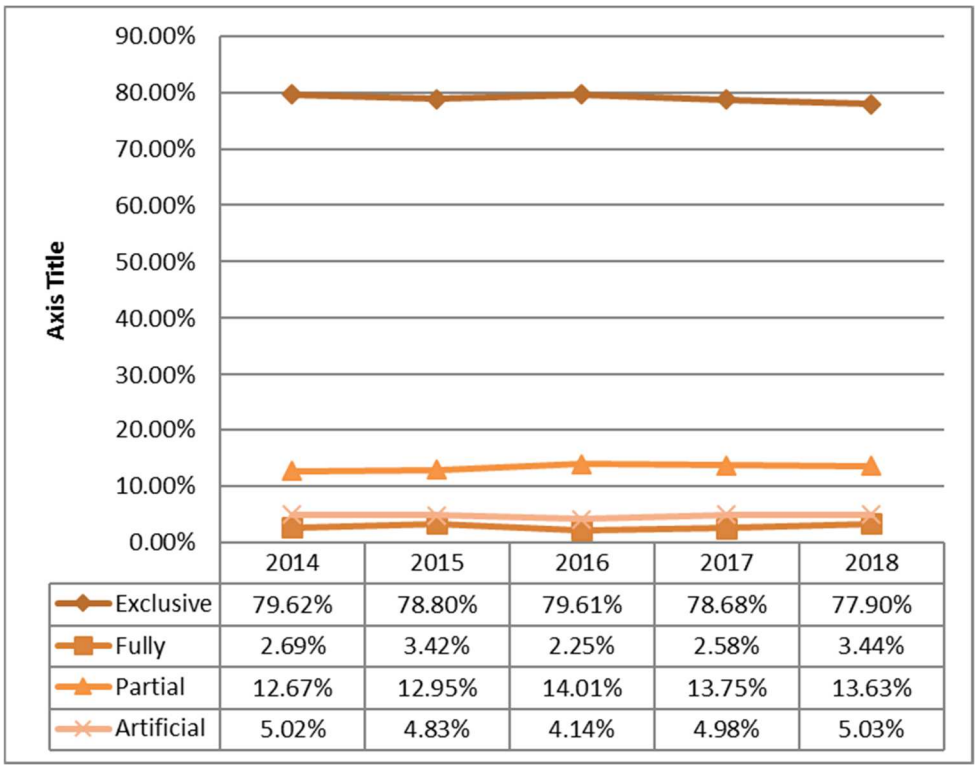
BirthEd is the provider arm delivering antenatal education. In this reporting period, all standard twelve-hour antenatal courses had two hours of breastfeeding education. This includes courses for women under 24 years and their support persons, and courses held on a marae. Women in Hutt Valley DHB region also have the opportunity to access an add-on breastfeeding course run for three hours each month. These courses are taught by breastfeeding specialists with the content and resources shared with the DHB and subject to audit by NZBA.

Infant Feeding Status

Infant feeding status is recorded at time of discharge from our facility. For some, this is following planned early discharge from the Birthing Suite, for some following an inpatient stay in our Postnatal Unit. Babies admitted and discharged from the Special Care Baby Unit are excluded from the data presented here.

"The lactation consultants were amazing and helped me through a very rough start feeding. They even asked me to let them know how things were going after my baby's tongue clip at 7 weeks. My baby is 4.5 months old and we are still fully breast feeding."

Figure 6: Feeding percentage by Type



	2014	2015	2016	2017	2018
Exclusive	79.62%	78.80%	79.61%	78.68%	77.90%
Fully	2.69%	3.42%	2.25%	2.58%	3.44%
Partial	12.67%	12.95%	14.01%	13.75%	13.63%
Artificial	5.02%	4.83%	4.14%	4.98%	5.03%

Table 5: Breastfeeding type by Age of mother, Mode of Delivery and Gestation, Ethnicity at birth 2018

	Artificial	Exclusive	Fully	Partial	SCBU	Unknown	Total
	AGE						
Under 16 years	0	2	0	0	0	0	2
16 to 19 years	5	52	1	5	5	0	68
20 to 24 years	19	178	10	24	20	2	253
25 to 29 years	17	346	10	64	48	6	491
30 to 34 years	25	369	17	70	56	8	545
35 to 39 years	7	192	12	34	26	5	276
40 plus years	3	38	2	9	3	0	55
Total	**76**	**1177**	**52**	**206**	**158**	**21**	**1690**
	MODE DELIVERY						
Breech Delivery	0	0	0	0	0	0	0
Caesarean Acute	18	210	19	61	60	8	376
Caesarean Elective	12	137	11	42	16	2	220
Instrumental Delivery	3	95	3	21	18	0	140
Vaginal Delivery	43	734	19	82	64	11	954
Total	**76**	**1177**	**52**	**206**	**158**	**21**	**1690**
	GESTATION						
24 to 27 weeks	0	0	0	0	2	0	2
28 to 31 weeks	1	1	0	0	1	0	3
32 to 36 weeks	1	33	9	16	49	2	110
37 to 41 weeks	74	1122	43	189	101	14	1543
42 plus weeks	0	20	0	1	5	0	26
Not stated	0	1	0	0	0	5	5
Total	**76**	**1177**	**52**	**206**	**158**	**21**	**1690**
	ETHNICITY						
Māori	24	255	16	30	39	7	370
Pacific	12	109	5	23	13	1	163
NZ European	36	516	14	78	67	5	717
Asian	1	77	9	34	11	4	136
Indian	2	94	7	30	17	4	154
Other	1	122	2	11	11	0	147
Not stated	0	3	0	0	0	0	3
Total	**76**	**1177**	**52**	**206**	**158**	**21**	**1690**

There are well documented associations between mode of delivery, gestation and rates of successful breastfeeding. We recognise babies who have been admitted and discharged from SCBU have data missing on breastfeeding status which accounts for nearly 10% of our babies. This has been discussed at Quality meetings and it is an ongoing objective to improve collection of this data for 2019.

The breastfeeding rates of Māori women in 2015/16 showed that only 38 percent were recorded as breastfeeding at three months. This has increased significantly to 46 percent in 2017/18. While there is still room for improvement to reach the target of >60%, and we remain focussed on improving our rates, efforts in the community are paying off[1].

[1]*Source: Hutt Valley DHB Annual Report 2018 pg. 5)*

There is a lower breastfeeding rate among women who identify as Indian or Asian ethnicity. Whether cultural beliefs and increased morbidities such as an increase in rates of small for gestation age babies and induction of labour rates are confounding variables, requires further exploration. Dedicated culturally appropriate breastfeeding education antenatally may be feasible to address this. There are breastfeeding classes in Mandarin sponsored by Capital and Coast DHB. Some women in our DHB access these but it would be good to explore classes closer to home.

Home Births in Hutt

Hutt Valley DHB does not collect data on home births. However, women are usually booked into the facility by their LMCs in case of transfer. The National Immunisation Register also collects registrations or opt off information for homebirths. In 2018, the provisional data from the Ministry of Health which was thirty homebirths representing 1.7% of our total number of births. The Ministry of Health has provided the data for the 2017 year which is sourced from the National Maternity Collection[1] but not yet available for 2018. The national average is 3.4% with Hutt Valley DHB falling below this average in 2017.

[1] Ministry of Health. 2019. Report on Maternity 2017. Wellington: Ministry of Health.

Nat and Moe, Homebirth

Table 6: Home Births in Hutt Valley DHB catchment

	2014	2015	2016	2017	2018*
Number of homebirths	38	60	41	47	30
Percentage of total birth number	2.1%	3.1%	2.2%	2.5%	1.7%

*Provisional Data from Ministry of Health 2019 email communication 7/5/19.

Section Three: Education Report

Education is an integral part of the Maternity Quality and Safety Programme. Thank you to all the staff who engaged fully with the education programme, initiated robust discussion and gave valuable feedback and ideas on 'doing it better.'

In April 2017, the Midwifery Council of New Zealand approved our application to be a provider of continuing midwifery education on an ongoing basis.

Midwifery Education

1.1 Midwifery Refresher Day: Community support for women in the postnatal period.

The purpose was to update midwives on our collaborative role with community health professionals in providing quality care for our mothers and babies. This was run on two days, one month apart to optimize attendance. Thirty-six midwives attended.

Some comments were:

- *Excellent day for beginning LMC practice in the Hutt Valley.*
- *Fantastic study day.*
- *More aware of dental health in pregnancy.*

1.2 Combined Emergency Skills Day.

We facilitated nine days over the year. Time for a change in focus. For 2019 we will restructure the day taking the feedback into consideration.

Feedback

- Enjoy practicing.
- Lovely to meet with other midwives etc.
- Loved working in pairs.
- Really enjoyed breaking down the scenario into tasks great learning.
- Excellent learning from analysing the case and preparing for the emergency.
- Learnt heaps from other midwives on the course.

1.3 Maternal Mental Health

The focus was on trauma specifically birth trauma.

Fabulous feedback from participants. This study day will be presented again on the 13th February 2019.

Feedback.

The session on Māori World View was excellent, informative and respectful.

This course should be presented every year.

Beautiful presentation and approach to teenager families.

1.4 Diabetic Study Day for Midwives

Excellent feedback and request for an annual study day.

One of the highlights from the day was the consumer's presentation. This consumer gave a detailed account of her daily management to achieve tight control of her blood sugar. Most midwives did not realize the financial cost of the paraphernalia required to maintain a healthy lifestyle. Excellent information from her.

It was a good refresher with comprehensive multi-professional team input.

Feedback:

Having the same message repeated throughout the day by the various speakers was valuable.

Just to repeat this study day multiple times to maximise the number of staff who can access it.

Having the consumer come to talk was great.

1.5 Secondary Care Study Day

The senior midwifery team attended this day.

Participants asked for more study days on complex medical conditions; more interactive sessions and an emphasis on knowledge translation.

Four participants enjoyed the discussion on defining the role of a midwife in the secondary care interface.

The intention is to run this day on an annual basis.

2.0 Multi-professional Training and Quality Initiatives

2.1 ACC

In 2013, the Ministry of Health, Health Quality and Safety Commission (HQSC) and ACC agreed to work together on a joint treatment injury project. It was agreed that NE should be one of the first treatment injuries to be targeted.

ACC has divided and resourced the project into four workstreams. My role is to coordinate the delivery of the evidence based initiatives and organise appropriate experts to present at multi-professional study days.

2.1.1 Gestational Related Optimal Growth (GAP) Training

Forty-eight midwives, four sonographers, two Obstetric SHOs and the Obstetric Lead attended the GAP education day presented by the Perinatal Institute Educator. I think that this was a record number of attendees for a single study day. The training has secured more funding from ACC for champions to be funded, for ongoing audits and the education required to keep the programme sustainable. Hopefully the funding will last until it is firmly embedded into practice. We have a multi-professional leadership group who will drive this initiative forward.

2.1.2 Foetal Surveillance training and education

Multidisciplinary training is mandatory for all clinicians. We currently run the RANZCOG Foetal Surveillance education day annually. We also

provide vouchers to staff to complete the online OFSEPLUS education package.

A weekly meeting is well attended and we review interesting/ challenging CTGs. Our challenge is to use RANZCOG language to enhance a common understanding of the interpretation of the CTG.

ACC are supporting this workstream by evaluating the effectiveness of the current available education and the logistics of rolling out a national education programme.

2.1.3 Universal Lactate Analysis

The third workstream is focused on the effectiveness of undertaking universal umbilical cord blood gas and lactate analysis on babies. Foetal scalp blood and umbilical vein and arterial blood lactate is used to help diagnose foetal hypoxia. Currently we are developing an online education package as part of our operator certification process. Once certified, the operator is responsible for testing and result management.

2.1.4 Introduction of the Newborn Early Warning Score (NEWS)

We are looking forward to more news from our paediatric working group on the fourth stream.

2.2 PROMPT

"All staff involved in care of pregnant women should undertake regular multi-disciplinary training in obstetric emergencies."[1.]

[1] 7th Annual Report of the Perinatal and Maternal Review Committee 2011

Two courses run this year

- *I think it was fantastic.*
- *Cannot fault it, great course.*

I invited the Emergency Department educator to comment on our course, specifically around giving participants constructive feedback. His comments were useful. This motivated a review of our current practice. Hopefully we can send staff to attend Train the Trainers Day. We have one member of the team who attended the training nine years ago. PROPMT UK has released a third manual which should be available towards the end of 2019. This is an opportune time to focus on what we want to achieve.

We need to develop a tool to look at whether this course does improve our outcomes.

2.3 Neonatal Life Support

This continues to be a popular choice for the multi-professional team. We have two midwives who are New Zealand Resuscitation Council (NZRC) Newborn Life Support instructors and we are hoping to increase this number in 2019. All maternity staff who attended in 2018 passed the written and practical assessment. We have secured funding for one other member of staff to attend the instructor course in June 2019.

3.0 Mandatory for DHB employees

3.1 Online Education:

This is completed during orientation. The frustrating aspect of the online education is the continued delay in receiving user name for Information Technology (IT) access. To circumvent this the new employee signs the relevant security access form which is then scanned through to IT. This however is often repeated on the start day.

3.2 Intravenous Access, Phlebotomy and Cannulation

Certification is a requirement of the DHB and I endeavour to book the new staff onto these courses during their orientation.

3.3 Epidural Workshop

Together with the anaesthetic team we ran four epidural workshops. These are two hours long and include a session on aseptic technique demonstrated by the theatre educator. There is an ongoing session on patient controlled epidural analgesia (PCEA).

3.4 Violence Intervention Programme

All staff working in maternity are encouraged to attend this day. We have keen involvement from the midwives and are now booking the Obstetric team onto the course.

4.0 Midwifery Yarn

This is an informal session held on Tuesdays for an hour on requested topics. It may be case presentations, controversial topics and generally any area of interest. Midwives can knit, crochet and hopefully it is a getting to know each other as well.

We ran 12 sessions in 2018. These were well attended.

5.0 Debrief and Individual Learning Plans

The role of the educator includes developing individualised learning plans with members of staff including the LMC midwives.

6.0 Registered Nurses Working in Maternity

Educator is working collaboratively with the nurse educator team to provide ongoing support for our nurses. I facilitated a day for nurses on their role in maternity, emergency response to bleeding and a postnatal check. This is an area which requires collaborative input especially from our team of registered nurses.

Two of them are on leadership Professional Development and Recognition Programme (PDRP) and are involved in interdepartmental projects.

7.0 Orientation

There is a comprehensive orientation in place for all staff. The orientation programme is continually updated to ensure that consistent and current practice is shared.

Planning for 2019

- The educator from the Perinatal Institute will provide two workshops on the Growth Assessment Protocol (GAP).
- PCEA education will be delivered to all core and LMC midwives as we move to PCEA epidural management.
- Appointment and support of champions for roll out and quality improvement, for Growth Assessment Protocol (GAP), Midwifery Early Observation Warning Score (MEOWS), Newborn Early Warning Score (NEWS), National Hypertensive Guidelines and National Sepsis Guidelines.
- Ongoing education to meet recertification requirements for Midwifery Council.
- Ongoing multidisciplinary education for fetal surveillance.
- Diabetic workshop.
- Second Maternal Mental Health Workshop.
- Online education on lactate testing and reporting.

Quality Leadership Programme

Hutt Valley DHB continues to support and actively promote the Quality and Leadership Programme (QLP). We currently have twenty midwives on the QLP pathway, five at Confident level and thirteen at Leadership level and a large number of midwives are in the process of compiling their portfolios ready for assessment. The contribution to the unit made by midwives includes QLP activities such as Health and Safety, Infection Control and Hand Hygiene reps, audit activities and initiatives such as establishing new policies and guidelines. We thank all our midwives for the activities they undertake above and beyond the basic requirements of their job and for their effort and contribution.

Tertiary Education- Completion

A few months ago I completed my Masters Research thesis which looked into the breastfeeding experiences of five service users and three midwives who represented LMC and core staff at this maternity unit.

I had become interested in the determinants of long term health conditions, obesity in particular, co-morbidities, and influences on future health, for example on the offspring of obese mothers, the ability or likelihood of breastfeeding and how this goes on to impact society as a whole.

My own reading and literature searches unearthed a wealth of different features thought to impact obesity. Therefore, I widened my literature review to incorporate maternity experiences put forward in the research to influence or be influenced by, obesity, and not to focus solely on breastfeeding.

I conducted semi-structured interviews to obtain the data to analyse and these revealed the following themes, communication, experiences of normality and autonomy, the midwifery partnership, the experience of intervention, and how intervention was perceived to effect lactation.

This small qualitative study found that interviewees considered that good communication was important to positive outcomes. Both clients and midwives thought that maternal obesity could be the first step to a cascade of intervention, which was understood to influence lactation success.

Maternity services at this site are in the process of developing an improved model of care for obese clients, and I hope to be able to participate and offer insight gained through my study.

Rachel Monerasinghe, Community Team Midwife

Section Four: Links with Other Services

Māori Health Unit

The Māori Health Unit was created to support whānau, the community, and the health workforce to improve outcomes across Māori health, including equitable access to services and supports that are appropriate to the needs of the whānau.

The primary functions are to:

- support Māori whānau in their hospital and health care journey
- connect whānau with appropriate community supports and services
- build strong connections and foundations within Māori communities
- influence health services to ensure they are equitable
- support the hospital to meet the needs of Māori whānau

We also work closely with Māori health and social service providers to ensure whānau have appropriate and co-ordinated services that best meet the needs of their whānau.

As part of the Māori Health Unit supporting the MCGG, the Integration Manager, Māori Health is helping to inform the work programme and, although everyone's responsibility, is supporting decisions to have a Māori health equity focus.

Operating Theatre

There are no operating theatre facilities attached to the Birthing Suite. Trial of forceps, caesarean sections and manual removal of placenta or any other procedures requiring an operating theatre require women to be transferred to the main DHB theatres on the first floor of the Heretaunga Wing. In 2018, there were three hundred and seventy-six emergency caesareans and two hundred and twenty elective caesareans. There were also 38 other procedures where operating theatres were utilised for maternity. These include forceps when a theatre is available immediately for back up should it be required.

Department of Anaesthesia and Acute Pain

Obstetric anaesthesia services at Hutt Hospital include:

- an obstetric anaesthesia high risk clinic
- a labour epidural service
- anaesthesia for caesarean delivery and other obstetric procedures
- a post-partum pain service
- multidisciplinary input into case reviews and service development
- teaching

The most significant development in 2018 was the introduction of Patient Controlled Epidural Analgesia (PCEA) using 0.0625% bupivacaine with 2mcg/ml fentanyl. This complements the implementation of electronic epidural insertion records to improve the quality of labour analgesia services and documentation. Automated reports are now being developed to allow ongoing audit of the labour epidural service and allow identification of areas where further opportunity for improvement exists.

The high risk clinic reviewed 84 women antenatally which represents 5% of all women delivering at Hutt Hospital. Intrapartum referrals are still being made for complex women that have not been seen during pregnancy. Without anaesthesia staffing of the delivery suite, these referrals are difficult to accommodate so greater utilisation of the high risk clinic is preferable.

In 2018, a total of 464 women chose an epidural for labour analgesia which represents 27% of all women delivering at Hutt Hospital. An audit of the July – December 2018 period shows that pain service follow-up occurred for 76% of these cases with 91% of women rating their satisfaction as good, 3% average and 6% poor.

Anaesthesia was provided for 596 caesarean deliveries in theatre representing 35% of all deliveries at Hutt Hospital. With one third of these booked as electives, the high number of emergency caesareans continues to be a risk in the absence of a dedicated obstetric theatre and limited after-hours staffing.

With 50-60% of all deliveries receiving a labour epidural or anaesthesia for caesarean delivery, the obstetric anaesthesia service continues to be involved in the majority of deliveries at Hutt Hospital.

"The new epidurals. I had a bad first birth and so was very worried about my 2nd and 3rd. My last birth was the best by far with the self-administering epidural."

SCBU

There is a level 2 Special Care Baby Unit, with twelve cots and two ventilators. This unit provides care for babies above thirty-two weeks' gestation. Babies under this gestation are transferred to the tertiary level Capital and Coast DHB; an attempt is made wherever it is safe to do so, to transfer women prior to birth at gestations earlier than thirty-two weeks. In 2018, there were 450 admissions and of these 22% premature. There were seventy-two transfers in from other hospitals, primarily Capital and Coast DHB, for ongoing care. Fifty-two babies were transferred out, primarily to Capital and Coast DHB and three to Wairarapa DHB.

"The staff at SCBU were fantastic and very supportive and provided lots of information."

"Your SCBU team is bloody incredible and I can't thank them enough for everything."

Maternal Green Prescription

Maternal Green Prescription supports women through pregnancy and the post-natal period with healthy lifestyle behaviour change. Now into its third year, the programme has seen a steady increase in referrals coming from Hutt Valley DHB and exceeded referral targets from this area in 2018. LMCs and midwives continued to be the most common referral source, followed by diabetes nurses.

The Maternal Green Prescription team continues to provide support for Māori and Pasifika women, women at risk of diabetes and pre-diabetes, young mothers-to-be and women with increased BMI. Clients are supported with goal-setting, provided with relevant information to assist them with personal goals and offered opportunities to participate in group walks, local events and healthy kai sessions.

Referrals can now be sent to us through MedTech, via an email form or through our online referral form at https://www.sportwellington.org.nz/active-health-and-wellness/maternal-green-prescription/maternal-green-prescription-health-care-referral/grx@sportwellington.org.nz

Maternal Green prescription and Healthy weight gain. It was good, Bronwyn is awesome, she used to be a midwife herself. I've just been discharged from them. Everything she did was good but I wasn't involved in what the other mums were involved in because it's just not me. Walking is not my thing, I would rather do a dance class or something like that. Green prescription is cheap, they subsidise the Council gyms which is good and free access to the pools. I liked the fact that she introduced the vege boxes and cheap ways to cook and she offered recipes, that was good. That was my favourite thing. I would love it if I was shown a couple of exercises and that would help you with your pelvic floor. Like these are safe exercises and you can do this with your baby. I would benefit from something like that.

"My Healthy Lifestyles Coordinator was really great with food ideas, exercise ideas and knowing she would be there for me if I needed extra motivation. The group walks were really good too."

"Helped to keep me motivated and thinking about good health choices."

Universal Newborn Hearing Screening and Early Intervention Programme (UNHSEIP)

Newborn Hearing Screening is offered nationally through all the District Health Boards. The aim of the programme is the early identification of permanent hearing loss in newborn babies so that they can access timely and appropriate interventions, inequalities are reduced and the outcomes for these children, their families and society are improved. The specific goals are completion of screening by one month, diagnosis by three months, and early intervention offered by six months. Early intervention before six months has been demonstrated to significantly improve long-term outcomes for children with hearing loss and their whānau.

Screening is offered to all newborn babies in the Hutt Valley DHB area through inpatient and outpatient services. The service operates six days per a week in the Maternity and Special Care units and three weekly outpatient clinics are run in the Audiology Department. We have a staff resource of two Screeners and one Screener/ Coordinator (2.3FTE).

The programme is managed through the Audiology Department under the Service Manager, Plastics, Dental, Maxillofacial, ENT, Audiology & Ophthalmology and under the Service Group Manager Surgical and Women's & Children's Health. Professional support is provided through linkage to Allied Health Scientific and Technical. Data is collected daily, analysed monthly, and reported quarterly to the National Screening Unit (NSU).

The service continues to maintain a high level of performance across all monitoring areas. Percentage levels achieved in the key programme indicators; diagnostic referral rate (1%), decline rate (0.4%), and incomplete screening rate (0%), are evidence of the high quality screening programme delivery here at Hutt Valley DHB. For continually achieving high completion rates and being acknowledged by the MOH as an exemplar for others the screening team received nominations for both the AHS&T Awards and HVDHB Quality Awards. Additionally, the Professional Lead Audiology Kylie Bolland and Speech Language therapist Bryony Forde won an excellence in clinical care award for their work in developing an interdisciplinary pathway to improve the quality of care provided to children in the cleft lip and palate programme.

A collaborative focus continued this year through screening team attendance and participation at the sub-regional combined Screening & Audiology meetings and the UNHSEIP Screener study day in May. These experiences to investigate and share valuable insight and skills with other professionals and programmes nationally and sub-regionally further enhance our screeners own knowledge and skill and remain a highlight for the team. Additionally, in conjunction with the new birthing centre team the service developed a birth notification and audit process to ensure timely screening for babies now born there.

In our next year the Hutt Valley DHB newborn hearing screening service will celebrate a 10 year milestone. Our work plan will continue our quality focus within the areas of consumer experience and monitoring for improvement to ensure we maintain our consistent excellent service levels.

Table 7: HVDHB UNHSEIP Volumes 2018

Newborns Offered Screening	1880
Completed Screening	1872 (99.6%)
Declined Screening	8
Screening Not Completed	0

For the hearing they came on the postnatal ward and kept popping back to catch baby at the right time. They gave information and the test was gentle. We had to go back with Jovanni 'cos they didn't get a proper reading. It was fine.

Table 8: Location of First Screen

First screen as Inpatient	1232 (65.8%)
First screen as Outpatient	640 (34.1%)

Table 9: Referral for Audiology Assessment

Ref for Audiology Assessment	19

Table 10: Referral Outcome

Audiology	Confirmed Permanent Hearing Loss	Unilateral	Bilateral
		1	3
Early Intervention	Referred to ENT Specialist	3	
Referred to AODC	3		

Pregnancy and Parenting Education (PPE)

There is one main provider of PPE within the DHB region, this is the Hutt Valley DHB contracted services from BirthEd. Parents Centre, Calmbirth and Empowered Birthing are privately run and together see approximately 220 women.

BirthEd

BirthEd is contracted by Hutt Valley DHB (and Capital and Coast DHB) to provide a range of free courses for women and their support partners, with courses specifically designed for youth (Women under 24 years) and M□ori women in the Hutt Valley and in the greater Wellington area. BirthEd provides high quality childbirth and early parenting education and support to women and their whānau, so they can make safe, well informed choices for themselves, their birth and their parenting. The courses are based both in the hospital and in the community and are run from Upper Hutt to Petone. Breastfeeding is an important component of BirthEd's nine-week course outline and is taught by breastfeeding specialists. An additional 'master' three-hour breastfeeding course builds on the basic information, is well subscribed to, and open to antenatal and postnatal women. Other three-hour specialty courses focus on 'Your New Baby' and 'Homebirth' as an option, 'Baby Safety' and 'Out of the Blues' - postnatal distress and depression. Baby safety conveys important key messages including shaken baby prevention, safe sleep, smoking cessation, postnatal distress and infant CPR and choking, delivered by a Red Cross instructor. 'Out of the Blues' provides vital information about the symptoms and coping strategies to support women and their partners with postnatal distress and depression.

I did antenatal classes with Aria, my first baby. It was through BirthEd, I did it even though I was reluctant at first. It was Tiare's third baby but it was a thirteen year gap. It gave me lots of knowledge of what to do and made me feel involved. Joe.

The Marae-based antenatal course known as Kaupapa M.A.K.E (M□ori Antenatal and Kai□whina Education) incorporates pregnancy, birthing and parenting education alongside weaving a kōnae (small basket) and whiri (cord tie) and demonstration of weaving of a wahakura (safe sleeping device). Partners are catered for in the programme with a dedicated 'men's group' and have their own break-away session to discuss the "what if stuff" while making Ipu Whenua, a container for the afterbirth. BirthEd works collaboratively with Te Kakano o Te Aroha Marae in delivering this three day course.

Women are able to book their courses online through the website and customer relations management system Arlo. LMCs are also able to make referrals through this system.

Table 11: Number of Courses Offered

	2014	2015	2016	2017	2018
Mainstream	19	20	20	19	18
Youth	6	5	5	4	4
Mainstream Postnatal	19	20	20	19	18
Youth Postnatal	6	5	5	4	4
New Baby	12	11	9	11	11
Breastfeeding	12	11	12	12	10
Baby Safety	11	11	8	11	11
Homebirth Option			3	6	5
Marae Option			4	2*	4
Out of the Blues			0	4	6
TOTAL	**85**	**83**	**86**	**92**	**91**

Table 12: Attendance by Ethnicity

	2014	2015	2016	2017	2018
African	3	13	8	23	11
Chinese	36	27	62	42	50
Pacific Island	41	20	14	10	9
Indian	33	34	31	62	75
Māori	64	57	63	41	55
Middle Eastern	4	2	5	1	10
NZ European	338	311	284	269	397
NZE/NZM	40	40	29	17	8
NZE/Pacific Island	1	3	1	4	7
NZM/Pacific Island	0	5	1	4	2
Other European	33	48	57	74	65
South East Asian	41	27	14	28	40
Latin American*					14
Other/Unknown	0	0	0	15	27
TOTAL	**634**	**587**	**569**	**583**	**770**

***Previously recorded under other ethnicities**

Parents Centre Lower Hutt

Parents Centre Lower Hutt is one of fifty centres nationwide. Their mission is "positive birth experiences and informed parenting in a community where parents are highly valued and supported in their role." Lower Hutt delivered fifteen antenatal classes and had one-hundred-and-eighty five couples attend during 2018. There is a charge for these courses. No figures were available from the Upper Hutt branch.

Calmbirth

Calmbirth® is a childbirth education program which believes that when we learn how to embrace birth as a natural part of life and not fear it, and stay connected by working together as a family, then not only will unnecessary intervention rates be reduced, but the way we experience and talk about birth will be far more positive and empowering for future generations of families.

The Calmbirth® program includes psychological and emotional preparation for childbirth and strives to reframe birth and encourage women to work with their bodies, partners and caregivers to create a positive experience no matter how the birth unfolds. Women and their partners/birth supporters learn how to retrain their response to stress by instilling confidence, and teaching how to be proactive in birth rather than reactive. The program includes fear release techniques through guided relaxation, as a means to facilitate emotional subconscious healing of fear and anxiety about childbirth, to help women and their partners move past any negative emotions around birth.

Women and their partners/birth supporters attend a relaxing weekend course where they learn about the natural birth physiology, the important connection between mind and body, and techniques to help them remain calm during pregnancy, labour, birth and beyond. 7 courses were held in Lower Hutt in 2018 with 37 couples attending. There is a charge for this course. Take-home resources are supplied, and ongoing support is provided following the course.

Well Child Tamariki Ora Providers

Plunket

Plunket offers parenting information and support as well as developmental assessments of children. Plunket Registered Nurses provide support through home and clinic visits, mobile clinics and Plunket Line; a free telephone advice service for parents. Plunket also organises parent groups, parenting education, toy libraries, drop in centres and play groups. Referral information not submitted at time of report.

Thriving Cores (formerly known as Pacific Health Well Child)

The aim of this service is to support parents and families to ensure that children achieve a strong foundation of health which will lead to overall wellbeing as they grow. Thriving Cores Well Child Tamariki Ora Provider Nurses work around families to ensure that health assessments take place, and are on time according to the Ministry of Health schedule. These can be clinic or home visits. Thriving Cores has also extended to holding clinics after hours (twice a month) and Saturday clinics (once a month) to provide working and studying parents the opportunity to complete the core checks of their whānau. The service works collaboratively with many agencies to ensure that additional support is given where required. Referrals out to other agencies with permission may be made. Other services include support at medical appointments, extra visits and education sessions. In 2018, Thriving Cores saw one-hundred-and-fourteen new babies in the Hutt Valley with 91 referrals coming from Community LMC Midwives. They also gave early additional support in the form of face to face (216 contacts) and over the phone (276 contacts).

Tamariki Ora

Tamariki Ora helps provide whānau with the wellbeing of their tamariki/children up to age four. The service aims to give children the best start in life with Health and Development Assessments, Whānau Care and Support and Health Education. Visits can take place at home or at Tamariki Ora clinics in Waiwhetu (opposite Waiwhetu Marae), Kokiri Pukeatua, Wainuiomata, Tui Glen School (Koraunui Marae, Stokes Valley) and at the Orongomai Marae Health Clinic, Upper Hutt.

The Tamariki Ora service saw 422 new babies (from 1 July 18 – 20th May 2019) with 3.3% of referrals from the DHB Primary Midwives Team and 70% from midwife LMCs, with 0.4% GP and other community groups 6.8% - other services 4.6% other WCTO providers 4.5% with and increased from self/family/friends 10.4%.

Violence Intervention Programme (VIP)

Background

In 2002, the Ministry of Health publishe d the Family Violence Intervention Guideline. These are now published as the Family Violence Assessment and Intervention Guideline (2016). They can be accessed on the Ministry of Health website www.moh.govt.nz/familyviolence.

The Guideline recommends that all health professionals become more proactive in *identifying*, *assessing* and *referring* victims of family violence as a component of their duty of care and as an integral part of DHBs developing leadership, systems and workforces that are responsive to victims of family violence. The guidelines recommend the routine screening of all women 16 years and over for family violence at health encounters in the designated services: Emergency, Maternity, Sexual health, Child Health, Mental Health and Addictions Service.

Additionally, the guidelines outline best practice for the identification of child abuse and neglect when children present to health services.

The VIP training is a key component of the Ministry's VIP programme. Other Ministry funding for VIP includes:

- Violence Intervention Programme Coordinator positions within all DHBs
- Independent annual audits to support quality improvement and programme monitoring
- (AUT)
- National VIP management support for DHBs to provide technical advice and support (Health Networks Ltd).

Programme Coordinator status

At HVDHB, two VIP Coordinators contribute a combined 1.0FTE to implement the Violence Intervention Programme.

Chris Mallon, the Service Manager for Women's and Children's Health Directorate is accountable for the VIP contract to the Ministry of Health. Kerry Dougall, Director of the Māori Health Unit, has been the VIP Programme sponsor since August 2018.

There was one thing when the midwife came in before my discharge and I know it's protocol apparently to check there is no family violence at home and they asked if they could talk to me by myself. I had my partner in the room and I said "OK, what's wrong?" My partner is going what? What's up and then she talked to me she asked if I was safe and I know the importance of it and I think it's a good thing, but I think that when they approach it send the dad off 'cos when he came back in he was asking "Is everything alright?" And I told him they were asking if everything was alright at home and he's like what! It's not nice for the dad and he thought they had just looked at him like he hit me. That was awful for him, that was horrible. Great for the mum. Probably your midwife could give you a heads up that you might be asked.

Table 13: Quality Clinical Audits

Maternity Service Audit periods	Antenatal IPV Screening rate %	Antenatal IPV Disclosure rate %	Post-natal IPV Screening rate %	Post-natal IPV Disclosure rate %	Power to protect Education rate %
Nov 2018	50	0	80	0	25
April 2018	59	0	78	0	44
Jan 2018	57	0	69	3	51

Violence Intervention Programme Training

HVDHB VIP updated their VIP training package to align to the Ministry's 2016 Guideline and were approved in June 2018. The core 8 VIP training is run alternate months for staff working in the designated services. VIP delivered advanced VIP training for the new Clinical Champions for the maternity service on 29 Nov 2018.

Maternity Workforce Development

Good attendance rates of midwives and LMC since rolling out VIP to maternity in 2016 with 78 percent (31/40) of the HVDHB midwives attending the core VIP training. No doctors from the maternity service have attended the VIP Core training yet. Fifty percent LMC midwives have attended the VIP core training.

Vulnerable Women and Unborn Baby Group Hutt Valley DHB

This group was implemented in 2012 to identify vulnerable pregnant women and to strengthen collaborative support for these women and their families. This group is now renamed as Maternal Care and Child Wellbeing Multi Agency Group. This group continues to meet fortnightly. External DHB members include: Police Family Safety Team members, Oranga Tamariki DHB Hospital Liaison Practice Leader, Social Worker, Naku Enei Tamariki (NET) Early Intervention Service Managers, Kokiri Marae, Whānau Ora, Social Services Manager, Well Child Tamariki Ora Providers (Plunket, Tamariki Ora), and Pacific Health Unit, Wellhomes and a Vibe Youth Health Service senior nurse clinician. Minutes are recorded at each forum with updates and actions related to each woman who is discussed by the group. A virtual event is created on WebPAS for data purposes. LMCs are welcome to attend the regular forum and they can contact the Violence Intervention team and/or an Associate Clinical Midwife Manager. There has been an increase in referrals since starting the group in 2012, as follows: 2012 (n: 86), 2014 (n: 85), 2015: (n: 88), 2016 (n: 171) 2017, (n: 157) and 2018 (n: 201).

The VWUB group 2018 objective was to implement the national Maternity Care, Wellbeing and Child Protection resource toolkit at HVDHB. This expectation was not met and a dedicated meeting is planned to achieve this milestone in 2019 and allocate resource to roll out the toolkit. The new group name Maternal Care and Child Wellbeing Multi-Agency Group is part of this and yet to be socialised.

National Child Protection Alert System

If there are child protection concerns and the case is open with Oranga Tamariki, and/ or a Report of Concern is completed by a health professional, a Child Protection Alert System (CPAS) multi-disciplinary team summary is completed on Concerto and the case is reviewed by the CPAS MDT and an antenatal alert may be created for the pregnant woman. This alert is reviewed within six weeks of the birth. An antenatal alert may be retained for future pregnancies or removed. The alert may also be transferred to the newborn.

Shaken baby prevention, I did watch the DVD. I read through the shaking information and how you can get overwhelmed 'cos I know that it's a thing, it's real, doesn't matter how good you are.

Oranga Tamariki – Hospital Liaison Practice Leader

The Hospital Liaison Social Practice Leader works collaboratively with health professionals and police to ensure quality service delivery to children and young people who present to the DHB with child protection concerns. The Oranga Tamariki Liaison ensures that a multi-agency safety plan is put in place for all children and young people admitted to Hutt Valley DHB who are suspected of, or confirmed as having a non-accidental injury. Additionally, the leader works collaboratively with hospital personnel to enhance earlier identification of children at risk of child abuse and neglect.

The two key objectives of the Hospital Liaison Practice Leader are:

- Ensuring that Oranga Tamariki – Ministry for Children (OTMC) and District Health Board (DHB) work together for all children when there are care and protection concerns.
- Early identification and appropriate response occurs for children at risk of abuse and/or neglect. This includes risk to unborn babies.

The Hospital Liaison Practice leader role is to:

- Build strong functional working relationships across the DHB and promote collaborative practice.
- Be the Oranga Tamariki liaison point within the DHB.
- Be available to share information and child protection expertise with DHB staff.
- Provide support and liaison for DHB staff to ensure that children and young people admitted with child protection concerns receive a quality service from Oranga Tamariki.
- Be a first point of contact for advice on working with the DHB. They will support and guide staff when they need assistance including advice on developing a multi-agency safety plan.
- Be available to work with Oranga Tamariki and DHB staff to resolve interagency issues or disputes.

Women's Health Social Worker

The Hutt Valley DHB Social Work Department provides social work services to both inpatients and outpatients who are experiencing health-related difficulties. Social workers advocate for and assist patients to access services or support within the hospital or in the community to maximise independence, wellbeing and coping abilities.

Our women's health social worker will work with and for the vulnerable pregnant women and infants in our community to focus on the safety and wellbeing of both. Our services can also provide support with adjustment to changes in physical health, mood and maternal mental health or pregnancy/birth-related difficulties.

Maternal and Early Child Health Provider Group (MECH)

The MECH Group is coordinated through the DHB's Strategy, Planning and Outcomes team and includes representatives from across maternal and child health providers, as well as Technical Advisory Services (TAS). The group's function is to support service development and integration across maternal and child health services. In 2018, the MECH Group continued to meet and supported a considerable amount of work across maternal and child health services. Work in 2018 focused on the implementation of the region's Sudden Unexpected Death in Infancy Prevention Programme, Well Child Tamariki Ora quality improvement work, newborn enrolment process quality improvements, breastfeeding improvement opportunities and the development of the DHB's First Thousand Days Partnership Project, among others.

First Thousands Days Partnership Project

In November 2018, the DHB initiated the *First 1000 Days Partnership Project*. The project aims to collaborate with whānau and providers to understand current service provision provided during the first 1000 days of a child's life (conception to second birthday), service gaps and opportunities, as well as possible solutions to assist the DHB in improving maternal and child health outcomes in the Hutt Valley. The project started following the publication of the DHB's Clinical Services Plan, which sets a clear focus for the DHB to improve its services to families during the first 1000 days. The project is focused on Māori, as well as those with complex needs, to understand options to eliminate inequalities and improve health outcomes for those most at risk of poor health outcomes. The project completion date is set for July 2019.

Maternal Mental Health

The Specialist Maternal Mental Health Service (SMMHS) is a community-based, tertiary mental health service. The focus is on providing support for women and babies within the Hutt Valley, Kapiti and Wellington areas.

Referrals for women living in the Hutt Valley can be made through Te Haika (mental health intake centre). Referrals can be made by a woman's midwife, GP or other health professional. Criteria for referral is women who are pregnant or post-partum with an infant up to twelve months, who are experiencing a moderate to severe mood disorder/mental illness; this may be new onset, or previous history re-triggered in the perinatal period. Women with an existing mental illness requiring consultation or advice related to conception or pregnancy can also be referred. Women who have miscarried or do not have the care of their child, or who are already being supporting by another mental health team do not come under this service.

The SMMHS also provides consultation and education support to all DHBs in the Central Region. This can include virtual multidisplinary meetings, case consultations, service development support and workshops.

The SMMHS service works closely with other health and social service providers who support women, babies and families. Wherever possible they support and promote education and awareness about perinatal mental illness.

The midwife introduced me to some of the services because during that time I had a bit of depression. I think I probably had it with my first children but it wasn't recognised. This time round for Aria my third baby, my midwife noticed my moods and how I was and suggested she refer me to Cindy at Maternal Mental Health. I started seeing her and things started going really well. Cindy referred me to a doctor in Wellington. I learned strategies to cope from Cindy.

Maternity Acupuncture Clinic

The maternity acupuncture service opened in 2008 and has now been operating within the Hutt Valley Hospital Outpatient Department for ten years. This clinic provides free acupuncture care for pregnancy and postnatal related conditions.

NEW ZEALAND SCHOOL OF ACUPUNCTURE AND TRADITIONAL CHINESE MEDICINE

This is the first, and to date only, clinic of this type within a New Zealand hospital and managed by the New Zealand School of Acupuncture and Traditional Chinese Medicine (NZSATCM). Women access this service directly, making an appointment through maternity administration staff. Treatment rooms are provided two afternoons a week for the school teaching year of thirty weeks. NZSATCM fourth year acupuncture students provide treatment under supervision of professionally registered acupuncturists experienced in pregnancy related care. All women sign consent forms for treatment and data collection. Between 120 and 160 women have access this service each year (table 1).

I was introduced to acupuncture by my first midwife. I don't think there was a clinic then in 2001. I loved it, thought it was great and helped me not to use drugs. I really loved the acupuncture before and during labour with my first baby and I used the clinic again in my last pregnancy.

Table 14: Number of Women Treated 2014 – 2018.

	2014	2015	2016	2017	2018
Number of women: initial visit	127	131	124	142	161

The main referral to the clinic is through midwives acting as Lead Maternity Carers (LMCs) recommending women to make an appointment. The majority of women present for treatment for back and pelvic and hip pain, and labour preparation. A range of other treatments are delivered that include treatment for nausea, heart burn, headaches or migraines, emotional concerns and insomnia. Further details relating to these treatments have been reported as observation studies (Betts, McMullan, & Walker 2016; Soliday & Betts, 2018).

Patient Feedback and Adverse Events

Since 2016, all women receiving three or more treatments have been asked to complete an anonymous feedback form on their third visit to identify any concerns about the treatment they received. This form asks for comments about what was beneficial or, not beneficial, and whether they have experienced any pain at needle site, bleeding or bruising from treatment, felt faint during or after treatment, had symptoms that became worse or had any other concerns. The only reported events have been minor with the majority involving pain or bruising at needle site with women leaving comments indicating that they did not view these events as detracting from an overall positive treatment experience (Soliday & Betts, 2018). At the time of writing this report it can be confirmed that this clinic continues to operate as a free outpatient service at Hutt Valley hospital. Data collection continues for future reporting.

Our thanks to Debra Betts for providing the above information. Debra, alongside her qualifications as RN, BHSc (Ac), PhD, is an Adjunct Fellow at the National Institute Complementary Medicine, Western Sydney University and Supervisor Hutt Hospital Maternity Acupuncture service. http://acupuncture.rhizome.net.nz

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Betts, D., McMullan, J. & Walker, L. (2016). The use of maternity acupuncture within a New Zealand public hospital: Integration within an outpatient clinic. *New Zealand College of Midwives Journal, 52*: 45-49
Soliday E, Betts D. (2018). Treating Pain in Pregnancy with Acupuncture: Observational Study Results from a Free Clinic in New Zealand. *J Acupunct Meridian Stud*,11(1):25-30.doi: 10.1016/j.jams.2017.11.005.

"Services offered are good - stretch class and acupuncture."

"*Free pregnancy acupuncture appointments.*"

Xiaoli, HVDHB Midwife

Physiotherapy Services

There is an allocated Women's Health Physiotherapist working across the Obstetrics and Gynaecology department and GSG ward, five days a week, at 0.8FTE. This covers both inpatient and outpatient physiotherapy services. Inpatient services include provision of advice about appropriate exercise and self-help comfort strategies to the majority of post-natal women during their hospital stay. Our physiotherapist also runs a free Antenatal Stretch Class once a week.

Common reasons for outpatient antenatal referral include back and/or pelvic pain, carpal tunnel syndrome and pelvic floor disorders.

Postnatally, women are referred for pelvic floor issues and pelvic and/or back pain. All women experiencing a third or fourth degree perineal tear are offered review by a physiotherapist at approximately six weeks.

I also went to the maternity physio Julia, for bands to support my pelvis and techniques to move. I wanted to go to the stretch classes but I couldn't get there during the day.

Table 15: Physiotherapy Outpatient events (Antenatal and Postnatal)

	2018
Antenatal	101
Stretch Class	167
Postnatal	40
Perineal tears	53
Total	380

"The lactation consultant and the physio on the ward were super helpful and caring and I appreciated their support."

Section Five: Maternity Services Clinical Outcomes 2018

The New Zealand Maternity Clinical Indicators

The New Zealand Maternity Clinical Indicators show key maternity outcomes for each DHB region and maternity facility.

The purpose of the New Zealand Maternity Clinical Indicators is to:

- Highlight areas where quality and safety could be improved at a national level.
- Support quality improvement by helping DHBs to identify focus areas for local clinical review of maternity services.
- Provide a broader picture of maternity outcomes in New Zealand than that obtainable from maternal and perinatal mortality data alone.
- Provide standardised (benchmarked) data allowing DHBs to evaluate their maternity services over time and against the national average.
- Improve national consistency and quality in maternity data reporting.

The New Zealand Maternity Clinical Indicators are evidence-based and cover a range of procedures and outcomes for mothers and their babies. Where possible, the New Zealand Maternity Clinical Indicators are aligned with international maternity indicators to enable international comparison. For the purposes of this report, we have produced data based on the Ministry of Health's (MOH) 20 New Zealand Maternity Clinical Indicators and commented on those where we are outliers compared to other DHBs.

MOH produce New Zealand Maternity Clinical Indicator reports annually, but are eighteen months behind in the data they provide. We have developed an internal data report based on the above system that enables us to look at our data from the previous year in order to react more responsively, instigating audits and changes in clinical practice. We have retrospectively compared our reporting to that in the New Zealand Maternity Clinical Indicators to assess for major inconsistencies.

Our review of the 2017 Clinical Indicators and continuing trends have prompted plans to investigate high rates of induction of labour and caesarean sections for standard primiparae. Of note is our decreasing rate of intact lower genital tract and third degree tears (Indicators 6-9). Work on education and quality improvement to practice has been undertaken. This is ongoing work carried over from the last reporting period. Please see Section 4 for 2018 data.

Work to improve our systems for the collection of accurate data that reflects our outcomes is ongoing and involves working closely with our clinical coding team and IT Department. Our reporting period is one year ahead of the availability of annual Maternity Clinical Indicator Data and means we are retrospectively benchmarking our DHB. We have developed an internal data report based on the indicators which enables us to look at our data from the previous year in order to react more responsively, instigating audits and changes in clinical practice.

The data in this report is based on births at our facility and does not include homebirths, or births by women from Hutt Valley DHB domicile who birth at other facilities. For example, 201 women living in the Hutt birthed at Capital and Coast DHB in 2018. Due to this there will always be a slight difference in what is within our report and that of the MOH report as we are reporting on births by facility.

See Appendix One for 2017 Maternity Clinical Indicator description.

Maternity Clinical Indicators

Indicator One: Registration with a Lead Maternity Carer in the first trimester of pregnancy (by facility)

We can report a static percentage of women who registered with a Lead Maternity Carer in the first trimester, at 68.9% in 2016 to 68.3% in 2017.

The collaboration with our local provider Te Runanganui o Te Atiawa is an initiative to encourage early engagement with a LMC through an accessible community based drop in clinic (see pg. 24 for more detail). It requires further evaluation as to the contribution this may have made to improving the registration and whether we are making a difference to groups who have historically not registered in the first trimester.

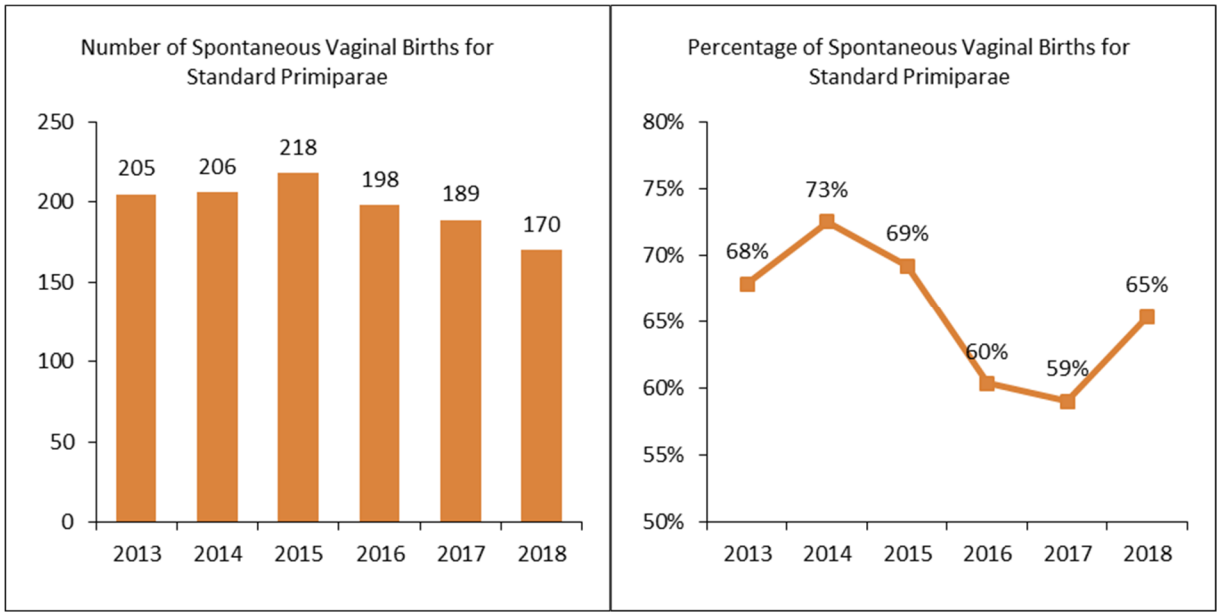
We have continued to work with MOH to provide data for women under DHB care via the Primary Maternity Data Collection System. Gestation at registration for women with a LMC is not collected at a local level. Note these numbers are primary care provided type at first registration and does not include those women who registered with an LMC first and then registered with our DHB at delivery.

Table 16: Registration with LMC in First Trimester by % (by facility)

	2013	2014	2015	2016	2017
Huttmaternity	52.6	60.1	64.1	68.9	68.3
Secondary and Tertiary Facilities	65.6	68	70.3	72.3	72.6
National	64.9	67.7	70	71.9	72.3

Numerator: Total number of women who register with a LMC in the first trimester of their pregnancy.
Denominator: Total number of women who register with a LMC.

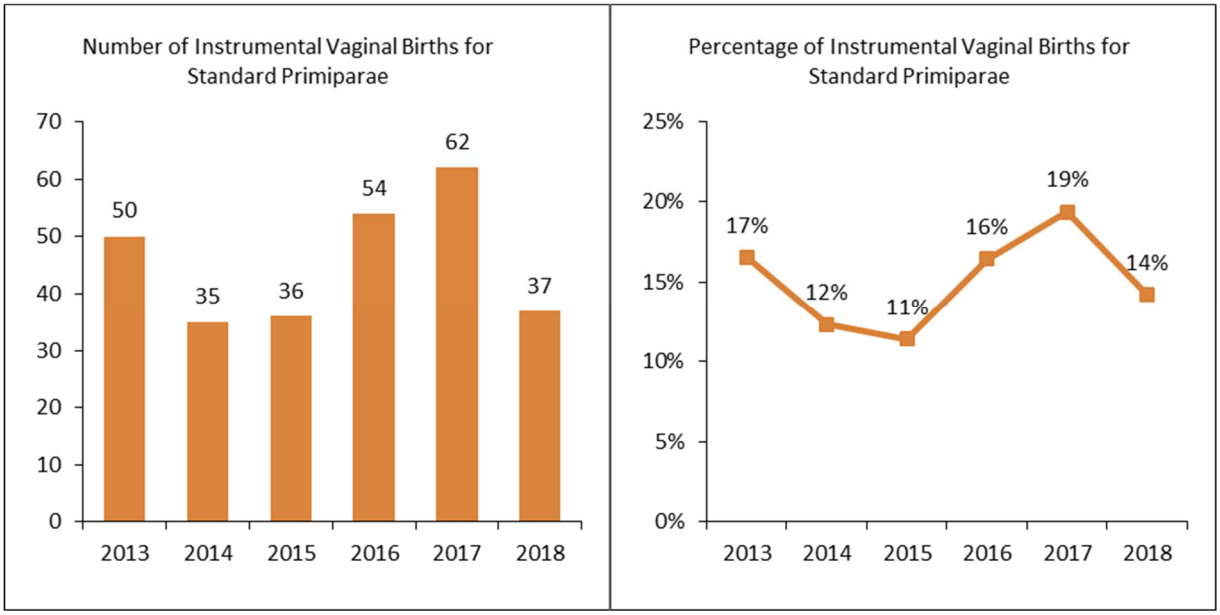
Indicator Two: Standard Primiparae who have a spontaneous vaginal birth (by facility)



Numerator: Total number of standard primiparae who have a spontaneous vaginal birth at a maternity facility.
Denominator: Total number of standard primiparae.

Comment:
The national rate for standard primiparae spontaneous vaginal birth in 2017 was 58.3% for all secondary and tertiary facilities. Huttmaternity had a rate of 57% (by facility) in 2017. Our data for 2018 suggests that our rate of spontaneous vaginal birth in the standard primiparae has increased to 65%. This is very encouraging as a primary facility opening in our DHB region is looking after a proportion of our standard primiparae women.

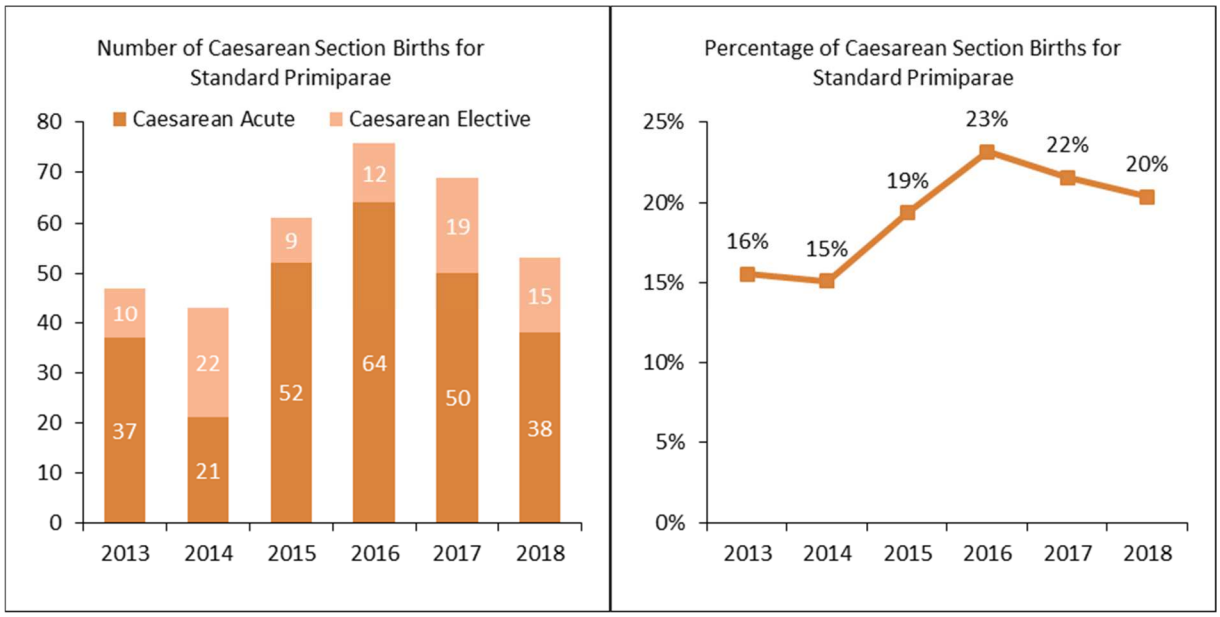
Indicator Three: Standard Primiparae who undergo an instrumental vaginal birth (by facility)



Numerator: Total number of standard primiparae who undergo an instrumental vaginal birth.
Denominator: Total number of standard primiparae.

Comment:
The National rate for standard primiparae undergoing an instrumental vaginal birth in 2017 was 16.3% (by facility), and 19.5% for all Secondary and Tertiary Facilities. In comparison, Huttmaternity had a rate of 19.4 % (by facility) in 2017. While this is under the rate for all secondary and tertiary facilities, trends in data collection including 2018, suggest that our rates of instrumental vaginal birth have decreased. Work to explore the relationship with our perineal trauma, induction of labour and caesarean section rate is being continued in this reporting period.

Indicator Four: Standard Primiparae undergoing caesarean section (by facility)



Numerator: Total number of standard primiparae who undergo caesarean section.
Denominator: Total number of standard primiparae.

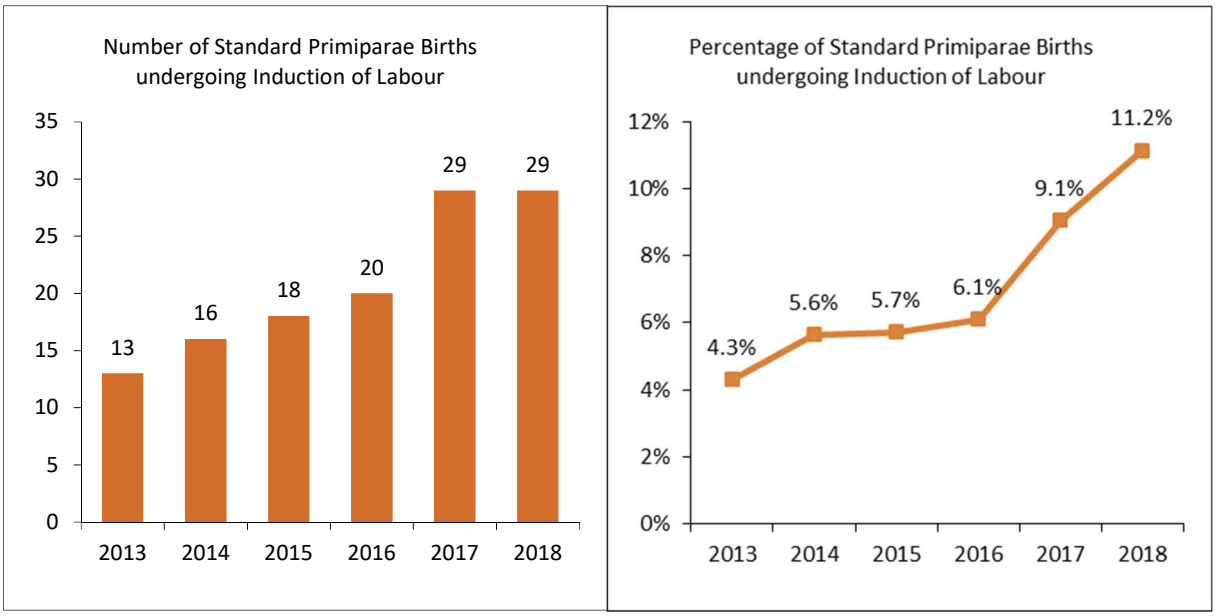
Comment:
The national rate for standard primiparae undergoing caesarean section in 2017 was 17.6% (by facility), and 21% for all secondary and tertiary facilities. This shows a small increase of 2% from the previous year nationally. However, in the same year Hutt Valley DHB had a rate of 22.3% (by facility) showing a small decrease from the rate of 22.8% in 2016. Our 2018 data collection suggests a slight drop to 20%, however we are still benchmarked as being one of the seven DHBs with the highest percentage of standard primiparae undergoing caesareans based on this data set.

To investigate this and take remedial action, we completed a multi-disciplinary audit of caesarean sections undertaken on standard primiparae having a caesarean for fetal distress, within the context of a Plan, Do, Study, Act (PDSA) improvement methodology. Please see Appendix Five for findings.

Table 17: Indication for Standard Primiparae Undergoing Elective Caesarean Section 2018

	No.
Placenta/Vasa previa	2
Breech presentation	9
Previous medical/surgical history	1
Maternal request	2
Miscoded	1
Total	15

Indicator Five: Standard Primiparae who undergo Induction of Labour (by facility)



Numerator: Total number of standard primiparae who undergo induction of labour.
Denominator: Total number of standard primiparae.

Comment:
Data from the 2017 clinical indicators show the national rate of standard primiparae women undergoing induction of labour at 7.6% for all of New Zealand and 8.4% for all secondary and tertiary facilities. The Hutt Valley DHB rate has significantly increased from 9.1% in 2016 to 11.2% in 2018. We are awaiting the release of the maternity clinical indicator data for 2018 to put this increase in the context of national data. Until this time, as part of our overall review of caesarean sections, a review of reasons for induction for standard primiparae (28 recorded) will be undertaken as 25% had an emergency caesarean.

In order to understand our increasing induction of labour rate for the standard primiparae, we will also review our coding of standard primiparae to ensure it is correct and inductions are properly distinguished from augmentations. We can then benchmark the definitions we use with other DHBs.

Table 18: Methods of Induction of Labour 2018 Standard Primiparae (by facility) and birth type

Method Induction	Number	Birth type
Medical with prostin	5	One miscoded as had factors excluding from standard primiparae definition and had emergency caesarean, 1 had an instrumental and 3 had vaginal births.
Medical with oxytocin	5	One miscoded as gestation <37 wks. Birth mode x 1 c/s, x1 instrumental and x 3 vaginal.
Surgical by artificial rupture of membranes	3	1 miscoded as labour spontaneous onset Birth mode x 1 c/s, x 2 vaginal
Medical and surgical	14	x 1 miscoded as exclusion of std primiparae for medical history. X 5 coded as inductions but were augmentation of labour which was spontaneous onset. X1 had mechanical, medical and surgical but was only coded for med and surg. Birth mode x 5 c/s, x 3 instrumental and x 8 spontaneous vaginal
Balloon catheter	1	Instrumental assisted birth
TOTAL	**28**	

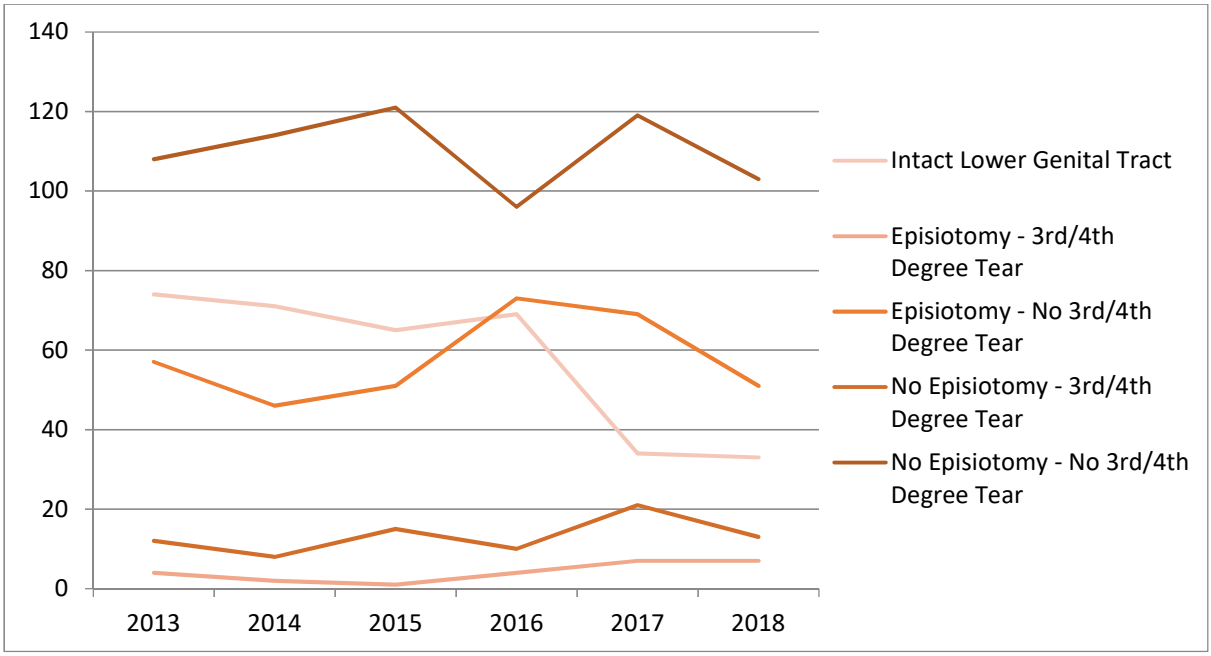
Table 19: Methods of Induction of Labour 2018 Standard Primiparae (by facility) and birth type – Amended table post audit

Method Induction	Number	Birth type
Medical with prostin	4	1 had an instrumental and 3 had vaginal births.
Medical with oxytocin	4	Birth mode x 1 c/s, x 1 instrumental and x 3 vaginal.
Surgical by artificial rupture of membranes	2	Birth mode x 1 c/s, x 1 vaginal
Medical and surgical	8	Birth mode x 1 c/s, x 7 spontaneous vaginal
Balloon catheter	1	Instrumental assisted birth
TOTAL	**19**	

Indicators Six to Nine: Perineal Outcomes

Figure 8 presents an overview of the MOH New Zealand Clinical Indications 6 – 9, around perineal status at delivery for Standard Primiparae. This includes intact lower genital tract, episiotomy with no third or fourth-degree tear, third or fourth-degree tear with no episiotomy and those with both episiotomy and third or fourth-degree tears.

Figure 7: Overview of Perineal Status for Standard Primiparae women (by facility)

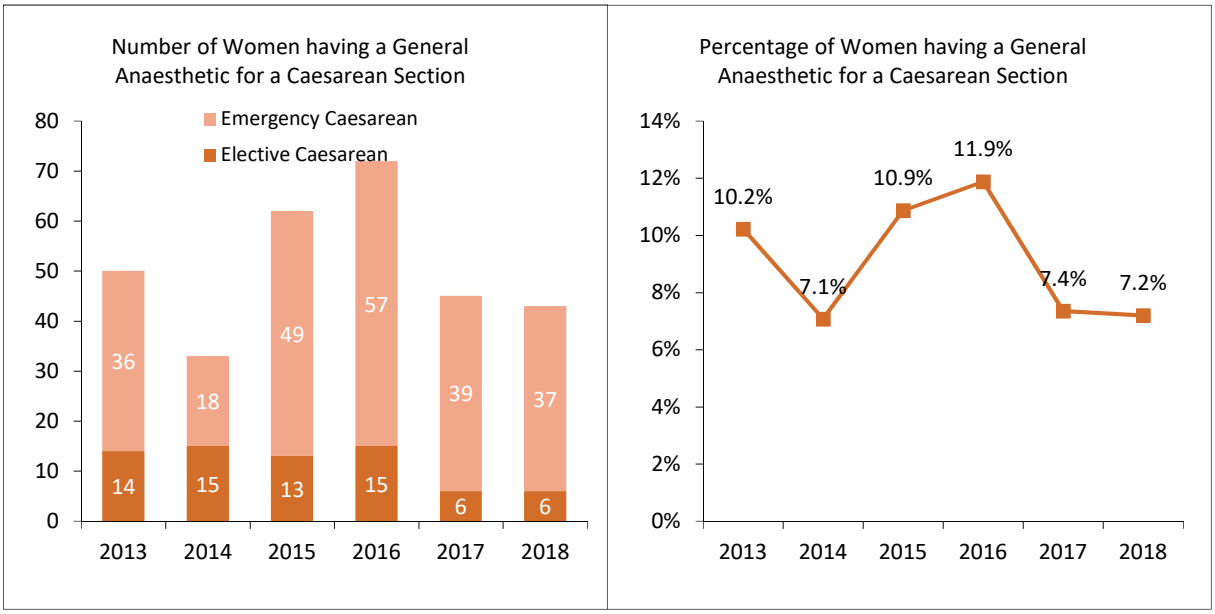


Comment:
In the 2017 national dataset, Hutt Valley DHB continues to be benchmarked as outliers compared to the median rate of other DHBs for these indicators. Our intact lower genital rate for standard primiparae shows no change from 14.0% in 2016 to 14.3% in 2017 (Indicator 6). Our own 2018 figures show a decrease in intact genital tract rate from 14.3% in 2017 to 16% for standard primiparae which is pleasing.

There was an increase in our overall use of episiotomy (and no third or fourth degree tear) at 29.1% in 2017 which was slightly below the national rate for all secondary and tertiary facilities (30%). However our rate for 2018 has shown a downward trend in this indicator from 28% to 25%. Standard primiparae sustaining a third-degree tear or fourth-degree tear (without episiotomy) rates have remained stable at a rate of 8.4% in 2016 and is again 8.4% in 2017. Our own data for 2018 shows a downward trend to 6.3%. However we have increased our rate in 2018 from 2.8% to 3.4% for third and fourth degree tears where an episiotomy was performed. Of all vaginal births in 2018, 3.7% women sustained a third-degree tear. Fourth degree tears have increased slightly from 0.32% in 2017 to 0.55% (n=6) for all births in 2018. Of note is that only one episiotomy was undertaken of the six fourth degree tears and 75% of women who sustained a third degree tear did not have an episiotomy.

A second workshop on supporting perineal integrity was held in 2018 and we await the 2018 maternity data in order to gauge our improvement compared with the national rate.

Indicator Ten: General anaesthesia for all Caesarean sections (by facility)

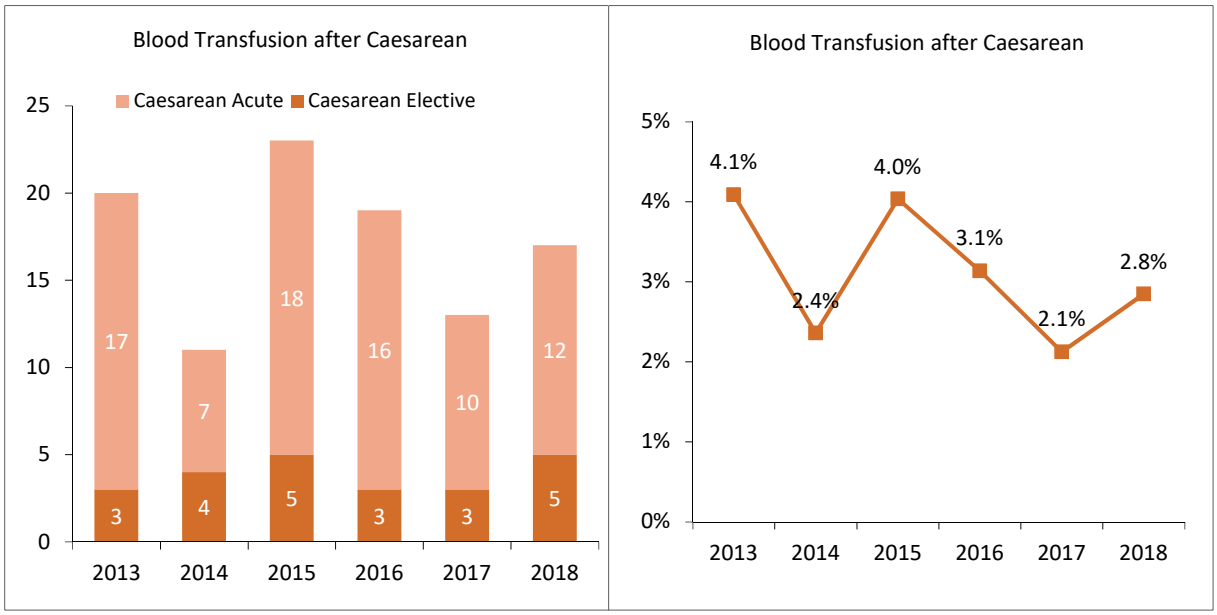


Numerator: Total number of women having a general anaesthetic for a caesarean section.
Denominator: Total number of women who undergo caesarean section.

Comment:
Our rates of caesarean sections under general anaesthetic have decreased significantly in 2017, however we remain outliers for this indicator when compared with other DHBs for the most recent clinical indicator data. The national rate by facility of birth for secondary and tertiary units in 2017 was 8.2% compared to our rate of 7.4%. further decrease is pleasing and ranks us seventh equal compared with the other twenty DHBs for this indicator. Our 2018 rate remains static.

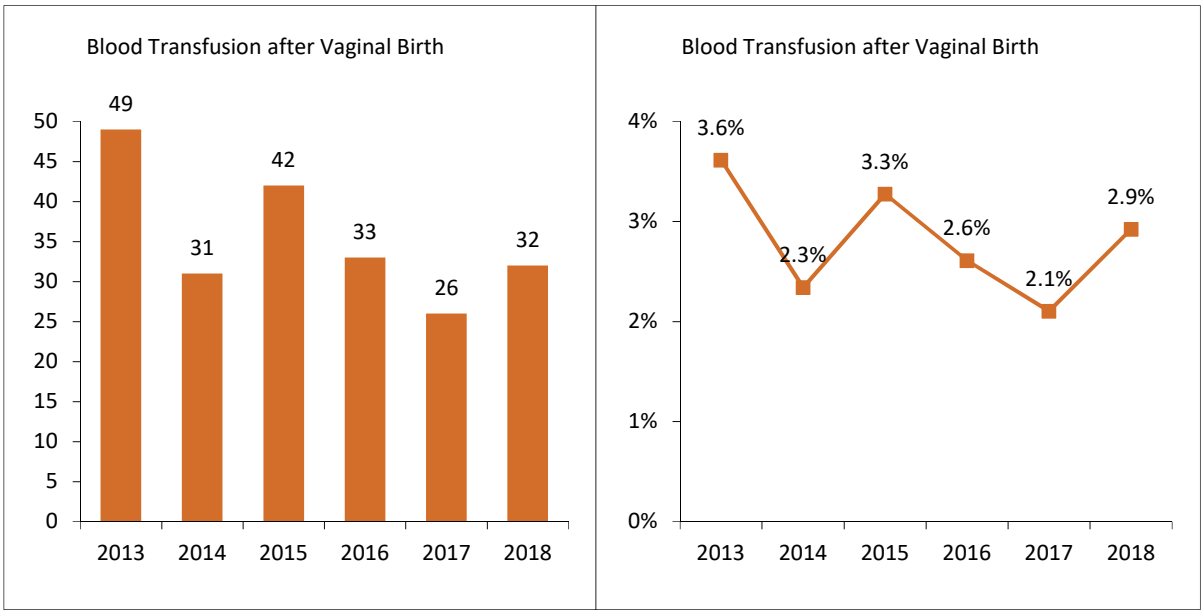
Patient-controlled epidural analgesia (PCEA) pumps were introduced to our unit in 2018. There is a need to evaluate the use of these in the context of reducing general anaesthetics for caesarean section.

Indicator Eleven: Women requiring a blood transfusion with Caesarean Section (by facility)



Numerator: Total number of women requiring a blood transfusion with caesarean section.
Denominator: Total number of women who undergo caesarean section.

Indicator Twelve: Women requiring a blood transfusion with Vaginal Birth (by facility)



Numerator: Total number of women requiring a blood transfusion with vaginal birth.
Denominator: Total number of women who give birth vaginally.

Comment:
Our rates of blood transfusions required with both caesarean and vaginal births (2.8% and 2.9% respectively) have shown an increase since 2017. When we commenced Carboxymaltose infusions given in the HVDHB Medical Day Stay Unit 2016, our rate of blood transfusions decreased. The slight increase in blood transfusions from 2017 to 2018 may reflect the decreased capacity for these women to have iron transfusions in the Medical Day Stay Unit.

Indicator Thirteen: Diagnosis of Eclampsia at birth admission (by facility)

Data provided by Ministry of Health from the New Zealand Maternity Indicators state there were no women diagnosed with eclampsia during labour in 2017 and this is the same as the aggregated rate for all secondary/tertiary figures. Our own 2018 data shows no diagnosis of eclampsia at birth.

Table 20: Diagnosis of Eclampsia at birth admission

Rate (%)

Facility	2013	2014	2015	2016	2017
All secondary/tertiary facilities	0	0	0.1	0	0.28
Hutt	0	0	0.1	0	0

Numerator: Total number of women diagnosed with eclampsia during birth admission.
Denominator: Total number of women giving birth.

Indicator Fourteen: Women having a peripartum hysterectomy (by facility)

There were no women who had a peripartum hysterectomy at Huttmaternity Facility for 2017. This is the same aggregated rate for all secondary/tertiary figures.

Table 21: Women having a peripartum hysterectomy

Rate (%)

Facility	2013	2014	2015	2016	2017
All secondary/tertiary facilities	0	0.1	0.1	0	.04
Hutt	0	0	0.1	0	0

Numerator: Total number of women having an abdominal hysterectomy within six weeks after birth.
Denominator: Total number of women giving birth.

Indicator Fifteen: Women admitted to ICU and requiring ventilation during the pregnancy or postnatal period (by facility)

The Ministry of Health data shows that there were no women requiring mechanical ventilation during the pregnancy or postnatal period in this reporting timeframe of 2018. However, the DHB records show that two women were ventilated. This will be investigated with regard to our data collection.

Table 22: Women admitted to ICU and requiring ventilation during the pregnancy of postnatal period

Rate (%)

Facility	2013	2014	2015	2016	2017
All secondary/tertiary facilities	0	0	0	0	.01
Hutt	0.1	0	0	0	0

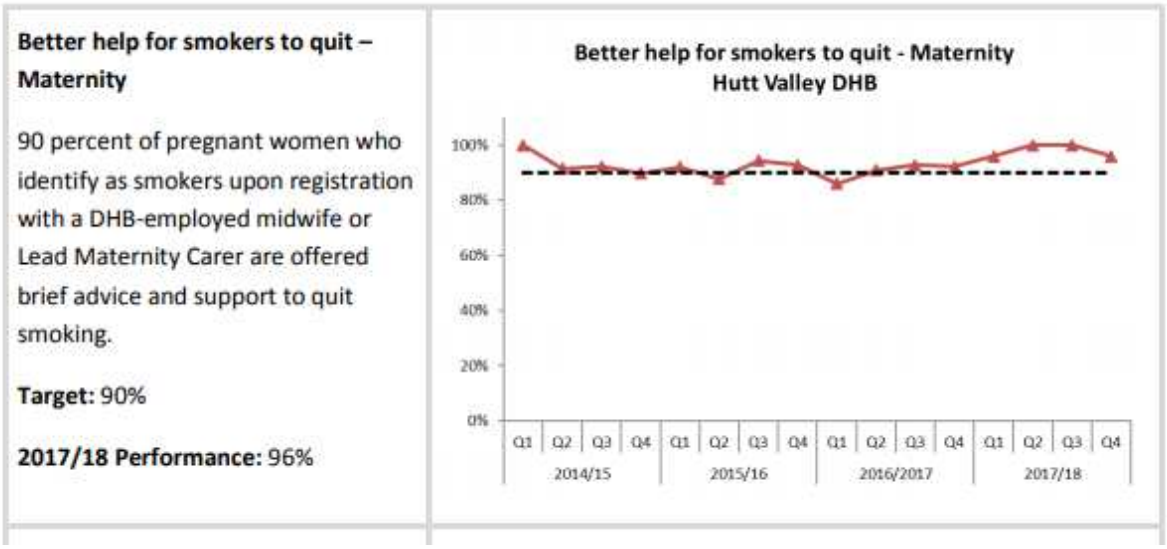
Numerator: Total number of women admitted to ICU and requiring over 24 hours of mechanical ventilation during admission anytime during the pregnancy or postnatal period.
Denominator: Total number of women giving birth.

In 2018, eleven women were admitted to ICU with two of them being ventilated.

Indicator Sixteen: Maternal tobacco use during postnatal period (by facility)

Both coded data and MMPO data show that LMCs and core midwives are consistent in asking women delivering in Hutt Hospital about smoking status and offering quit advice. Better help for smokers to quit was one of the Minister's Health Targets as outlined in the HVDHB Annual Report 2017. Results indicate the target of 90% was exceeded at 96%.

Figure 8: Better help for smokers to quit – Maternity Hutt Valley DHB



Source: Hutt Valley District Health Board Annual Report 2018 pg.31.

Table 23: Smoker at time of Birth by %

Delivery Year	Māori	Pacific	Asian	Indian	European	Other	Not Stated	All ethnicities
2014	38	11	0	0	9	0	11	13
2015	40	9	0	0	11	3	0	15
2016	42	13	0	1	9	0	0	15
2017	33	13	0	0	9	5	0	13
2018	38	14	0	1	10	5	0	15

Table 24: Maternal tobacco use during postnatal period (2 weeks after birth), by facility %

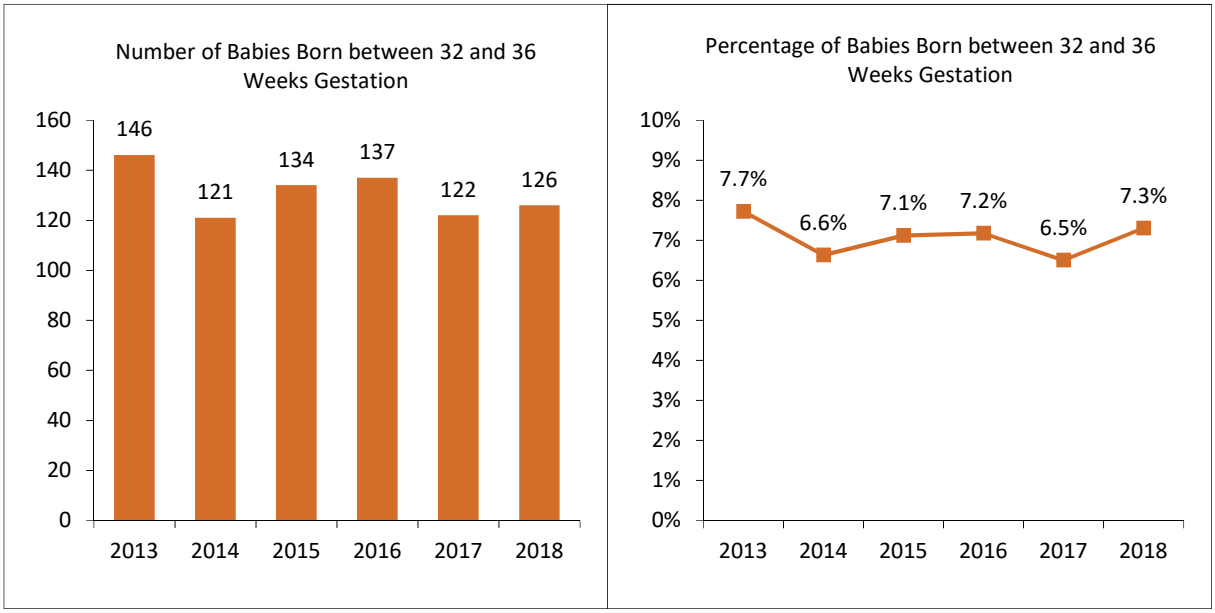
	2013	2014	2015	2016	2017
Our rate %	11.3	10.2	11.4	9.5	8.7
All Secondary and Tertiary Facilities	12.6	11.0	11.3	11	9.9
New Zealand	13.5	12.8	12.0	11.7	10.5

Numerator: Total number of women identified as smokers at 2 weeks after birth.
Denominator: Total number of women with smoking status at 2 weeks after birth reported.

Comment:
Data on smoking status at discharge from this facility is collected. (Table 24)
This is only data for DHB Community Team providing pregnancy care at this point in time.

At a national level, MOH introduced a Key Performance Indicator, maternal tobacco use during postnatal period, into the New Zealand Maternity Clinical Indicators for 2012. This provides data on smoking status at two weeks following birth, for those women registered with an LMC. It does not currently include women who receive DHB funded Primary Care. The most recent data (2017 NZ Clinical Indicators) shows this rate at 8.7%, which is below the national average of 10.5% and is tracking downwards.

Indicator Seventeen: Preterm birth (by facility)



Numerator: Total number of babies born under 37 weeks gestation.
Denominator: Total number of babies born (live births).

Comment:
In 2012, this indicator was further broken down to <32 weeks and 32-36 weeks in the New Zealand Maternity Clinical Indicators. Our above figures do not include the <32 week figures as these babies would be transferred to a Level 3 facility. This makes it difficult to benchmark against MOH data. By facility we recorded nine births 32 weeks or under, six transferred to CCDHB and three to another hospital. The rate of babies born between 32 and 36 gestation has increased from 6.5% to 7.3 % (n= 126).

Indicator Eighteen: Small babies at term (37-42 weeks' gestation) (by facility)

Table 25: % Small babies at term (37-42 weeks' gestation)

Facility	2013	2014	2015	2016	2017
All secondary/tertiary facilities	3.2	3.3	3.4	3.2	3.2
Hutt	2.4	2.9	3.4	3.3	2.9

Numerator: Total number of babies born at 37-42 weeks' gestation with birthweight under the 10th centile for their gestation.
Denominator: Total number of babies born at 37-42 weeks' gestation.

Comment:
Our rate of 2.9% for 2017 is below the national rate. This puts us just above the 50th percentile in the context of the national data. Our numerator for 2018 is twenty-eight babies with the denominator one-thousand-seven hundred and twenty-four by facility which decreases our rate but will need to be seen in comparison with other DHBs when the clinical data is released. Overall our rate of low birth weight babies for all gestations (figure 10) is showing a decrease in 2018.

Indicator Nineteen: Small babies at term born at 40-42 weeks' gestation (by facility)

Table 26: % Small babies at term, born 40-42 weeks' gestation

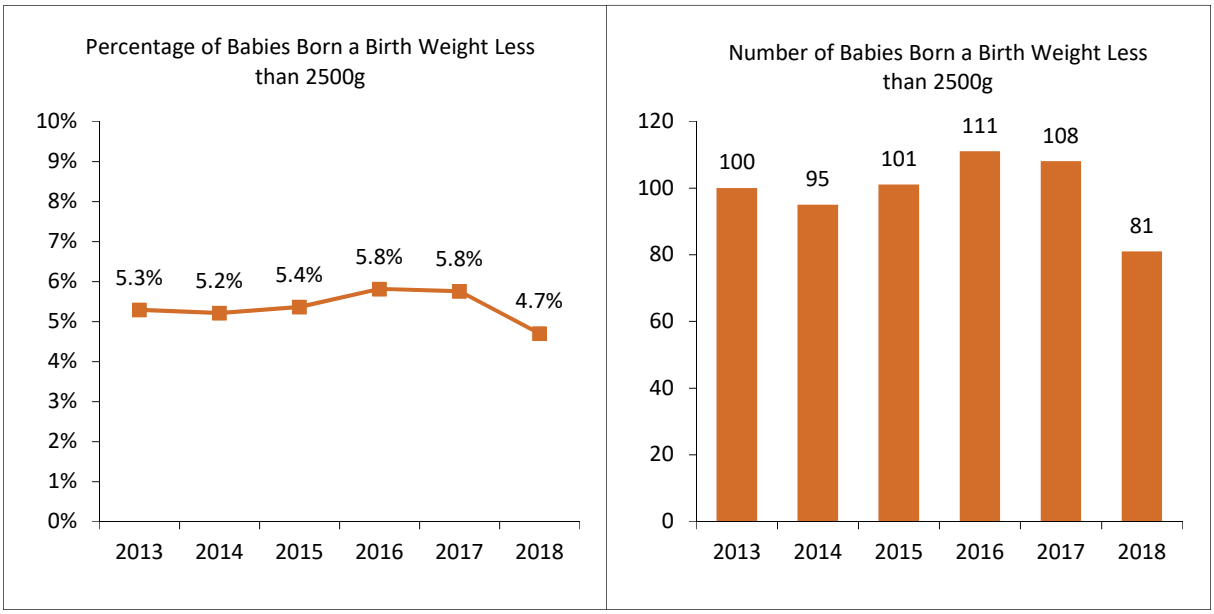
	2013	2014	2015	2016	2017
Huttmaternity	39	30.6	41.9	42.1	22
Secondary and Tertiary Facilities	34.9	37.9	37.0	34	30.4
National	36.7	39.4	38.4	35.8	31.9

Numerator: Total number of babies born at 40-42 weeks' gestation with birthweight under the 10th centile for their gestation.
Denominator: Total number of babies born at 37-42 weeks' gestation with birthweight under the 10th centile for their gestation.

Comment:
The numerator for Hutt Valley District Health Board of babies born at 40-42 weeks' gestation with birth weights under the 10th centile for their gestation is eleven babies by facility with a denominator of fifty (by facility).

Our rate of 22% shows a significant decrease (see figure 10). This places us as the DHB with the lowest rate in the context of the national data and requires further comparison of future data of our ability to detect small babies in utero.

Figure 9: % Low birth weight babies (<2500 grams)



Indicator Twenty: Babies born at 37+ weeks' gestation requiring respiratory support (by facility)

Table 27: % Babies born at 37+ weeks' gestation requiring respiratory support

Facility	2013	2014	2015	2016	2017
All secondary/tertiary facilities	2.1	2.2	2.1	2.1	2.2
Hutt	2.1	2.1	2.3	3.1	2.7

Numerator: Total number of babies born at 37+ weeks' gestation requiring over 4 hours of respiratory support.
Denominator: Total number of babies born at 37+ weeks' gestation.

Comment:
Hutt Valley DHB shows a significantly higher incidence than the national rate of 2.2% for 2017 within this indicator. The numerator is forty-seven and the denominator one-thousand-seven hundred forty-four. This puts us above the seventy-fifth percentile in the context of national data and we rank third out of twenty DHBs for this indicator. The relatively high rate of admissions of babies over thirty-seven weeks' gestation requiring respiratory support, needs further exploration to both understand the data and to take appropriate remedial action if it is required. We are intending to audit this.

Section Six: Maternity Quality and Safety Programme Activities 2018

The Maternity Quality and Safety Programme (MQSP) had a number of quality initiatives underway for the 2018 year. This was a combination of building on work commenced in the previous plan. In 2018 under the variation to the Crown Funding agreement, we developed five projects. These are outlined below.[1]

The MQSP at Hutt is supported by a coordinator at 0.4FTE, and administration support at 0.5FTE.

Governance and Clinical Leadership

Our range of meetings and forums are well embedded and we are continually looking at ways to improve how these work within our governance structure (figure 10). We are still to engage representation from general practice and Pacific health on our MCGG and we would like to utilize the expertise in this group to inform quality initiatives sitting outside the Maternity Quality and Safety Programme.

The Consumer Engagement Group continues on alternate months. This is to support progression of the consumer workstreams and for these representatives to have direct access to our management. A representative from this group attends the larger Maternity Clinical Governance Group (MCGG).

Consumer Members

There is growing evidence to support the relationship between consumer engagement and improved outcomes from health care. The Health Quality and Safety Commission (2015) defines consumer engagement as:

“A process where consumers of health and disability services are encouraged and empowered to actively participate in decisions about the treatment, services and care they need and receive. It is most successful when consumers and clinicians demonstrate mutual respect, active listening and have confidence to participate in full and frank conversation. Systems that support consumer engagement actively seek input from consumers and staff at all levels of an organisation.”

Our consumer members are highly valued and lead some of our workstreams to make quality improvements for the women and families they represent. We have been able to recruit another two consumers to enhance our team of dedicated women.

1. *Health Quality and Safety Commission. (2015). Engaging with consumers: A guide for District Health Boards. Health Quality and Safety Commission, Wellington, New Zealand. Accessed 6 May 2019 http://www.hqsc.govt.nz/assets/Consumer-Engagement/Publications/DHB-guide/engaging-with-consumers-3-Jul-2015.pdf*

MCGG Members

Alison Grant,
LMC Representative

Chris Mallon,
Director of Midwifery

Davina Smith,
Primary Youth Representative

Elle Ratcliffe,
Administration Support

Jodi Caughley,
Strategy Planning & Outcomes

Karen Daniells,
Clinical Midwifery Manager

Kylie Byrne,
Consumer Representative

Margaret Hope,
Core Midwife Representative

Meera Sood,
Obstetrician

Megan Telfar,
Consumer Representative

Nicky Jackson,
Quality Facilitator

Rhiannon Jones,
Maori Health Representative

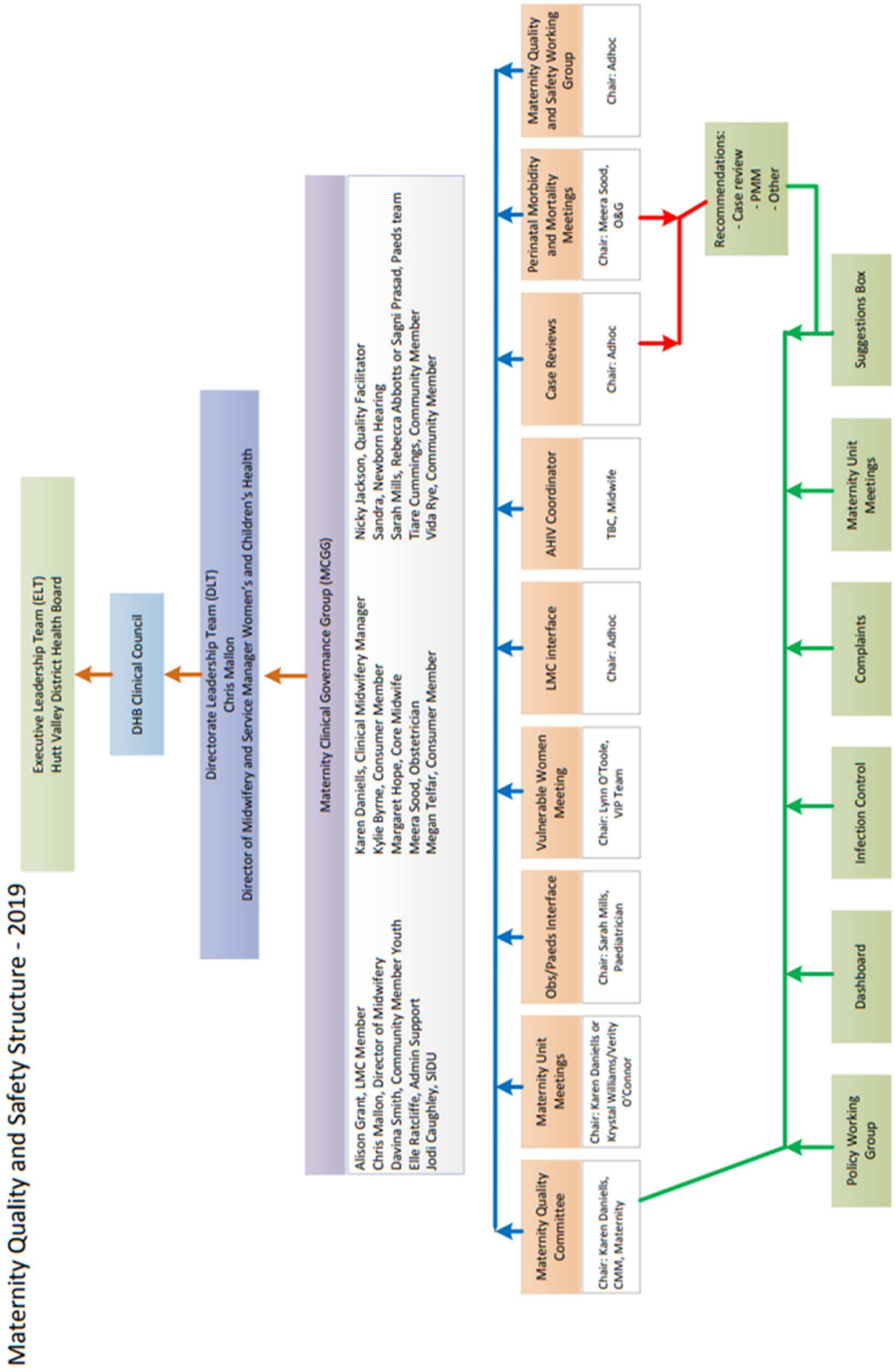
Sarah Mills,
Paediatrician

Tiare Cummings,
Consumer Representative

Vida Rye,
Consumer Representative

Maternity Quality and Safety Structure – 2018/19

Figure 10: Maternity Quality and Safety Structure – 2018/19



MQSP Projects

Business as Usual Quality Work

The Maternity Quality Safety Programme two-year plan includes Business As Usual (BAU). These are ongoing such as collection of smoking data, attendance on other project groups, maintenance of the consumer surveys and social media. Some of this work is highlighted in this section. For more detail regarding this please see Appendix Six.

MQSP Annual Report Compilation

The content of our annual MQSP report focuses on our maternity service, our collaboration both within the DHB and community agencies and our consumers. Our quality improvement initiatives are highlighted and future improvements identified.

Our response to trends in clinical indicators benchmarked against other DHBs are outlined and we have considered recommendations from National Maternity Monitoring Group (NMMG) and the Perinatal and Maternal Mortality Review Committee (PMMRC) recommendations, annual maternity report and PMMRC annual report.

Following feedback from the Ministry of Health, we will make our report publically available on our DHB website. We are constantly looking at ways of improving our reporting.

Smoking Cessation Advice data collection

We collect the data on smoking cessation advice and submit to the Ministry of Health on a quarterly basis. This is for women under the care of the DHB.

Sub Regional 3DHB Campaign

Each year Capital Coast, Wairarapa and Hutt Valley DHBs meet quarterly to discuss and share our ongoing projects. We plan an annual sub-regional campaign with a different focus each time. Recent examples include; "top five things to do when you find out you're pregnant", the “importance of baby movements” and a "pregnancy checklist". In 2018, we created two posters to reach women with mental health concerns in pregnancy or following birth. At Hutt DHB we held two forums to update our midwifery staff and LMC access holders on screening and resources available. We updated our respective DHB resources (Community Support booklet) for reflect services for women in our areas. We engaged with Health Line regarding advice given to women in the perinatal period and have plans to update the information to the dedicated text number for maternal mental health and to develop a business size card to give to women.

Speak up if you are down

Talk to someone if you are feeling anxious, stressed or are not enjoying your pregnancy or baby.

Ph: HealthLine on 0800 611 116

Or talk to your Midwife, Well Child provider or GP.

To find a midwife LMC visit:
www.findyourmidwife.co.nz
For more pregnancy or postnatal information visit: www.huttmaternity.org.nz

HUTTmaternity

HUTT VALLEY DHB

TATOU WAHINE TO TATOU TAONGA

Our Women Our Treasure

Let someone know if you are feeling down.

Talk to someone you trust: Whānau, Marae, Midwife, Well Child provider, GP or Ph: HealthLine on 0800 611 116.

"Ehara taku toa I te toa takitahi, engari, he toa takitini"
"My strength is not the strength of one,
it is the strength of many"

For more pregnancy or postnatal information visit: www.huttmaternity.org.nz

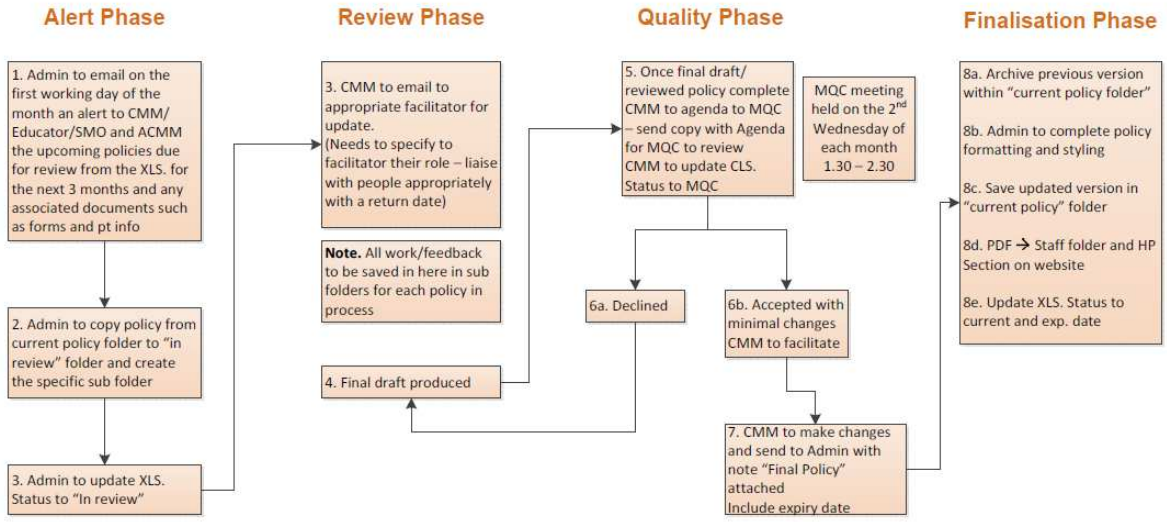
HUTT maternity

HUTT VALLEY DHB

Document Control

These systems ensure a robust revolving system for reviewing all Huttmaternity documents in a timely manner. However currently this is an ongoing MQSP activity but relies on input from the whole unit to review documents according to the deadline set. This needs the Policy Working Group (see structure pg. 79) to be re-activated and additional FTE for both midwifery and medical staff to align with other units where there is dedicated FTE for policy and guideline writing.

Document Control Flowchart



Communications

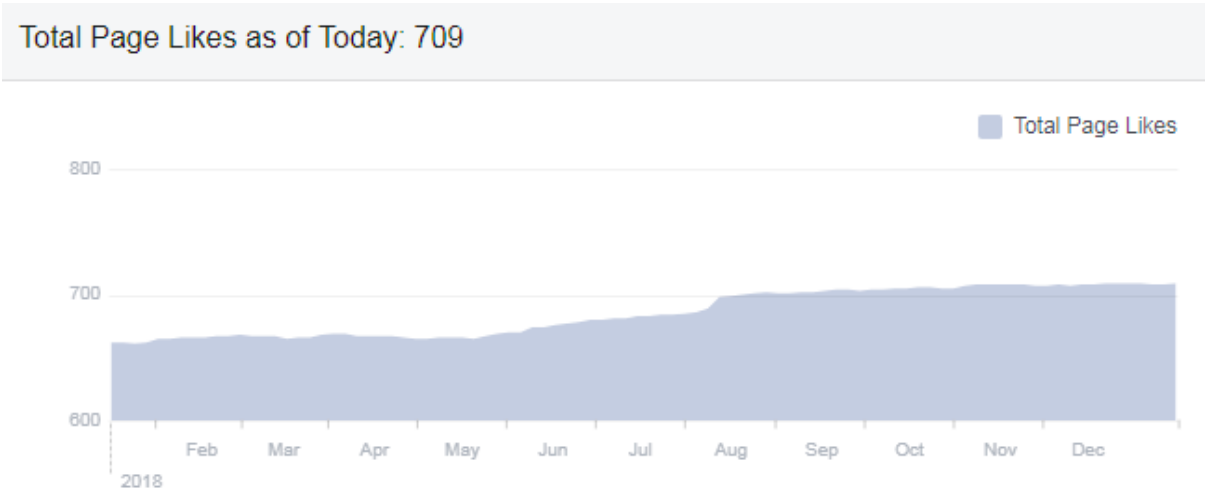
Newsletters

Our internal newsletter for core staff and LMCs is emailed out on the first and third Monday of the month. There are multiple contributors to these newsletters and it is open to everyone to submit items. By having this planned approach, it has reduced the amount of information sent out separately. Included are news items, education and training, staff news, upcoming meetings, recommendations, policy updates and meeting minutes. We have included short surveys for staff to encourage wider consultation on issues pertaining to our maternity services. We continue to look for ways to improve readership such as ensuring we have up-to-date emails, hard copies left in the unit and on noticeboards and incentivising readership occasionally with draws to win a voucher for the café.

Huttmaternity Facebook

Our Huttmaternity Facebook continues to promote important messages to our online community.

Figure 11: Growth of Huttmaternity's Facebook Page – 2018



Huttmaternity Website

The website is continually updated with additions to the resource section and links to policies as they are updated. The site also includes a live feed to our Huttmaternity Facebook page. Below are the sessions, users and page view numbers for 2018.

Figure 12: Huttmaternity website engagement – 2018

I was about four months when I booked with my third baby. My original midwife gave me some midwives names.I did look on the internet and was easy to find a midwife to care. "When I Googled it and it was quite easy to bring up midwifery care. I actually didn't know about the website. I just did it myself and when I Googled it the Huttmaternity website came up which is good.

Improving consumer engagement

Te Rā o Te Raukura

Te Rā o Te Raukura is a local festival which has been running annually for 23 years. The kaupapa is to share information that will help whānau to improve their health, education, well-being or creative strength. Arohanui ki te Tangata is the guiding statement that expresses sentiments of sharing, love, respect and togetherness towards fellow neighbours. The festival has grown from a couple of tables to now being held in a 60' x 10' marquee. The local PHO Te Awakairangi health network alongside other providers of health services and Te Runanga o Taranaki Whanui Hauora services promote a "healthier Hutt Valley for all."

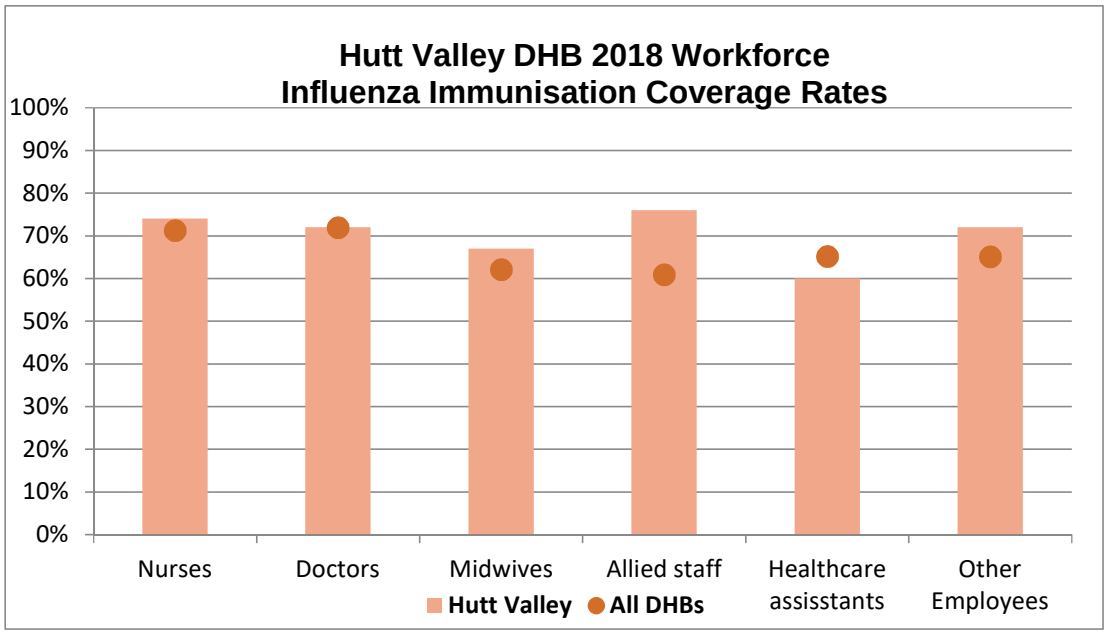
It is fitting for Huttmaternity to have a table at this event as Māori wāhine make up 22% of our birthing population. Our aim was to promote early engagement with a lead maternity carer (LMC) give early pregnancy advice and this year offer Boostrix immunisation on site. Again there was the incentive to encourage whānau to approach the stand using the "health passport" where health services asked a question to which people needed to answer to go in the draw for a basket of goodies. We also conducted our own survey on how to find an LMC when you are hapū. One hundred and ten people answered this survey. Our thanks to the Central Technical Advisory Service (TAS) for funding the gift voucher. Only four Hāpu women were immunised but we are hoping the visibility and ripple effect was worth our presence. Pleasingly, quite a few women had already had the Boostrix (whooping cough) immunisation when they came to our stand.

Huttmaternity was also able to promote its website and Facebook information and how to find a Lead Maternity Carer.

Staff Flu Vaccinations

During the 2018 flu season, core midwives (employed) were vaccinated by the DHB occupational health team. The rate showed an increase from 2017 of 5% and for 2018 was above the national rate of 62% (figure 14). Huttmaternity are pleased to report that two of our staff members have been administering flu vaccinations to women and staff, pre flu season.

Figure 13: Hutt Valley DHB 2018 Workforce Influenza Immunisations



Pop up immunisations

This initiative was created to increase the uptake of flu and whooping cough vaccinations for pregnant women in the Hutt Valley by taking pop-up clinics out into the community. We felt that by making it easy and accessible i.e. no appointments, local venues and flexible days/times, that women would find it easier to get their vaccinations done. We wanted to provide an educational element too, to advertise that this is recommended and safe to do in pregnancy. The service was set up by the Early Pregnancy Assessment Unit staff, with the support and involvement of Regional Public Health, and involved setting up informal clinics once a week, in public spaces distributed from Upper Hut down to Wainuiomata. On the back of the success of this, we plan to go bigger and better in 2019, with a specific focus on reaching our Māori and Pasifika women in local maraes and community centres.

HUTTmaternity

Hutt Maternity will be providing a FREE Pop-Up

Flu and Whooping Cough Vaccination Clinic for pregnant women

HERE weekly, 8.30 – 10.30am Thursdays	HERE weekly, 11am – 1pm Thursdays
10th May	17th May
24th May	31st May
7th June	14th June
21st June	28th June

Whooping cough vaccination from 28-38 weeks
Flu vaccination at any stage in your pregnancy

Theatre team

The theatre team initiative was in response to the withdrawal of Midwifery LMC care where historically they had been providing the secondary care to their clients when there was the need for a caesarean section. The specialized team was created to provide midwifery care for an anticipated additional six hundred procedures per year. This team covers all emergency and elective caesareans Monday to Friday.

This has been universally applauded by all departments interfacing with maternity as it increases safety of women and babies at handover to theatre, promotes continuity and enables safe transfer from theatre to the postnatal ward. Anecdotally it has been said to increase the satisfaction for women and we plan to more formally evaluate this service.

Unit enhancement

Our consumers performed an audit of our unit using a tool called BUDSET (Birthing unit design spatial evaluation tool). Such recommendations as improving signage, birth aids and storage redesign were made. Many of these recommendations will be carried out within the refurbishment plan which was taken to the Board in November. The consumer group were also given a small budget to improve the Whānau room in the unit. They engaged donations, paint and time from Bunnings (local hardware company) and revamped the room. We are hoping the DHB will add to this by redoing the kitchenette cabinetry.

Increasing physiological birth rate

There is ongoing work to identify correct rates of intervention, beginning particularly with standard primiparae women. Within this project there are workstreams to promote normal birth and investigate reasons for low risk women being subjected to interventions which may cause more harm.

Caesareans performed for fetal distress have been investigated in this reporting period (see appendix five). Findings suggest injudicious use of cardiotograph monitoring, lack of fetal blood sampling in labour may have led to caesareans where in fact more time could have been given to facilitate a vaginal birth.

Plans for refurbishing the maternity unit include the provision of a low intervention birthing room with a dedicated birthing pool for relieving labour pain and birthing.

Partaking in a multinational trial investigating the use of balloon catheters for induction of labour where women can go home to labour in the early part will inform our practice of induction.

We are yet to progress the use of acupuncture for preventing the need to induce in some situations. Many midwives practice this and our unit has an alongside acupuncture service overseen by Registered Acupuncturists (see pg. 54) which is free to women. The delay in this can be attributed to workforce.

New model of care for women with high BMI

Table 28: Body Mass Index for all Births in 2015 – 2017 Huttmaternity Data

	2015	2016	2017	2018
<= 18.4	28	26	40	24
18.5 - 24.99	833	791	770	652
25 - 29.99	534	546	516	469
30 - 34.99	230	299	273	286
35 - 39.99	119	116	128	141
>= 40	84	85	101	114
Unknown	28	8	20	4
Total	**1856**	**1871**	**1848**	**1690**

Working group

A working party was formed and online surveys have been carried out amongst women who had attended our secondary clinic in 2016 and in 2018 with a body mass index over 40kg/m^2. The response rate was poor (<20%) but those who did respond spoke of time wasting and 'fat shaming' and a lack of consistency in information and doctor. A workshop was held in March 2017 to begin a conversation

about our care of these women who were overweight in pregnancy. The impetus for this was our rate of women with BMI over 35kg/m^2 and anecdotal reports of women choosing not to attend our secondary care clinic for this condition under the referral guidelines.

Again further work on this project has been stymied in 2018 as a result of workforce shortages and resource. Plans to revive the working group to design a new model of care are underway. The group aims to improve the journey for these women and support a healthy weight gain in overweight women during pregnancy and beyond.

Huttmaternity Data Integrity

The data for the Maternity Clinical Indicators has been sourced from Hutt Valley DHB events, stored in the Hutt Patient Management System (WebPAS) and the Huttmaternity Database (Concerto), and has been extracted from the National Minimum Dataset (NMDS) and coded using ICD-10-AM-v6. Some data is reported from our primary maternity services to the National Maternity Collection.

We continue to have issues with correct collection and coding of our data and require dedicated FTE to investigate this despite responsive amendments from audits of the same.

Management of consumer feedback and review

We now have a year's worth of quantitative and qualitative data. The comments from our quarterly electronic survey are shared with relevant services/staff. Our system of referring complaints to the DHB Quality team for further input is embedded

Section Seven: National Maternity Monitoring Group Recommendations Relevant to MQSP

Alongside our own MQSP Objectives we have attempted to allocate priority to the National Maternity Monitoring Group (NMMG) workstreams as directed by the Ministry of Health. We have outlined our progress or plans to date, in those relevant priorities.

One: Responding to Workforce Issues

Staffing is an important issue that significantly impacts quality and safety for midwifery and medical workforces. The National Maternity Monitoring Group 2017 report states that "DHBs need to review basic staffing for midwifery and medical workforces, ensuring that a safe and high-quality service is supported. The workplace culture must enable staff to work collaboratively, feel safe and supported, and maternity services must be women-centred."[1]

We have struggled to recruit to vacant FTE for a variety of reasons. The "Dear David" campaign demonstrated that both employed and self-employed midwives are continuing to leave the service citing unsafe working environments and conditions that compromise the quality of care able to be provided.

In response to the withdrawal of ten LMCs in our district caring for women over the Dec/January timeframe, we created an on call team of experienced midwives. This primary intrapartum care team (PIC) cared for 24 Women in December 2018. The preliminary feedback from surveys to women, core staff and the PIC team has been positive. The external review of the maternity service undertaken in November 2018 will likely discuss workforce shortages for both midwifery and obstetricians. We await the recommendations of this review to escalate these issue and action the recommendations. Midwifery workforce shortages are nationwide but at a local level have been placed on the DHB risk register since 2017.

Two: Primary Birthing

In July 2018, a private primary birthing unit opened in our area. We have formed good collaborative working relationships with the manager and staff to reach consensus on shared policies. In this reporting time frame 98 women birthed at the unit including some low risk women who had originally booked with our DHB team. The reason was two fold in that primary birthing was promoted offering primary women under DHB care a choice, and to mitigate the issues due to the LMC midwifery workforce taking fewer women on over the December/January period.

We are cognisant of the need to increase our physiological birth rate at our own facility. Plans for refurbishment of the unit include the provision of a primary birthing room. This will be within the maternity floor but removed from the current birthing rooms. The creation of this room is integral to the overall refurbishment plan but also provides our primary women with a choice and a purpose built birthing pool.

We have amended our website to include information (based on the Ministry of Health information) on primary birthing in our district. Of note however is the significant decrease (25%) of homebirths for 2018 which may be attributable, at least in part, to women choosing the new primary birthing unit instead.

Our website has been updated to reflect the choices for place of birth in our region. MQSP supported four core midwives to attend a Primary Birthing Skills workshop in November 2018.

National Maternity Monitoring Group. 2018. National Maternity Monitoring Group Annual Report 2017. Wellington: Ministry of Health. Pg 9.

Three: Investigation of standard primiparae induction and caesarean rate

This has been reported under our two year MQSP work plan as we were identified as outliers for this clinical indicator. Our data collection and coding remains an issue and it is a priority to address this. The corrected Induction of Labour rate for standard primiparae is significantly lower when adjusted for augmentation of labour.

Four: Access to postpartum contraception

Hāpu Ora is a service described under our Community Midwives workload (pg. 24). This is an initiative to reduce inequity and promote early registration with a Lead Maternity Carer. Alongside offering early pregnancy care and help to access a Lead Maternity carer, access to postpartum contraception in the form of a long acting reversible contraceptive (LARC) method of Jadelle insertion has become one of the services accessible at this marae based community clinic. Two of our midwives have received education to enable them to carry out this procedure.

Five: Access to primary Maternal Mental Health Services

Access to community non acute mental health services has shown 52 women were assessed in clinic by a member of the Specialist Maternal Mental Health team in 2018. This shows a 25% increase from 2017 (see pg. 53 for a description of this service). We have updated our Community Support brochure to highlight support for women with mental health concerns and published the Edinburgh Postnatal Depression Scale to make it more accessible to midwives to use with their clients. Education on awareness of the Maternal Mental Health Pathway for our DHB was covered in the planned workshops on maternal mental health, dealing with trauma and a cultural view of mental health, in September 2018. It was attended by 14 midwives both core and LMC. This is to be repeated in February 2019.

Section Eight: Perinatal and Maternal Mortality Review Committee (PMMRC) Recommendations for MQSP at Huttmaternity

The recommendations from the 12th Annual Report released in June 2018 and relevant to MQSP are listed below. As with NMMG, these include recommendations around data collection, actions undertaken at Huttmaternity in direct relation to recommendations, and work to improve our data integrity. To date this has involved work to identify the issues and is ongoing, involving expert assistance external to our Maternity Unit. Once the Ministry of Health has updated the MAT dataset, we will audit our collection of the requested data using reports generated by the Ministry of Health identifying the gaps to:

- Reduce preterm birth and neonatal mortality.
- Review rates of Neonatal Encephalopathy NE and identify areas for improvement.
- Improve care for mothers under 20 years of age.
- Provide sufficient staff to observe skin to skin and identify risk of SUDI (theatre team and pepi pod initiative).
- Identify areas for improvement for perinatal related mortality.
  a. Early recognition and treatment of sepsis.
  b. Establish septic bundle kits.
  c. Clinical pathways while national guidelines are rolled out.

The National Interdisciplinary Clinical Practice Guideline on the indication and timing for induction of labour is eagerly anticipated as we seek to improve our rates of induction of labour by applying a practice guideline based on high quality research. In the interim we have reviewed our process with regards to the booking of induction and handover of care from primary to secondary care.

Neonatal Encephalopathy (NE) Task Force Initiative

Neonatal Encephalopathy (NE) is a one of the main causes of brain injury in newborn babies. When NE does occur, the effects have a long-lasting impact on whānau and support services over the course of a lifetime. ACC has initiated work with the maternity sector to achieve a 25% reduction in the incidence and severity of preventable NE by 25% by 2022. Huttmaternity is interested in being involved in the pilot of this initiative. By working collaboratively and across the sector we hope to improve outcomes for babies and whānau.

Sudden Unexplained Death in Infancy (SUDI)

Within our unit we have commenced a smoking cessation initiative in conjunction with Kokiri Marae, (Moe Ora mō ngā pēpi and Hapū Māmā stop smoking programmes), Midwifery Champions and the Community Midwifery Team. This is to improve staff confidence in positively assisting whānau with smoking cessation for example increasing smoking cessation wrap around including nicotine replacement therapy.

This is being linked to our ground breaking sudden unexpected death of an infant prevention, providing wahakura and pēpi pods for the at risk community and during their stay in our unit. This will be rolled out in 2019. In working alongside this programme, which has a 'by Māori, for Māori' approach, we are trying to align with Te Tiriti o Waitangi and reduce inequity as Māori babies are nearly five times more likely to pass away as a result of SUDI than non Māori.[1]

The aim of this programme is to ensure no at risk babies leave the postnatal ward without appropriate protection from SUDI.

Improving care for mothers under 20 years of age

Investment at the start of life in the form of antenatal care and education needs to underpin some of the work of the MQSP. The DHB currently contracts BirthEd and with a focus on birth and parenting education including safe sleep principles, their MAKE Kaupapa (Māori Antenatal and Kaiāwhina Education) is reaching women who may not ordinarily access antenatal education as it is close to home (marae-based). BirthEd also offers dedicated youth friendly antenatal education at Vibe. Vibe is a one- stop wrap around health and social service for under 24 year olds in our district. Our clinical governance group has representation from Vibe.

Increasing our consumer representation of marginalised groups is a further aim of this MQSP to help understand inequities in our service including those mothers under 20 years of age.

[1] Source: 2013/14 New Zealand Health Survey, Ministry of Health.
[2] Mitchell E, et al NZMJ 2 June 2017, Vol 130 No 1456.
[3] PMMRC. 2018. Twelfth Annual Report of the Perinatal and Maternal Mortality Review Committee: Reporting mortality 2016. Wellington: Health Quality & Safety Commission.

Recommendations from the Maternity Mortality Working Group

Establishment of sepsis bundle and pathways to enable earlier recognition and treatment while waiting for nationally consistent guidelines.

Our emergency study days include detailed scenarios on recognition and treatment of sepsis in the peri-partum woman. As noted in our education and perinatal and mortality sections, we are in the process of developing a guideline to include in our sepsis bundle while we await the national guideline rollout.

Section Nine: Quality and Safety

Consumer Feedback

Our consumer survey localises the National Consumer Survey Tool provided by MOH. This is sent out quarterly to women with valid emails (currently 60% and up from 50% in 2017). The response rate is currently 36.6%. Women and their whānau also have the opportunity to provide this feedback by hard copy and complaints are directed to our DHB quality team should this be requested. The identification of themes from our survey to feed into MQSP objectives is one of our ongoing workstreams.

Compliments, complaints and recommendations from all sources are reviewed by the Maternity Quality Committee. Appropriate actions are planned, documentation altered as needed and decisions communicated to relevant parties. Feedback from the Maternity Quality Committee is a standard item on our MCGG.

Compliments

Along with compliments in our survey, seven praises relating to the Maternity Unit were registered with the DHB Quality Team for 2018. The themes of these compliments relate to care and staff professionalism.

It should be acknowledged that not all compliments are registered through the Quality Team and many thank you cards are given collectively and to individual staff members in our unit or through sending the staff a “Tumeke” card. This initiative is another means of feedback and is being well utilised by staff to staff for compliments also. Please find some examples of these compliments:

“Last 6 weeks of pregnancy was difficult with some concerns about baby. We were supported with weekly consultations, scans and information. Felt very secure with MAU, the doctors there, and the Ob/Gyn doctors.”

“The antenatal care and care during labour was outstanding - special thanks to our LMC, Hospital Midwife and student Midwife.”

“Support and care I was given from midwife and also the staff in the delivery suite that assisted after giving birth.”

“They provided continuous support to me and my partner while I was struggling to breast feed and was under recovery.”

“Hospital Midwives went above and beyond during birth including staying beyond their shift finishing.”

tumeke

tumeke

[too m*eh*-keh]

A colloquial saying literally translated to mean 'too much.' "Tumeke!" was proclaimed to express that someone was impressed with the actions of an awesome team player.

Our people give their all to care for patients and support their colleagues.

Grab this Tumeke card and write a note to someone who has been particularly awesome today! Simple.

Let's acknowledge the small but exceptional 'tumeke' moments at Hutt Hospital.

To _____

I want you to know I appreciated it when you...

_____

_____

_____

_____

_____

You demonstrate the following DHB values:

- ☐ 'Can do' attitude: leading, innovating & acting courageously
- ☐ Working together with passion, energy and commitment
- ☐ Trust through openness, honesty, respect & integrity
- ☐ Striving for excellence

from _____

tumeke

HUTT VALLEY DHB

Complaints

In the 2018 year, there were eighteen complaints registered with the DHB Quality Team. All complaints were responded to in writing. If appropriate, a meeting was held with the complainant and their family and clinical staff.

The themes can be summarized by this Wordle:

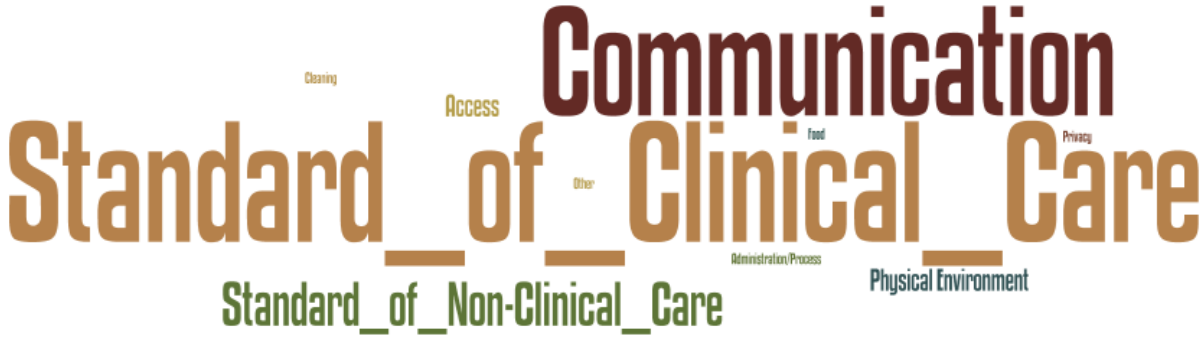


Table 29: Complaints by Category

Department and General Event Type for 2018	Number of Events
Delivery Suite	**93**
Blood and Blood Products	1
Clinical Care/Service/Coordination	7
Facilities/Building/Property	2
Good Catch	2
Infection Control	1
Maternal/Childbirth	40
Medication	3
Patient Falls	2
Safety/Security/Privacy	3
Skin Tissue	1
Staff and Others Health and Safety	21
Staffing	10
MAU	**3**
Maternal/Childbirth	1
Medication	2
Post Natal Ward	**51**
Clinical Care/Service/Coordination	3
Facilities/Building/Property	4
ID, Documentation or Consent	3
Maternal/Childbirth	13
Medication	7
Patient Falls	3
Safety/Security/Privacy	2
Staff and Others Health and Safety	11
Staffing	4
Tube and Drain	1
Grand Total	**147**

We have a main DHB generic Health Care Events reporting system and a complementary process to capture specific maternity events. See our pathway (Appendix Two).

Health Care Events

For our internal event reporting there were 90 inpatient and unit events and 57 for employees and affiliates. The Maternal and Childbirth category is where the process did not go smoothly due to staffing or equipment issues and this showed a marked increase from previous years.

All events are reviewed by the Clinical Midwifery Manager and Line Managers as appropriate and actions recommended as a result.

Trigger List/Event Reporting

This pathway currently sits alongside our DHB Health Care Events. Each event is reviewed by the Weekly Trigger Review Group and a review plan decided. Options include; nil action required, systems review, case review or refer on to the Review Steering Group for consideration of Root Cause Analysis (RCA).

Event Reports are produced quarterly on the number of events and unexpected outcomes which are presented to the MCGG and recommendations are circulated to Maternity Staff via our internal newsletters and in our online staff folders.

Clinical Reviews and Recommendations from 2018

As an outcome of the use of the trigger forms, there were 15 clinical reviews from 43 maternal, 20 baby and nine systems events triggered. Some of the reviews were multi-faceted i.e. delay in theatre equipment and high lactate of baby. The cases of abnormal lactates made up 45% of reviews (nine). Others included admission to intensive care unit (three), unexpected admission to SCBU (two), GA caesarean section (nine) primary or secondary post-partum haemorrhage (seventeen).

Recommendations included improvements in communication, education on cardiotocograph (CTG) monitoring and interpretation through weekly CTG meetings and attendance at RANZCOG Fetal Surveillance Education Programme (FSEP) education and on online FSEP. Regular emergency drills and transfers to theatre scenarios were recommendations. Staffing shortages and escalation of reporting to Senior Medical Officers have new protocols which have been imbedded.

Perinatal Mortality Cases

The maternal mortality ratio in New Zealand in the triennium 2014-2016 was 9.42/1000, 000.[1] This is the lowest ratio since perinatal mortality and morbidity review committee (PMMRC) started collecting data in 2006. The most important change is the inclusion of maternal suicide among direct maternal deaths.

This report comments on severe acute maternal morbidity rates which are used alongside maternity mortality rates as a measure of the responsiveness and quality of maternity care. The definition of severe acute maternal morbidity identified nearly five times as many cases as maternal death. Severe acute maternal morbidity is when a pregnant women or recently pregnant woman is ill and 'would have died had it not been luck or good care was on her side.' (Mantel, Buchmann & Rees, 1998).

In line with the New Zealand Maternity Standards requirement of developing a systematic review process and PMMRC, our clinical team supports review and reporting of:

- Women admitted to ICU.
- Newborn babies transferred to CCDHB for therapeutic hypothermia.
- Babies that are stillborn or have died in the neonatal period (Liveborn over 20 weeks and up to 28 days after birth).

Perinatal Morbidity and Mortality Meetings are scheduled quarterly. The format has been changed to allow LMC Midwives to present their own cases and in 2018 included education sessions on neonatal encephalopathy and lactate monitoring during labour. We are trying to provide multidisciplinary team education and have more of a focus on near misses and good catches in our care at this forum. We welcomed Dr Kate Strachan Pathologist, who attends our quarterly meetings.

The morbidity experienced by women under our care is reflective of national findings i.e. sepsis, massive postpartum haemorrhage and consequence – peri-partum hysterectomy, eclampsia, severe pre-eclampsia presenting as HELLP syndrome and influenza.

Huttmaternity has chosen to investigate further cases where women had unplanned admissions to ICU over the period of November 2017 to November 2018 as recommended by the National Maternal Morbidity working group. The purpose of this review is to identify which cases were preventable and to recommend changes to our systems and identify sustainable quality improvement initiatives to reduce morbidity and potential mortality. The review is ongoing at the time of reporting, however their cases have been presented at the perinatal mortality and morbidity meeting held in November 2018.

[1] PMMRC. 2018. Twelfth Annual Report of the Perinatal and Maternal Mortality Review Committee: Reporting mortality 2016. Wellington: Health Quality & Safety Commission.

Stillbirths

We acknowledge the grief of the families in our community who have lost their precious babies in this time. This may have been a little life but it is not a little loss.

We meet as a multi-disciplinary team to honour their babies by going through a rigorous process to identify anything we can change and improve. This is shared with the families.

In the 2018 reporting timeframe there were nine stillbirths. Three of the babies were 20-22 weeks gestation with the remaining three over 34 weeks and three at full term (full term is considered 37-42 weeks).

The recommended gold standard for investigation following a stillbirth is:

Full post mortem examination including all of the following: external examination; internal examination of the brain, chest, and abdomen; examination of the placenta; genetic testing; radiology; photographs.

Out of the seven, three women consented to this gold standard. This highlights some gaps in how we are talking to women to explain the process and acknowledge their cultures. Something for us to consider.

Table 30: Distribution of ethnicity in babies stillborn 2018

Ethnicity	Total
NZE	1
NZM	3
Pacifica	1
Indian	1
Chinese	1

Cultural Safety

Understanding differences and using an equity lens in our review of perinatal mortality is imperative.

Adverse Serious (SAC2) and Sentinel (SAC1) Events

The Severity Assessment Code (SAC) is a numerical rating which defines the severity of an adverse event and as a consequence the required level of reporting and investigation to be undertaken for the event (Maternal Morbidity review toolkit for maternity services, 2018). Guidance from PMMRC around appropriate SAC rating for HIE babies is expected shortly. The document is out for consultation at the moment.

At Huttmaternity, there were two SAC1 events reported in 2018. Two babies were diagnosed with Hypoxic Ischaemic Encephalopathy Grade 3, and have yet to be SAC rated.

There were no maternal deaths in 2018.

Source:http://www.hqsc.govt.nz/assets/Reportable-Events/Resources/guide-to-using-sac-2008.pdf
Accessed 1 May 2019.

Health and Disability Commission (HDC) Reviews

In this reporting period, there were three complaints via the Health and Disability Commission (HDC). Two of these complaints related to another provider and records were requested. On receipt of a complaint from HDC, HVDHB commences an investigation and responds to the Commission's requests for clinical records and associated documentation pertaining to the concerns raised. The completed response is provided to the HDC who reviews the case to decide if further action is required.

I had the Boostrix, I got the whooping cough one.

Action of recommendations from reviews - maternal

Laboratory

- Additional tests added as a matter of course for pre-eclampsia screening on lab forms

Recognition of early deterioration and timely escalation.

- MEWS used in the antenatal period to alert a practitioner to a deteriorating intrauterine condition affecting the baby such as maternal sepsis.
- All women in the postnatal ward to have initial set of observations documented on the MEOWS (soon to be the maternity specific vital signs chart MEWS) chart. Further observations will depend on the ongoing clinical picture. The attending midwife in delivery suite documents initial set of observations on the MEOWS before handing over care to the postnatal staff

Influenza Immunization.

- Seasonal or pandemic influenza vaccination is recommended for all pregnant women regardless of gestation and for women planning to be pregnant during the influenza season (PMMRC, 2018). Immunization against influenza is specifically promoted to pregnant women and available to all pregnant women free of charge.
- The staff in the early pregnancy assessment clinic have set up and implemented pop up immunization clinics in the community. The pop up clinic is regularly held at Hāpu Ora (drop in marae based clinic). The staff also provide a 'walk in' clinic situated in the Maternity Assessment unit on the ground floor.
- Promotion of staff influenza vaccination (see page 83).

Improving collaborative care across inter hospital departments

- Education was provided for midwives from a multidisciplinary team on managing diabetes and trouble shooting. The day was well attended and will be repeated next year.
- Continued use of MEOWS chart and roll out of MEWS hospital wide when rolled out in June 2019 to support escalation of clinical care using objective defined criteria. A clear management plan from a senior clinician is an expectation.
- Continuing work with Emergency department (ED) to improve appropriate referral to O&G/LMC and for identification of sepsis.
- Continuing work on emergency calls that are used consistently and appropriate alerts to anaesthetics and other appropriate specialties.
- Continue to review Emergency Moves to Theatre.
- An amalgamation of RCOG and SOMANZ guidelines on sepsis were altered for a local approach and is to be passed by the quality committee.
- Communication to LMCs via LMC interface that they have access to significant history via Concerto to obtain comprehensive history.
- Request to LMCs to consider referral to primary midwifery team if not available to respond appropriately to women with high social issues.
- Request to Vulnerable Women Group (VWUB) to publicise referral criteria, processes and communication into and out of the group.
- Midwifery staffing has been noted on the risk register.

Action of recommendations - neonatal

Babies Transferred for therapeutic hypothermia in 2018

- Review of transfers from Huttmaternity to CCDHB occurs as a result of a trigger within our review process.

Table 31: Transfer for therapeutic hypothermia by mode of birth

Mode of Birth	Grade	Number
TLUSC/S	0	1
TLUSC/S	1	3
TLUSC/S	3	1
VAGINAL BIRTH	1/2	1
VENTOUSE	0	1
Forceps	1	1
TOTAL		8

As a result of these reviews the following recommendations were enacted on:

Availability of Obstetric SMO

- If Obstetric SMO is not available s/he is to arrange appropriate cover and inform the ACMM or midwife in charge.
- If the ACMM or midwife in charge discover that the obstetric SMO is not available they are to use the escalation policy to ensure SMO cover.
- SMO should not be allocated to a surgical list when on call for delivery suite.

Foetal Surveillance training and education

- Multidisciplinary training is mandatory for all clinicians. We currently run the RANZCOG Foetal Surveillance education day annually. We also provide vouchers to staff to complete the online OFSEPLUS education package.
- Weekly education meetings are held where CTGs are reviewed as part of reflective practice.
- Continuous monitoring of the baby is recommended during the insertion of an epidural or spinal anaesthetic, if conditions allow place a Foetal Scalp Electrode for quality trace if unable to trace externally (MATY103).

Assistant Clinical Midwifery Manager (ACMM)

- ACMM to provide cover on the night shift. Business case has been presented to the CEO.

Communication in the multidisciplinary team

- Mandatory hand over round at 08.00 including SMO, RMO and ACMM to facilitate MD communication.
- MD Team to develop guidelines for setting time frames for O&G review that relate to the urgency of the review required.
- APH of unknown origin is a late pregnancy risk factor for SGA babies. Recommend that all practitioners follow the New Zealand Fetal Medicine Network Guideline for Management of Small for Gestational Age Singleton pregnancies after 34 weeks gestation.
- Introduction of the Growth Assessment Protocol to our unit. We have had confirmation that GAP New Zealand has secured funding through the ACC Neonatal Encephalopathy Taskforce (email dated 4/12/2018).

Continuity of Care

All women in New Zealand should have access to continuity of care and for DHBs to ensure 95% of pregnant women in their community receive continuity of primary midwifery care (PMMRC, 2018).

- Women with social complexity requiring a multidisciplinary approach to care should be assigned a key clinician to coordinate her care; informational continuity.

Section Ten: Forward Planning 2018-20

As part of the Maternity Quality and Safety contract we regularly review our two-year plan. In 2018 a directive of the new Crown Funding Agreement was for the programme to choose 3-5 projects, local and national. Our revised plan is included as an appendix and summarises activities in 2018 and objectives for the two year period, 2018-2020.

A review with our Maternity Clinical Governance Group is taken six monthly and quarterly reporting is submitted to the Ministry of Health.

(See Appendix Six)

Appendix One: Background Information

Our Maternity Quality and Safety Programme work is guided by the following documents.

The NZ Maternity Standards[1]

The New Zealand Maternity Standards provide guidance for the provision of equitable, safe and high-quality maternity services throughout New Zealand. They consist of three high-level strategic statements to guide the planning, funding, provision and monitoring of maternity services by the Ministry of Health, DHBs, service providers and health practitioners.

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

Standard Two: Maternity services ensure a women-centred approach that acknowledges pregnancy and childbirth as a normal life stage.

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

The National Maternity Monitoring Group (NMMG)

"The NMMG is responsible for overseeing the New Zealand maternity system and for providing strategic advice to the Ministry of Health (MOH) on priorities for improvement. Monitoring and the implementation of quality systems is important to ensure that the MQSP contributes to safer outcomes for mothers and babies."[2]

The MNNG reviewed each DHBs 2016 and 2017 Maternity Quality and Safety Reports and the reports of the external reviews that were conducted on five DHBs. Common themes revealed were

- Staffing shortages and a resulting lack of capacity for professional development.
- Issues with leadership, accountability, clinical governance and interdisciplinary collaboration.
- A lack of communication with or a clear understanding of the role of Access Holding LMCs within the hospital setting and
- Unhelpful differences in data collection, management and reporting of maternity related statistics and outcomes.

1 *Ministry of Health 2011 New Zealand Maternity Standards: A set of standards to guide the planning, funding and monitoring of maternity services by the Ministry of Health and District Health Boards. Wellington: Ministry of Health.*

2. *National Maternity Monitoring Group 2017 National Maternity Monitoring Group Annual report 2017. Wellington: Ministry of Health.pg 15*

The Perinatal and Maternity Mortality Review Committee

Recommendations from 12th Annual Report of the Perinatal and Maternal Mortality Review Committee: Reporting mortality.[1]

PMMRC is an independent committee that reviews the deaths of babies and mother in New Zealand. The PMMRC provides a comprehensive reporting system, a network of nationally linked coordinators and a framework for assessing cases with the aim of progressively improving care. Every year the PMMRC release a range of recommendations. See pg. 91-92.

[1] PMMRC. 2018. Twelfth Annual Report of the Perinatal and Maternal Mortality Review Committee: Reporting mortality 2016. Wellington: Health Quality & Safety Commission.

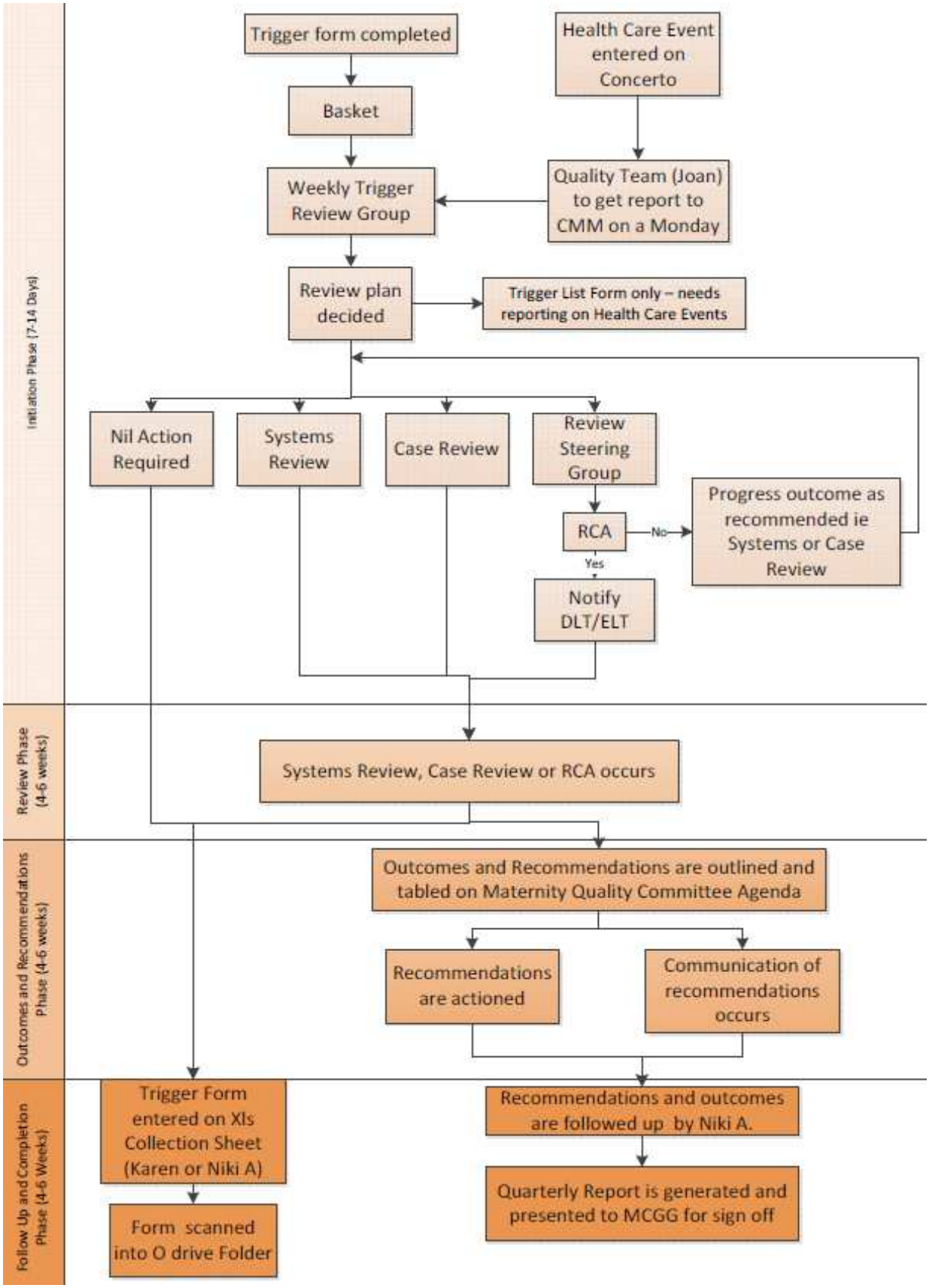
New Zealand Maternity Clinical Indicators

Table 32: New Zealand Maternity Clinical Indicators

		Indicator
Women registered with an LMC	1	Registration with a LMC in the first trimester of pregnancy
Standard Primiparae	2	Standard Primiparae who have a spontaneous vaginal birth
	3	Standard Primiparae who undergo an instrumental vaginal birth
	4	Standard Primiparae who undergo caesarean section
	5	Standard Primiparae who undergo induction of labour
	6	Standard Primiparae with an intact lower genital tract (no 1st- to 4th-degree tear or episiotomy)
	7	Standard Primiparae undergoing episiotomy and no 3rd- or 4th-degree perineal tear
	8	Standard Primiparae sustaining a 3rd- or 4th-degree perineal tear and no episiotomy
	9	Standard Primiparae undergoing episiotomy and sustaining a 3rd- or 4th-degree perineal tear
Women giving birth	10	Women having a general anaesthetic for caesarean section
	11	Women requiring a blood transfusion with caesarean section
	12	Women requiring a blood transfusion with vaginal birth
	13	Diagnosis of eclampsia at birth admission
	14	Women having a peripartum hysterectomy
Women giving birth	15	Women admitted to ICU and requiring ventilation during the pregnancy or postnatal period
	16	Maternal tobacco use during postnatal period
	17	Pre-term birth
Live-born babies	18	Small babies at term (37–42 weeks' gestation)
	19	Small babies at term born at 40–42 weeks' gestation
	20	Babies born at 37+ weeks' gestation requiring respiratory support

3. *Ministry of Health 2018 New Zealand Maternity Clinical Indicators 2016. Wellington: Ministry of Health.*

Appendix Two: Trigger / Event Reporting Pathway - Huttmaternity



Appendix Three: Ministry of Health letter 7 June 2019

133 Molesworth Street
PO Box 5013
Wellington 6140
New Zealand
T+64 4 496 2000

7 June 2019

Dale Oliff
Acting Chief Executive
Hutt Valley DHB
Dale.oliff@huttvalleydhb.org.nz

Dear Dale

Maternity Quality and Safety Programme Annual Report

Thank you for submitting your 2018 Maternity Quality and Safety Programme Annual Report. It is evident that there has been hard work put into the Maternity Quality and Safety Programme in your DHB.

We will be providing the MQSP Coordinators with an annual report template that will incorporate a report assessment template from the National Maternity Monitoring Group (NMMG) to assist DHBs with identifying areas to be reviewed. This will also assist you to focus your reports on the MQSP reporting requirements.

Your continued commitment to ensuring women and whānau are able to access and receive maternity care facilitating optimal outcomes for mothers and babies is appreciated.

We encourage you to publish the report on your DHB website, if you haven't already done so. This will ensure your population, especially women and prospective mothers and whānau, can see the maternity services available in their district.

Well done on your hard work over the year and thank you for your continued dedication to providing quality maternity care.

Yours sincerely

Clare Perry
Group Manager – Health System Improvement

Dr Judith McAra-Couper
Chair
National Maternity Monitoring Group

Cc: Chris Mallon – Director of Midwifery

Nicola Jackson - MQSP Coordinator

Appendix Four: Intimate partner violence audit

Participants: HVDHB Community Team Midwife and VIP CNS.

Audit period is from 1 November to 30 November 2018.
Sample size: Random samples of patient files are to be retrospectively selected from the review period.

Data Source
The Data was sourced from the O drive/department/ business information/ report/Maternity Inpatients.
The data was requested for all women who were admitted to the maternity ward during the month of Nov 2018.
The data supplied included:

- The date of admission, the date of discharge, event number, NHI number status, gender, age, ethnicity, admitting ward, discharge ward and length of stay.

Number of eligible women in the review period
This excluded any women who were discharged from any unit other than MA1 and MA2 such as the Intensive Care Unit (ICU).
The data was specifically for the women and excluded data for babies.
Sample size: 42

Method:
Rachel and Lynn met in the medical records department to view the patient files on 28 Jan 2019 from 2pm-3.30pm and the audit sample was the number of patients files manually reviewed in that time.

For Antenatal IPV screening –The first page of the Booking Form was looked at in the patient file. IPV Screen Y/N
IPV disclosed Y/N

For the Post-natal screening -The Birth Unit Discharge Summary was looked at in the patient file.
For the Power to Protect (P2P) audit- the baby form or the baby's discharge summary was viewed**.**

Using the patient's NHI number, we highlighted the NHI numbers where the second to last number was 0. This meant the patient files were stored in bay 0.

Antenatal Results
Number of eligible women: 26 records pulled in audit timeframe
Number of women screened 13 out of the 26
IPV Screening rate: 50%
Number of disclosed: 0 out of the 13 women screened
IPV Disclosure Rate: 0%

Post-natal Results
Number of eligible women: 26 records pulled in audit timeframe
Number of women screened 21 out of the 26
IPV Screening rate: 80%
Number of disclosed: 0 out of the 13 women screened
IPV Disclosure Rate: 0%

Power to Protect (P2P)
Excludes babies transferred and discharged from SCBU
2 declined
24 records reviewed
6 of the 24 records showed evidence of P2P education
P2P education rate-25%

Audit Findings:
It was noted that there was six cases where there was no documentation for the baby T. There was no Baby Discharge Summary and/or no baby form found in the health records.

Antenatal
The 50% antenatal screening rate has decreased from the 59 percent in the June 2018 audit. The zero antenatal disclosure remains the same.

Postnatal
The 80 percent postnatal screening rate has increased from 78 percent in the June 2018 audit. The zero post-natal disclosure remains the same.

It is noted that the screening positive or negative result is not recorded on the Birthing Unit Discharge Summary.
It is only recorded if the screen occurred such as :

Family Violence Screened Antenatally: Yes

Family Violence Screened Postnatally: Yes: No referral necessary

Family Violence Screened Postnatally: Yes: A referral has been made - seen by social worker

Family Violence Screened Postnatally: Yes: A referral has been made

It is noted that the IPV screen result should not printed on the Patient Copy of the Birthing Unit Discharge Summary as this could increase risk for a woman who may be experiencing IPV.

Power to Protect (P2P)
The P2P education rate of 25% has decreased from the 44% rate in the previous audit from June 2018.

Action: VIP Co-ordinators to meet with senior maternity staff to review the IPV documentation on the Birthing Unit Discharge Summary. A date for this has been set in 2019.

Appendix Five: Standard Primiparae Caesarean Section Audit

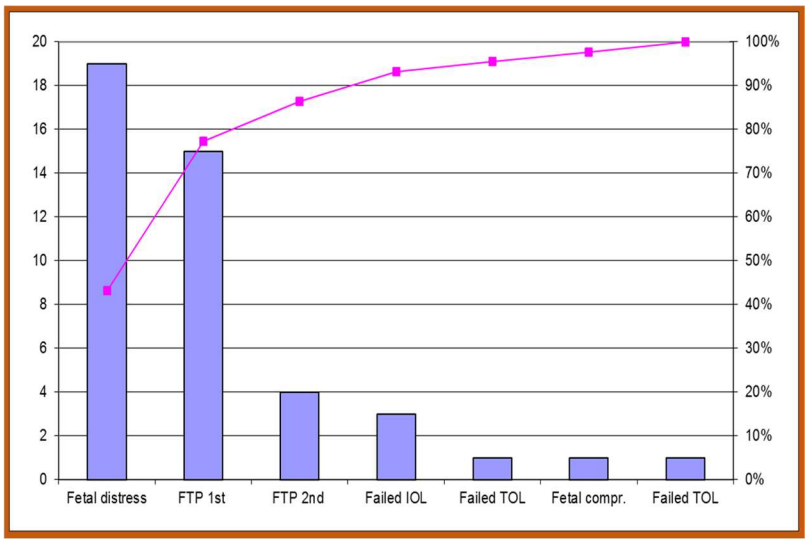
An audit of 49 standard primiparae women who had an emergency caesarean in 2017 was undertaken. This was in order to understand the indication for this mode of delivery in this low risk group and to give direction for further investigation of our rising caesarean rate.

Findings discovered four incorrectly coded cases. To address this we would like to develop and implement standardised primary indications for caesarean to improve future auditing and is dependent on our IT services and data integrity investigation (workstream 4 pg 119).

All births occurred over 38 week's gestation. 23% had BMI over 30, 10% had a general anaesthetic and 2% required a blood transfusion. 48.8% identified as NZE, 8.7% NZM, 6.5% Pacifica and 8.7% for Asian and Indian women respectively. 91 % had a LMC Midwife, 6.6% had a LMC Obstetrician and 2.2% were under the DHB team.

To focus a project on the area for improvement with the greatest potential impact we developed a pareto chart the practice surrounding the decision making for caesarean section in the two largest indication groups – failure to progress (41%) and fetal distress (43%).

Figure 14: Pareto Chart Indication of caesarean for standard primiparae women 2017



This investigation was achieved by developing an audit tool, however there was no standard to determine what constituted the diagnosis of failure to progress. Therefore it was decided to look more intensely at the women who had undergone caesarean section for the indication of fetal distress.

The cardiotocographs were examined for evidence of hypoxia and compared with neonatal arterial and venous lactate results.

Findings

With regard to identification of primary drivers for performing caesareans for fetal distress in this group of low risk women, there was:

- Injudicious use of continuous cardiotocograph (CTG) monitoring in low risk primiparae women. Evidence suggests this can increase the rate of intervention.
- Varying interpretation of the CTG; hence inconsistent care planning and ongoing management of care. We have a diverse workforce delivering intrapartum care and it is a fundamental safety issue that the practitioners agree and adhere to one specific Obstetric College guideline. This determines consistent interpretation of a CTG and foetal wellbeing. We endorse the RANZCOG Intrapartum Fetal Surveillance (IFS) Clinical Guideline and provide mandatory FSEP education.
- Although practitioners attend the education on the RANZCOG guidelines this is not often reflected in practice. Knowledge translation is an ongoing challenge.
- One baby out of the nineteen was mildly acidotic and admitted to SCBU for 4 hours.
- No babies from this demographic were transferred to CCDHB for therapeutic hypothermia.

Actions

- Develop a sticker for standardized documentation of the description and interpretation of the CTG using RANZCOG language. This is included in the ISBAR tool as part of the consultation process.
- Safe transfer of a woman and baby to theatre. The use of the left lateral pillow. This is an ongoing project driven by one of the theatre midwives for her leadership level on the Quality Leadership Programme.
- Weekly multidisciplinary meetings. These are well attended and gaining more credibility as a safe learning space for interpretation of the CTG and how it relates to the clinical picture. It is common practice at these meetings that practitioners accept a gentle reminder to use RANZCOG language when describing the CTG. The learning is in the robust discussion and challengers to practitioners to justify actions when disagreement occurs.
- Innovative ideas come from different professions and this includes a thorough orientation to the new start RMOs around CTG management at Hutt.

Appendix Six: MQSP 2-year Plan 2018-2020

HUTT maternity
Hutt Valley Maternity Care

Maternity Quality and Safety

2 Year Programme Plan 2018-2020

Established September 2018

Background

Huttmaternity has engaged in quality and safety activities since 2011, initially as a 'Demonstration Site' for MOH, the prequel to the formal Maternity Quality and Safety Programme (MQSP) which rolled out nationally in 2012. Over this time we have made great inroads in establishing a quality and safety framework led by our Maternity Clinical Governance Group (MCGG). Our MCGG consists of clinical leaders from Obstetrics and Paediatric services, consumers, midwives and obstetricians, core midwifery staff, primary care, youth care, DHB Quality, Māori Health, Pacific Peoples Health and Strategy, Planning and Outcome (SPO) members.

The MQSP has multiple influences at both national level with MOH and the National Maternity Monitoring Group (NMMG) workstreams, National Clinical Indicators, the New Zealand Maternity Standards, and at local level with DHB audit and service requisites.

It has been these influences that have guided Huttmaternity to develop its workstreams and objectives to date. A summary of objective status for the 2017-2018 period is provided below. Further information on the objectives and MQSP work previously completed is detailed in the Maternity Clinical Annual Reports for 2012 – 2017 inclusive; these are all available on the Huttmaternity website: www.Huttmaternity.org.nz

Moving forward, the variation to the 2012/13 Crown Funding Agreement, Schedule G4, outlines the specifications for the 1 July 2018 to 30 June 2020 period. The Maternity Clinical Governance Group (MCGG) have identified current objectives for completion and established three new objectives to align with the service requirements of the agreement under the group menu identified by the Ministry of Health planning workshops.

The MQSP Coordinator will facilitate all workstreams and monitor progress until completion, with the support of the Huttmaternity Maternity Clinical Governance Group and management. Additional FTE to project lead our review of data integrity and intervention rates is being sought. A summary of the main phases of work under each of the projects and timeline of deliverables is provided.

2018-2020 Objectives and activities

Objective		Summary
1		**MQSP Activities**
	a.	Annual report compilation – Monitoring clinical indicators
	b.	Collection smoking cessation advice data (DHB team)
	c.	Contribution to Maternity Quality Committee
	d.	Document control – policies, procedures, forms, information for women
	e.	Facilitation Maternity Clinical Governance Group
	f.	Self-Audit of NZ Maternity Standards by MCGG
	g.	Increasing registration with LMC in first trimester – Hāpu ora, Te Ra 3 DHB sub regional meetings
	h.	Improving consumer engagement – Consumer representative meetings, Information for women, Consumer satisfaction survey, Facebook, Website maintenance
	i.	Assistance with other QI projects – SUDI, HQSC review, Immunisation Outreach, WCTO interface.
	j.	Attendance other groups – MECH, Antenatal care pathway work, Green Prescription
	k.	Unit Enhancement
	l.	Planning for business as usual
2.		**Increasing physiological births** – intervention rate review
	a.	Acupuncture observational study
	b.	Primary birthing room at DHB
	c.	Review IOL decision processes
	d.	Review C/S decision processes
	e.	Oblige trial
	f.	Neonatal encephalopathy work
3.		**Supporting healthy weight gain in pregnancy for women with high BMI's**
	a.	Establish new model of care
4.		**Data Integrity**
	a.	Maternity dashboard data integrity improvements
	b.	Data to Mat ODS
	c.	Breastfeeding data (Including SCBU admissions)
5.		**Management of Consumer feedback and review**
	a.	Refine process of addressing feedback and instigating recommendations

2018-2020 Objectives and Activities – Rationale and Evaluation

1. MQSP Activities – to embed activities as business as usual within HVDHB

a) Annual report compilation

As a requirement of MQSP Programme our Clinical Annual Report is produced each year. This includes interpretation and analysis of Maternity Clinical Indicator data and progress and outcomes of quality improvement projects. Several consultations with stakeholders before final sign off by our MCGG is undertaken. The report is due to MOH by 30th June each year, and is facilitated by the MQSP Coordinator.

b) Collection smoking cessation advice data (DHB team)

This is a "business as usual' activity initiated in 2015, where mandatory data reporting to MOH on screening, brief advice and cessation support offered, is reported. This data is for DHB employed midwives providing pregnancy care. We have reviewed systems for collecting this data for all women accessing our facilities and await IT changes to enable this.

c) Contribute to Maternity Quality Committee

The facilitator of the MQSP chairs the Maternity Quality Committee which feeds into the MCGG. This committee is the operational arm of maternity quality in the DHB, with MQSP administrative support for such activities as approval of audit applications, policy reviews and approval and day to day running of the unit, for example infection control, health and safety and new protocols.

d) Document Control

This is an ongoing activity to ensure policies and consumer information is reviewed and updated to align with latest evidence and is accessible. Our policy working group needs to be reinstated to ensure there is robust review and the most up to date evidence based information to base new policies on. Our consumer representatives are involved in reviewing the consumer information which is highly valued. The medi-board display of information for women is in the Maternity Unit entrance and is maintained by our MQSP administrator.

e) Facilitating Maternity Clinical Governance Group

Terms of reference for the Maternity Clinical Governance Group (MCGG) are reviewed annually. The facilitation of this group is by the co-ordinator supported by the administrator for the Maternity Quality and Safety Programme (MQSP). Meetings are bi-monthly with the wider membership, with meetings on alternate months for the consumers, co-ordinators and management to progress consumer workstreams. This governance group has representatives from all disciplines; Obstetric, Paediatric, Midwifery, the Primary and Secondary sector and Consumers and the DHB Māori Health unit, (a new Pacific Peoples Health representative being sought due to retirement of previous representative) Quality team and Service Planning and Outcomes unit. This group feeds into the overall Clinical Council with our Director of Midwives, sitting on both groups.

f) Self-Audit of New Zealand Maternity Standards

An annual process to guide remedial actions and setting of objectives for the Maternity Clinical Governance Group. Performed alongside review of programme plan midterm.

g) Increasing registration with LMC in first trimester

One such initiative to improve early registration and engagement with an LMC, is a collaboration with with Te Runanganui o Te Atiawa for a drop in clinic that has been operating since August 2017.

For the past two years Huttmaternity has had a presence at a local community festival – Te Rā o Te Raukura hauora. Our goal is to increase the visibility of Huttmaternity services and promote early engagement with a LMC. In February this year we had members of the Huttmaternity team offering pregnant women onsite Boostrix immunisation and plan to do this annually to bring these services closer to home.

h) Improving Consumer engagement

Such initiatives under this MQSP activity include: facilitation of bi-monthly meetings with consumer representatives and management. Consumers are involved with workstreams to improve communication and information for women and their whānau through production of information pamphlets and the use of Facebook and our website. Our consumer representatives have also been involved in improvements to the environment and will be instrumental in the planning for the refurbishment of the unit and creation of a primary birthing room. Our representatives have held coffee groups and have plans to keep seeking feedback from our community and ensure a good representation of all women and whānau. We have increased the number of consumers on our Maternity Clinical Governance Group to ensure a good representation of all women and whānau in this contract term. We plan to support them to access feedback from the wider community.

i) Assistance with other Quality Improvement projects

The MQSP is able to support other quality improvement projects such as Safe Sleep, pop up immunization clinics, reviewing documentation to enhance communication, Well Child Tamariki Ora interface.

j) Attendance other groups

The MQSP facilitator attends other groups such as the Maternity Early Child Health Provider group and three DHB Health pathways antenatal care development group, refurbishment steering group and quality improvements with TAS (technical advisory service for central DHBs)

k) Unit enhancement

Facilitation of improvements to unit to increase user friendliness as guided by BUDSET evaluation for example signage, birth aids, storage redesign. This is part of the refurbishment plan which is in progress. This evaluation was carried out by our consumers again to inform the refurbishment project.

l) Planning for business as usual

Such activities as annual report compilation, directing document control and quality actions around feedback are examples of how we plan to embed MQSP activities as business as usual.

2. Increasing physiological birth rate– intervention rate review

a) Acupuncture for women

Indicator five results since 2017 have demonstrated a rise in induction of labour rates in our standard primiparae women. We plan to work with our in-house Registered Acupuncturists and to capitalise on skills of some staff members, to offer acupuncture for women with with ruptured membranes at term (with no labour). An observational study and evaluation of this intervention as a way of reducing inductions of labour (and or unnecessary interventions), has been outlined as an action to meet the objective of increasing primary births in our unit.

Deliverables:
a) Formation of project team February 2020
b) Pilot May 2020
c) Evaluation July 2020

Evaluation:
a) Consumer survey, use of acupuncture clinic
b) Rate of uptake of acupuncture with preterm rupture of membranes,
c) Rate of spontaneous onset of labour following use of acupuncture
d) Length of active phase of labour
e) Rate of augmentation
f) Maternal fever in labour
g) Mode of birth.

b) Primary birthing room at DHB

Plans to create a specific primary birthing room are on-going and will involve broad consultation with staff, LMCs, Consumers and the wider hospital services. A concept design has been produced and a project plan is in progress.

Deliverables: a) Business case to Board –October 2018
b) Project team (part of overall unit refurbishment) November 2018
c) Commissioning work April 2019

Evaluation: a) Rate of spontaneous vaginal birth without intervention increases from 25.3% (2017 rate)
b) Consumer satisfaction survey

c) Review of induction of labour decision process

This is on-going work to monitor indication for induction and at which gestation inductions are occurring. This work also informs workforce planning and review of primary and secondary interface. Further review of the process will be carried out at an operational level in the Maternity Unit.

Deliverables: a) To be defined by project team b) plan November 2018

Evaluation: a) Reduced rate of induction of labour for non-evidence based indication
b) Increased uptake of acupuncture for pre labour induction/augmentation (see objective 2a)
c) Review use of syntocinon and develop protocol.
d) Evaluate mode of birth following induction of labour

d) Review of caesarean decision processes

This is on-going work to streamline and reduce rates of caesarean and improve the journey for women needing to have both elective and acute caesareans. Other workstreams, such as the neonatal encephalopathy (see objective 2 g) will feed into this work. Another example of work to inform this workstream is a review of GA caesarean sections. Patient Controlled Epidural Analgesia (PCEA) pumps have been introduced to our unit in April 2018. Plans are being made to evaluate the introduction of PCEA in the context of reducing general anaesthetics for caesarean section. Other quality improvements are to be determined under a dedicated project using a PDSA methodology.

Deliverables: a) To be defined by project team
b) November 2018

Evaluation: a) Consumer and staff satisfaction surveys
b) Reduction of rate of primary caesarean section rate.
c) Reduction of use of general anaesthesia for caesarean

f) Oblige trial

Huttmaternity have committed to participate in the Oblige (Outpatient Balloon vs Inpatient Gel) multi-centre randomised controlled trial. The primary hypothesis is that women having outpatient induction of labour with balloon will have a lower caesarean section rate, compared to women having inpatient induction of labour with vaginal prostaglandins.

Deliverables: a) as per multi centred trial timetable

Evaluation: Carried out by the Liggins Institute (The University of Auckland)

g) Neonatal encephalopathy – lactate testing evaluation Workstream

Huttmaternity have expressed interested in participating in this evaluation project by the Neonatal Encephalopathy NE taskforce. This is to evaluate the benefits and effectiveness of undertaking universal cord lactate analysis on newborn babies in tertiary, secondary and primary birthing situations.

Deliverables: as per the ACC sponsored NE taskforce work plan

Evaluation: as per the ACC sponsored NE taskforce work plan

3. Promoting healthy weight gain in pregnancy for women with high BMI

a) Re-establish working party to establish new model of care

Some women are declining referral to secondary services for having a high BMI but no gestational diabetes. A workshop and initial working party meetings have occurred in order to look at improving services to these women. An initial survey to women attending clinic in the previous year has been undertaken. A plan to re-establish a multidisciplinary working party and consult more extensively with consumers has been developed. Although BMI has been removed as a clinical indicator, in 2018, our rates have further increased with 229 women having a BMI of >35. Ninety women were referred under referral guideline code 4017 (Morbid obesity BMI > 40 and Obesity BMI > 35). We are missing the opportunity to do healthy weight gain in pregnancy interventions with approximately 60% of women.

Deliverables:
a) Re-establish working party October 2018
b) Assess need for further consultation October 2018,
c) Further consultation November December 2018
d) Planning implementation of new model of care January-March 2019
e) Implement new model April 2019
f) Evaluation December 2019

Evaluation:
a) Focussed consumer satisfaction
b) Increased attendance rates for referral guideline code number 4017
c) Increased rate of women with high BMIs having healthy weight gain during pregnancy.

4. Data Integrity

a) Maternity dashboard integrity for clinical indicator data collection

Deliverables: Dedicated project plan with lead to be devised.

Evaluation:
a) Random audit records of 90 women (5%) to ascertain conformity of data from concerto and data extracted for MOH

b) Data to Mat ODS

Coding investigation and audit

Evaluation:
a) No missing data identified in reports to MOH

c) Accurate smoking and breastfeeding data for all women birthing at facility

Evaluation:
a) Smoking status at booking identified for all women booked at facility
b) Review accuracy of data collected comparing Concerto discharges and data to ministry of health (including babies discharged from SCBU)

5. Management of consumer feedback and review

a) Refine process of addressing consumer feedback and review recommendations

We have collected consumer feedback by conducting electronic (and hard copy) surveying based on the MOH Maternity Consumer survey. We use the data for informing improvement in areas such as breastfeeding support. When women or their whānau wish to contact for further input into a complaint this is referred to our DHB Quality team. We need a review how recommendations from reviews are instigated.

Deliverables:
a) Meeting with quality team October 2018
b) Ongoing plan developed February 2019
c) Evaluation commenced August 2019

Evaluation:
a) Clear pathway consistently followed
b) Audit of recommendation instigation
c) Follow up feedback on review process from consumers

Timeline: MQSP Programme Huttmaternity 2018-2020

Objective	Workstreams 2018- 19	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
1	**MQSP Activities**												
a	Annual report compilation										✓	✓	✓
b	Collecting smoking cessation advice data (DHB team)				✓			✓			✓		
c	Contribute to Maternity Quality Committee	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
d	Document Control												
e	Facilitating Maternity Clinical Governance Group (MCGG)					✓		✓		✓		✓	
f	Self-audit NZ Maternity standards by MCGG									✓			
g	Increasing registration with LMC in first trimester								✓				
h	Improving consumer engagement				✓		✓		✓		✓		✓
i	Assistance with other QI projects	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
j	Attendance at other groups	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
k	Unit enhancement								✓	✓	✓	✓	✓
l	Planning for business as usual	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
2	**Increasing physiological birth rate – intervention rate review**												
a	Acupuncture observational study								✓		✓		
b	Primary birthing room DHB				✓	✓				✓	✓	✓	✓
c	Review IOL processes					✓					✓		
d	Review C/s processes				✓	✓							
e	Oblige trial				TBA								
f	NE taskforce lactate evaluation				TBA								
3	**Support healthy weight gain in pregnancy for women with high BMIs**												
a	Establish new model of care for women with high BMI/obesity				✓	✓	✓	✓	✓	✓	✓		
4	**Data Integrity**												
a	Dashboard data for clinical indicator data collection				TBA								✓
b	Data to MOH				TBA								✓
c	Smoking and Breastfeeding data				TBA								✓
5	**Management consumer feedback and review recommendations**				✓				✓				

Timeline: MQSP Programme Huttmaternity 2018-2020

Objective	Workstreams 2019-2020	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
1	**MQSP Activities**												
a	Annual report compilation										✓	✓	✓
b	Collecting smoking cessation advice data (DHB team)				✓			✓			✓		
c	Contribute to Maternity Quality Committee	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
d	Document Control												
e	Facilitating Maternity Clinical Governance Group (MCGG)	✓		✓		✓		✓		✓		✓	
f	Self-audit NZ Maternity standards by MCGG									✓			
g	Increasing registration with LMC in first trimester								✓				
h	Improving consumer engagement		✓		✓		✓		✓		✓		✓
i	Assistance with other QI projects	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
j	Attendance at other groups	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
k	Unit enhancement	✓	✓	✓	✓	✓	✓						
l	Planning for business as usual	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
2	**Increasing physiological birth rate – intervention rate review**												
a	Acupuncture observational study	✓		✓									
b	Primary birthing room DHB	✓	✓	✓	✓	✓	✓						
c	Review IOL processes	✓											
d	Review C/s processes						✓						
e	Oblige trial	TBA											
f	NE taskforce lactate evaluation	TBA											
3	**Supporting healthy weight gain in pregnancy for women with high BMIs**												
a	Establish new model of care for women with high BMI/obesity	✓	✓	✓	✓	✓	✓						
4	**Data Integrity**												
a	Dashboard data for clinical indicator data collection	✓											
b	Data to MOH												
c	Smoking and Breastfeeding data				✓				✓				✓
5	**Management consumer feedback and review recommendations**		✓										

If you have any enquiries about this report, or wish to contact Hutt Valley DHB, please contact the Hutt Valley DHB Director of Midwifery:

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