MATERNITY QUALITY AND SAFETY PROGRAMME

Nelson Marlborough Health

Maternity Services Annual Maternity Report

2018-2019

www.nmdhb.govt.nz/maternity

Acknowledgements

We would like to acknowledge the contribution of:

- Donna Addidle - Service Manager, Women, Child and Youth, NMH
- Nick Baker - Chief Medical Officer, NMH
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- Ditre Tamatea - General Manager, Maori Health Directorate, NMH
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- Rachael Peek, Charge Midwife Manager, Motueka Maternity Services, NMH
- Jan Kirk - Charge Nurse Manager, Special Care Baby Unit, Nelson
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- Ashleigh Foord - Midwifery Educator, Nelson Hospital
- Silke Powell - Midwifery Educator, Wairau Hospital
- Rachel O'Hanlon - Community Midwife, Nelson
- Jill Pledger - Administration Support, Public Health, Nelson
- Helen Tippler - Clinical Nurse Specialist, Gestational Diabetes, Nelson Hospital
- David Barragh **-** Clinical Nurse Specialist, Gestational Diabetes, Wairau Hospital
- Gina Lyons - Family Violence Intervention Team Leader, NMH
- Jenny Dravitzki – New Born Hearing Screening Services, NMH
- Jan Rollason - Social Work, Maternity Services, Nelson, NMH
- Felicity Spencer - Maori Maternal Health Services, NMH
- Karen Vis, Smoke Free Coordinator, NMH
- Paula Peacock - Business Intelligence, NMH
- Donald Hudson - Business Intelligence, NMH
- Scott Starling – Analyst, Models of Care, NMH
- MQSP, Governance Group, NMH
- Laura Ferguson **-** Consumer, Nelson
- Kathryn Paaske - Consumer, Marlborough

NB: We would also like to acknowledge all those staff who have contributed, and provided advice, to the MQSP and quality initiatives.

Message from Maternity

Nelson Marlborough Health Services is pleased to present the Maternity Quality and Safety Programme Annual Report for 2018-2019.

We are grateful for the support from the Ministry of Health for the Maternity Quality and Safety Programme (MQSP). This support enables us to continue to undertake quality initiatives, always with a commitment to improving maternity care, and to understanding the vision of the MQSP. We are pleased to have our community consumers participate, share knowledge, and provide us with excellent advice and recommendations.

The Maternity Quality and Safety Programme continues to add value to our maternity systems in Nelson Marlborough Health. As a part of adding value, more work is to be done to see how we can align our programme with other quality initiatives occurring within NMH, and which may have links to, and an impact on, maternity services.

As an organisation, we remain committed to embedding the MQSP as business as usual, and to working toward the integration of national PMMRC and Maternity Monitoring Group recommendations and national guidelines as quality activities.

A special thank you to everyone who has contributed to the MQSP over the last year. Your support is greatly appreciated and we look forward to working with you in the coming year.

Donna Addidle

Sylvia Keller

Debbie Fisher

Graham Cross

Lois McTaggart

Rachael Peek

Glossary

Caesarean Section An operative birth through an abdominal incision.

Episiotomy An incision of the perineal tissue surrounding the vagina to facilitate or expedite birth.

Gravida A pregnant woman.

Maternity Facilities A maternity facility is a place that women attend, or are resident in, for the primary purpose of receiving maternity care, usually during labour and birth. It may be classed as primary, secondary, or tertiary depending on the availability of specialist services (Ministry of Health 2012).

Multipara A woman who has given birth more than once.

Neonatal Death Death of a baby within 28 days of life

Parity Number of previous births a woman has had

Primipara A woman who is giving birth for the first time**.**

Primary Facility Refers to a maternity unit that provides care for women expected to experience normal birth with care provision from midwives. . Access to specialist secondary maternity services and care will require transfer to a secondary/tertiary facility. Primary facilities do not provide epidural analgesia or operative birth services.

PPH Post partum hemorrhage **-** Excessive bleeding after birth of >500 mls of blood.

Secondary Facility Refers to a hospital that can provide care for normal births, complicated pregnancies and births, including operative births and Caesarian Sections, plus specialist linked services which include anaesthetic and paediatric services. As a minimum, secondary facilities include an obstetrician rostered on site during working hours, and on-call after hours, with access to support from anaesthetics, paediatrics, radiology, laboratory, and neonatal services.

Standard A group of mothers considered to be clinically comparable,

Primiparae expected to require low levels of obstetric intervention. Standard Primiparae are defined in this report as women recorded in the National Maternity Collection (MAT) who meet all of the following inclusions:

- delivered at a maternity unit
- are aged between 20-34 years (inclusive) at delivery

- are pregnant with a single baby presenting in labour in cephalic position.
- have no known prior pregnancy of 20 weeks and over gestation
- deliver a live or stillborn baby at term gestation: 37- 41 weeks inclusive
- have no recorded obstetric complications in the present pregnancy that are indications for specific obstetric interventions

Intervention and complications rates for such women should be low and consistent across hospitals. Compiling data from only standard primiparae (rather than all women giving birth) controls for differences in case mix and increases the validity of inter-hospital comparisons of maternity care (adapted from Australian Council on Healthcare Standards 2008, p29)

Stillbirth The birth of an infant after 20 weeks gestation, which has died in the womb and weighed more than 400 grams.

Tertiary Facility Refers to a hospital that can provide care for women with high-risk, complex pregnancies by specialized multidisciplinary teams. Tertiary maternity care includes an obstetric specialist or Registrar immediately on site 24 hours a day. Tertiary maternity care includes on-site Level 3 neonatal services.

Weeks' Gestation Term used to describe how far along the pregnancy is. It is measured from the first day of the woman's last menstrual cycle to the current date.

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SECTION ONE

Nelson Marlborough Health - Vision, Mission, Values

Our Vision: Ko te Whakakitenga

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

Our values: Ā Mātou Uara

Nelson Marlborough Midwifery Vision Statement

"…that wahine, their pepe, and their whanau, have access to high quality, safe midwifery care that acknowledges pregnancy and childbirth as a normal life event…"

"Quality safe teamwork is at the heart of all that we do to provide safe standards in maternity care…"

Maternity Quality and Safety Programme

This is the sixth Nelson Marlborough Health (NMH) Maternity Quality and Safety Programme (MQSP) Annual Report since the establishment of the Ministry of Health (MoH) Maternity Quality and Safety Programme (MQSP) in 2011.

The National Maternity Monitoring Group came into operation in 2012, as part of this programme, to oversee the maternity system in general, and the implementation of the maternity standards, in particular.

The high-level strategic statements of the New Zealand Maternity Standards are:

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 woman-centered 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.

(MoH 2011)

Aims and Objectives

Nelson Marlborough Health Services are committed to providing and improving the quality of maternity services for our women, babies and whanau.

The NMH maternity services aims and objectives are to:

- Provide women-centered maternity care that meets the needs of the population
- Continue to establish, implement, and review, as required, systems and processes to support the provision of quality safe care
- Take a whole of systems approach towards improving the health of women and children as guided by the MOH goals and targets
- Develop the maternity workforce to meet the needs of the population
- Develop and strengthen regional link

Purpose

The purpose of this report is to provide information about the Nelson Marlborough regions:

- Improvement in relation to overall aims and objectives
- Achievements against the quality improvement goals set for 2018/2019
- Contribution to addressing the priorities of the National Maternity Monitoring Group (NMMG 2018), recommendations of the Perinatal and Maternal Mortality Committee (PMMRC 2019) and the Maternal Morbidity Working Group (HQSC 2019)
- Performance in relation to the MOH Maternity Clinical Indicators 2017 (MoH 2019)
- Response to consumer feedback and ongoing consumer involvement
- Quality initiative goals for 2019/2020

MQSP Framework

The MQSP framework is based on the:

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

Maternity Quality Governance and Leadership

Governance Structure

Our maternity quality governance group is made up of members from the hospital multidisciplinary team, as well as primary community health and consumer members.

The governance group meets once a month and videoconferencing brings together members from across the region – Golden Bay, Motueka, Nelson, and Marlborough.

The governance structure for the Maternity Quality and Safety Programme (MQSP) comprises group members from the DHB clinical governance group, consumers, maternity-related services, midwifery, obstetrics, paediatrics, anaesthetics, social work, Lead Maternity Carers (LMCs), community service groups and general practice.

It is vital that all service relating to maternity care interact closely with clinical guideline development and maternity-related quality initiatives, for example, Maternity and Neonatal early warning scoring systems and Customised antenatal growth charts. While good work has occurred, there is still work to do to see MQSP embedded more as business as usual within NMH services.

Quality Planning and Reporting

As part of planning our quality improvement initiatives, we identify areas for quality improvement through a range of sources, for example, the Maternity Clinical Indicators data report, PMMRC recommendations, MNNG recommendations, client and family/whanau complaints, and SAC events. Work streams are developed, reporting to MQSP Governance Group occurs, and also to the DHB Clinical Governance Group.

Consumer Engagement

Engaging with our community through consumers of maternity service continues to be one of the priorities of the NMH Maternity Quality and Safety Programme (MQSP).

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 treatments, 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".*

A key priority for 2018 was to further develop and strengthen our consumer representation and relationships, and to be consulting with the local community groups and Tangata Whenua that align with our maternity services. While this goal has been difficult to achieve

this year, we are now happy to report that consumer representatives have been engaged and we look forward to working with them in the 2019/2020 year.

Two new consumer members, Laura Ferguson and Kathryn Paaske, have recently joined the Nelson Marlborough MQSP, Laura in Nelson, and Kathryn in Marlborough.

Laura was able to attend a recent NMH consumer orientation induction programme held in August 2019. This proved to be an invaluable experience for Laura, and there is a plan to support Kathryn to attend the next orientation programme.

Our consumers have been involved in evaluating the revised Maternal Mental Health Referral Pathway, and are keen to be involved with, and to provide input and feedback to, the quality initiatives being undertaken, for example, the Admissions to SCBU audit project. As well, NMH has a separate Consumer Council and consumers from this council may provide feedback on occasion to the MQSP.

"As a consumer for the MQSP, our role is to give a consumer perspective to the various quality activities underway. The vision is to assist us to identify work streams and for each consumer to take a lead in MQSP project activities, and to provide a wholistic view for policy makers about decisions being made for the women/wâhine and family/whânau within the NMH community"

Consumer Profiles

Laura Ferguson

“Hi. My name is Laura Ferguson, and I’m a mother of 3 awesome boys –

Parker 8, Dexter 3 and Jed 1.

I am Nelson born and bred but have spent time living in Wellington and Nova Scotia while studying Education and Criminology at university.

I currently work as a part time teacher at Birchwood School and Nelson Intermediate, and also own my own wee sewing business custom making babies and children’s clothing.

My husband Gary is a baker so although he has very early starts each day it means he’s usually home by 2pm to enjoy time with our children”.

Kathryn Paaske

“I’m Kathryn Paaske, a first time mum to my wee boy (Luke). Who is now 7 months old, growing bigger everyday. Time sure has whoosh by. From him sleeping and feeding all day, to now exploring the new world that surrounds him. Being fascinated with everything he comes across, for at least a few minutes, till he spies something more interesting.

My Husband Jason commutes to Havelock every morning, where he works as a forklift operator. He wakes early making sure to be quiet as Luke and I are often still sleeping. Then with a kiss goodbye he starts his day. Home time rolls around and Luke absolutely loves it when he can have Daddy cuddles and playtime together.

We are currently living in Blenheim with my mum till we can find a place that is suitable for our growing family. It definitely has been very helpful living together. With every helpful tip or trick she can teach me, from all her experience of raising her own 5 children.

I’m lucky enough to be able to be a stay at home mum. Raising Luke is a real blessing and I am definitely looking forward to all our adventures.

I'm interested in being a consumer for maternity services, as I believe we should have the best start in life. This requires keeping a close eye of every factor surrounding maternity.

Staying informed and having the knowledge to make decisions that improve all future maternity experiences. To achieve this we need to help each other so that we are able to deal with any situation that arises. Sharing our experiences so we can learn and grow together as a community”.

SECTION TWO

Nelson Marlborough Communities

Nelson Marlborough Health Services (NMHS) serve a population of almost 145,000 across a wide rural geographical area reaching from Golden Bay, Murchison, Tasman, Nelson, Marlborough Sounds, Blenheim, and Seddon, south to Kekerengu.

This is an area of 227,000 square kilometres governed by three territorial authorities – the Nelson City, the Tasman District Council, and the Marlborough District Council.

The Nelson Marlborough population is expected to grow by 14,000 residents (9% growth) by 2033, with the Tasman region population growth predicted to triple in this time.

South Island DHB Boundaries

Geographics

As part of being able to improve quality and safety in maternity care, and to design and deliver the most appropriate services, it is helpful to understand our population base.

NMH provides services for a usually resident population of 150,770 across a wide ranging region of urban, rural, and remote rural locations.

Nelson and Tasman comprises three urban settlements – Nelson, Richmond, and Motueka, smaller rural settlements like Mapua, and remote rural settlements like Takaka, Tapawera and Murchison.
Mapua, Takaka, and Murchison each have Medical Health Centres with Takaka supporting a small primary birthing unit, available for women living in the Golden Bay area.

The widespread natural disposition of the Nelson Tasman region adds momentum to ensuring quality maternity services are safely available and accessible to all populations, including those living in the more remote rural locations of the region.

Marlborough comprises the main town of Blenheim, with Renwick, Picton, and Havelock forming the smaller urban settlements set within rural landscapes. The southern region of Marlborough is served by the smaller rural communities of Ward and Seddon, neither of which has a medical centre. Women accessing maternity services from these communities will usually travel to Blenheim for maternity care.

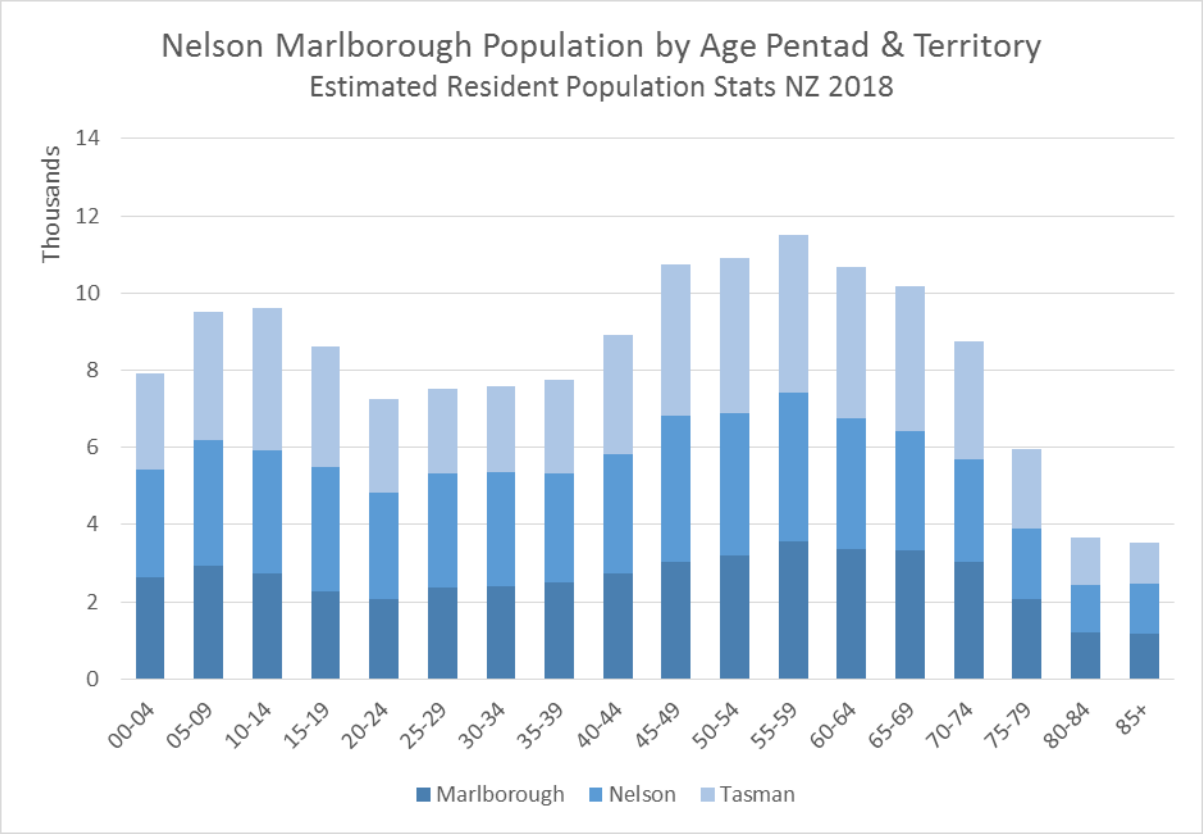
Rural and remote rural health care is a feature of NMH services, and MQSP is keen to ensure that quality safe maternity care reaches all women and families throughout the region.

Nelson Marlborough's population tends to be older than the national average, with a lower proportion of Māori and Pacific people living in the regions compared to the national average.

Nelson Marlborough also has a lower proportion of people in the most deprived section of the population when compared to the national average.

The people of Nelson Marlborough region

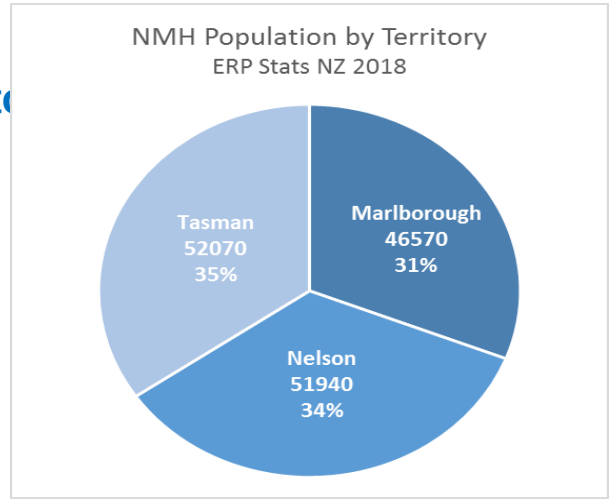
Population Age



Comment: The demographic shows the range of age groups across the Nelson Marlborough region, and reasonably evenly spread through each region.

Territ

The three territorial authorities, Marlborough, Nelson, and Tasman are roughly equivalent in their population size.



Population Growth in our region

Total Nelson Marlborough Population 2012 – 2018

2012	2013	2014	2015	2016	2017	2018
140,575	142,070	143,700	145,500	147,040	148,700	150,580

Comment: We note that there is a population increase of 1,880 in the Nelson Marlborough total population between 2017 and 2018.

Ethnicity distribution in our region

Ethnicities for Nelson Marlborough region, and New Zealand (2013 Census).

	Nelson	Tasman	Marlborough	NZ
European/other	91.1%	95.2%	91.4%	75.8%
NZ Maori	9.9%	7.9%	11.9%	15.6%
Pasifika	1.9%	1.1%	2.5%	7.8%
Asian	4.7%	2.3%	3.1%	12.2%

Comment: Nelson Marlborough's population has a greater proportion of Europeans than the wider New Zealand population.

Tangata Whenua

There are eight tribes that form the Manawhenua population of Te Tau Ihu (Nelson Marlborough): Ngati Kuia; Rangitâne and Ngati Apa (from the Kurahaupō canoe), Ngati Koata, Ngati Rarua and Ngati Toa (from the *Tainui* canoe), Ngati Tama and Te Ãti Awa (from Taranaki).

The Iwi Health Board (IHB) is integral to the provision of health care to Maori, and is a partner to the Nelson Marlborough District Health Board (NMDHB).

The IHB advises the NMDHB on strategic matters that affect the health and disability status of Maori in the rohe (region) of Te Tau Ihu o te Waka a Maui (top of the South Island).

The IHB is mandated by the eight Manwhenua Iwi in the region, and the He Kawenata Memorandum of Agreement underpins the partnership between the two boards.

Maternity Services and Facilities

Our Maternity Services

As a region Nelson Marlborough supports approximately 1500 births a year, including home births.

Our community services and maternity unit teams extend across Nelson Marlborough from Golden Bay, Tasman, Nelson, and Blenheim.

There are community midwives across the region in all communities. There are primary maternity units in Golden Bay and Motueka and a community health centre in Murchison. There is a secondary unit in Nelson and Wairau hospitals.

The DHB works with the national obstetric and neonatal referral frameworks with tertiary centres as requried.

Golden Bay Integrated Family Health Centre

Golden Bay Health Hub

2018 Births = 16 & postnatal stays

Golden Bay Birthing Room

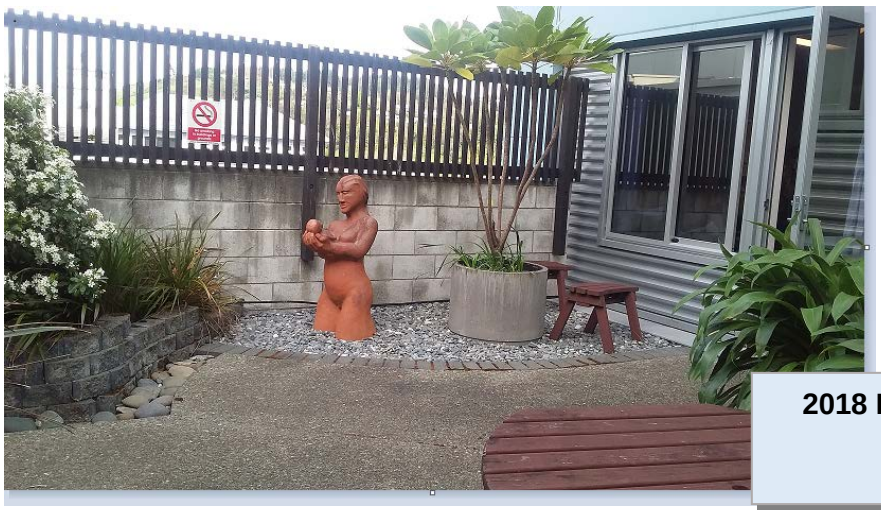
The Golden Bay Integrated Family Health Care Centre and maternity services are highly valued by their community, providing excellent remote rural maternity services across the Golden Bay region. The midwives provide antenatal clinics, labour and birth care in the facility or at home and postnatal care up to 6 weeks.

Motueka Maternity Services

2018 Births = 41
Transfer into Motueka Maternity for postnatal care = 151

Motueka maternity services are well supported and valued by the community, with increasing numbers of local mothers, babies, and whanau being cared for at the unit. The unit is focussed on an integrated model of care supporting LMCs, and providing a service to meet the community's maternity needs – in particular equity and access, and the priorities within the first 1000 days national project. Utilsation at Motueka maternity has increased three fold in births and 4 fold in postnatal stays since 2017.

Nelson Maternity Services



2018 Births = 873

Nelson Maternity Unit

Nelson maternity services provide secondary-level care. Service provision includes maternity care for both low risk and women requiring more complex care from both local urban areas and remote rural areas surrounding the Nelson area. The Nelson hospital has a dedicated maternity unit caring for women and their families.

The birthing suite comprises 4 dedicated birth rooms, one water birth room, one clinical assessment room, and one bereavement room (The Rose Room). Each birthing room is fully equipped for labour and birth, including a neonatal resuscitation station, and private bathroom facilities. Each birthing room has a bath and may be used for water birth. The birthing suite is staffed by core midwives providing midwifery care for DHB primary and secondary care women. The core midwives provide emergency maternity care 24 hours a day, 7 days a week, and provide support to community midwives as needed. Medical staff consisting of an obstetrician and an obstetric registrar, are rostered to cover an on-call 24/7 medical staff roster. A senior house surgeon is also rostered to provide house surgeon cover 24/7. The Special Care Baby Unit (SCBU) has 10 cots and provides care to new born babies from 32 weeks gestation.

"… thank you so very much for your kindness, expertise & support during my back & forth hospital admissions & then labour and birth – thank you for caring for our baby during her difficult breathing stage – I felt completely confident in you as you were so encouraging, calm, and expert at what you do…"

Consumer Comment

Wairau Maternity Services

Wairau Maternity Unit

2018 Births = 497

Wairau maternity services provide care for both low risk and women requiring more complex care in the greater Marlborough region. Service capture extends from Rai Valley to Kaikoura and the Lower Wairau Valley.

The Wairau hospital has a dedicated maternity unit caring for women and their families. The birthing suite comprises 3 birth rooms, and 1 with a birth pool. There are 8 in-patient combined antenatal and postnatal beds. Each birth room is fully equipped for labour and birth, including a neonatal resuscitation station. The core midwives provide 24/7 emergency care, and support community midwives as needed. Medical staff consisting of 3 obstetricians plus locums are rostered to cover an on-call 24/7 staff roster. The Wairau Maternity Service does not have a dedicated obstetric registrar or obstetric house surgeon. And, when a neonatal need arises, the neonatal facilities are managed by the paediatric service. The paediatric service cares for neonates from 34 weeks gestation and comprises 4 neonatal cots. Babies born less than 34 weeks gestation, or women presenting with pregnancies at less than 34/40, are transferred to either tertiary care, or to Nelson Hospital, for neonatal care.

…We are so thankful that as midwives & doctors you all are in our lives and helped us to have a wonderful, peaceful birth of our beautiful baby boy, taught us so much about everything from nutrition to how to take care of our precious baby and always there when we pressed 'Help' button...

Consumer Comment

SECTION THREE

Birthing Demographics

Health statistics for women giving birth in the Nelson Marlborough region 2018.

Births for Nelson Marlborough

2018 total births = **1509**

On average **4** babies born a day

Birth by Facility Type - %

58% - Nelson maternity unit
33% - Wairau maternity unit
3.5% - Primary maternity units
5.5% - Home birth

Maternal ethnicity

70% European
6% Maori
8% Asian
3% Pacific
13% Other ethnicity

Deprivation %

Deprivation Quintile **8** sees our highest number of deprived = **18%**

Deprivation Quintile **10** (most deprived) = **0.2%**

Registration with a Lead Maternity Carer

1st trimester **– 77.1%**

Be Smoke Free

At 1st LMC registration = **13% smoking**

2 weeks postnatal = **9.9% smoking**

Average Age

47% of NMH mothers are in the **30-40yrs** age bracket

Intelligence Business Service (2018).

Total births and % of total birthing population

	2012	2013	2014	2015	2016	2017	2018
Births in NZ	61,178	58,717	57,424	61,038	59,430	59,610	58,020
Births Nelson	894	949	843	839	920	869	873
Births Wairau	486	482	448	457	504	459	497
Births Motueka	56	52	40	42	34	30	43
Births Golden Bay	19	18	17	22	21	16	13
Home Births Nelson Tasman Marlborough	N/A	N/A	N/A	N/A	N/A	N/A	83
Total Births NM	1455	1501	1348	1360	1479	1374	1509
% of all NZ Births in NM	2.3%	2.5%	2.3%	2.2%	2.4%	2.3%	2.6 %

Comment: Our Nelson Tasman/Marlborough birthing population consists of a range of births between 2.2% and 2.6% of all New Zealand births between the years 2012-2018. Data includes home births for Nelson Tasman and Marlborough - 2018.

Births by region Nelson Marlborough 1991-2017

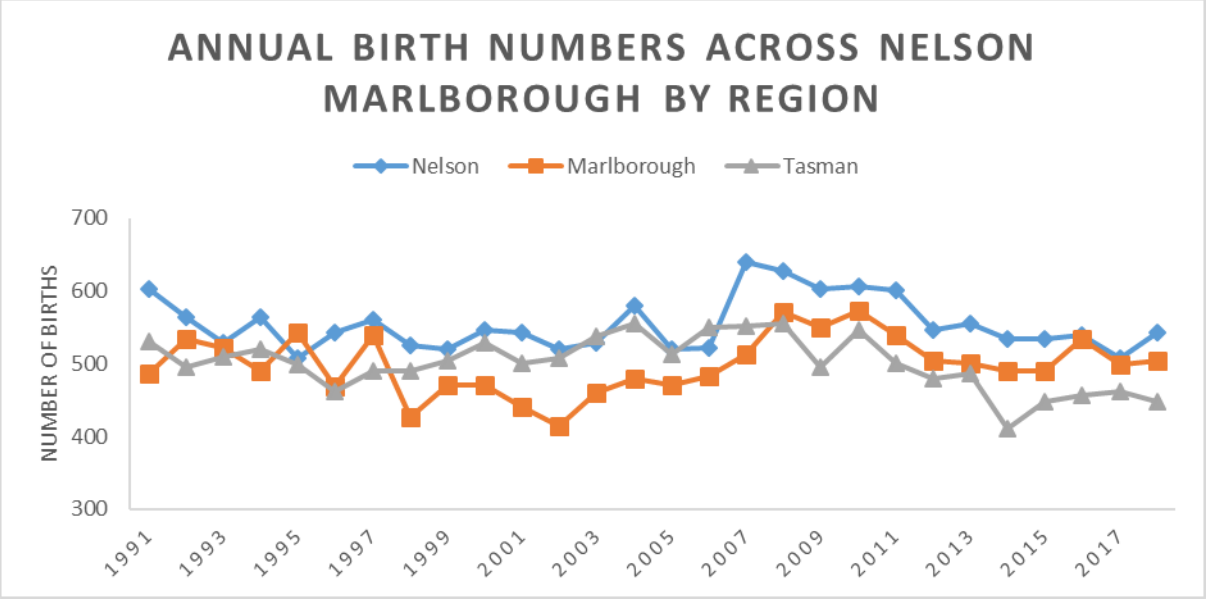
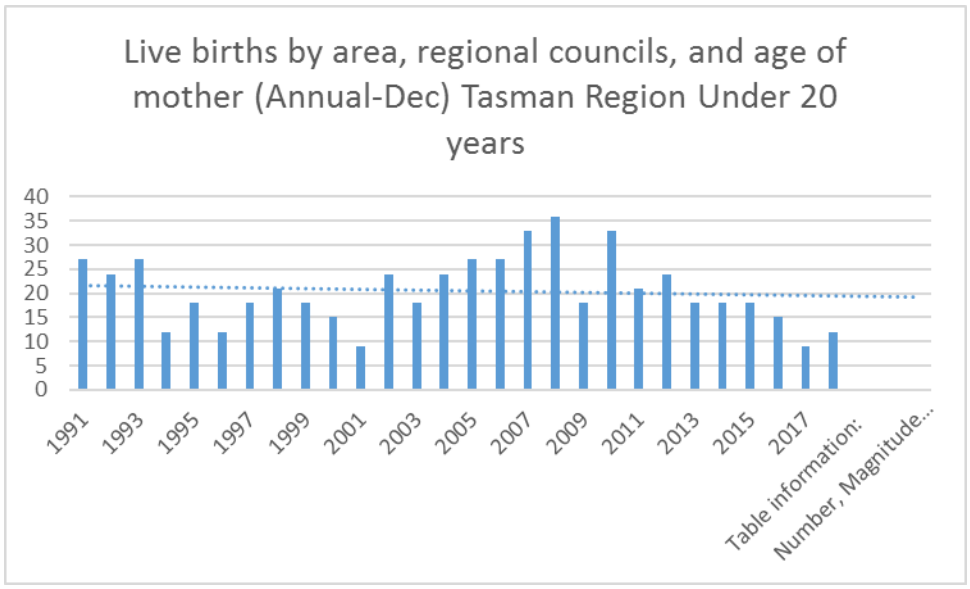
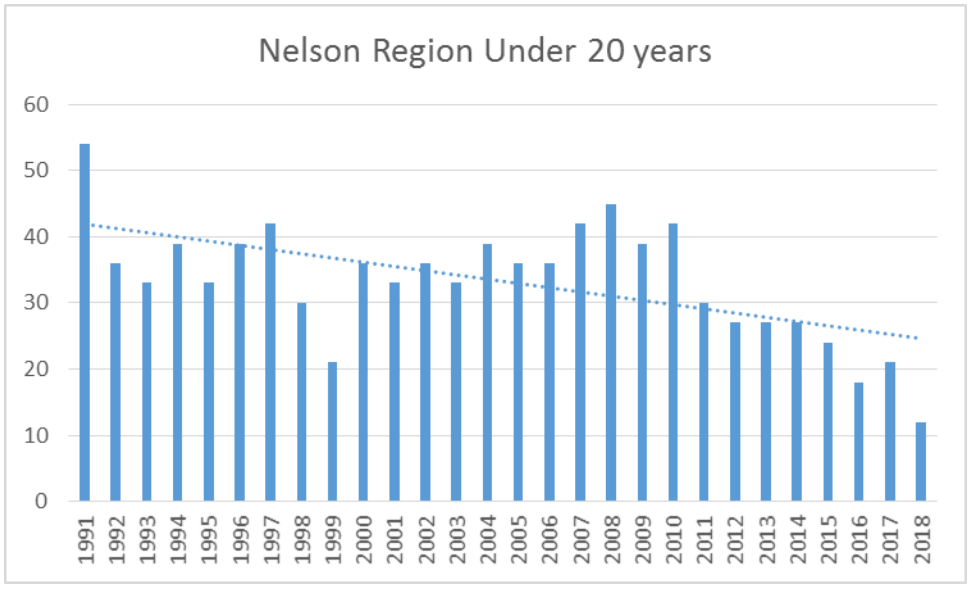
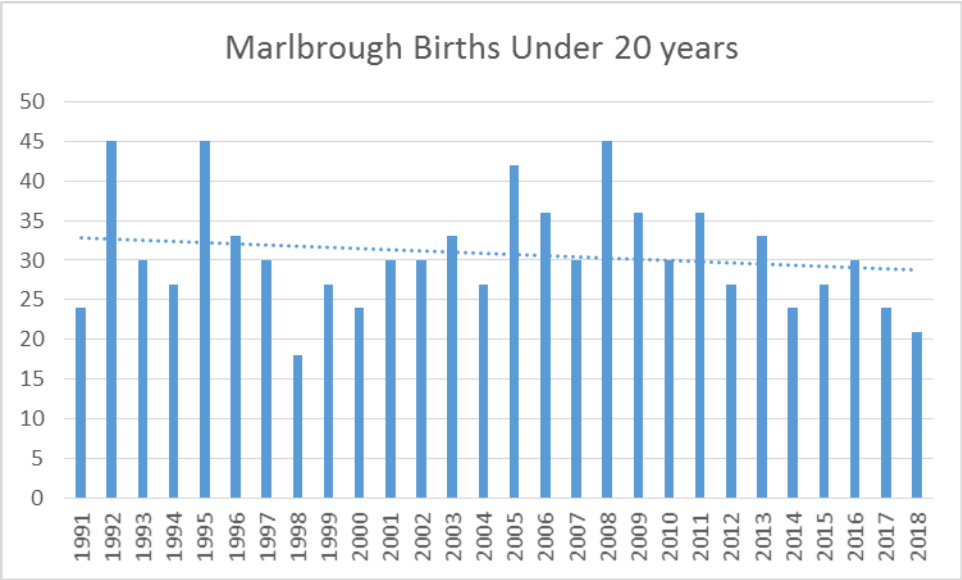


Figure 2: Annual birth numbers across Nelson Marlborough region 1991-2017.

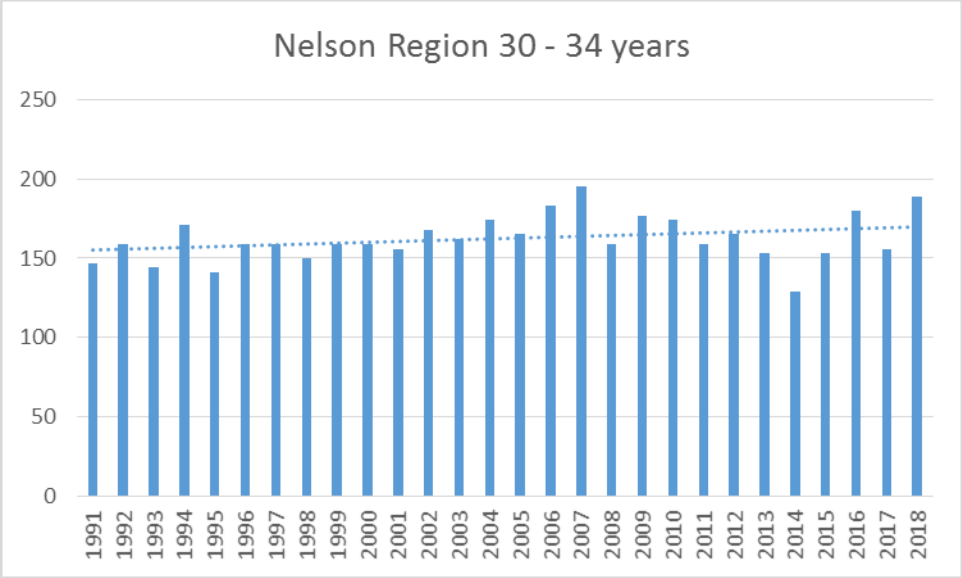
Age of birth mother across Tasman, Nelson and Marlborough Domiciles 1991-2018

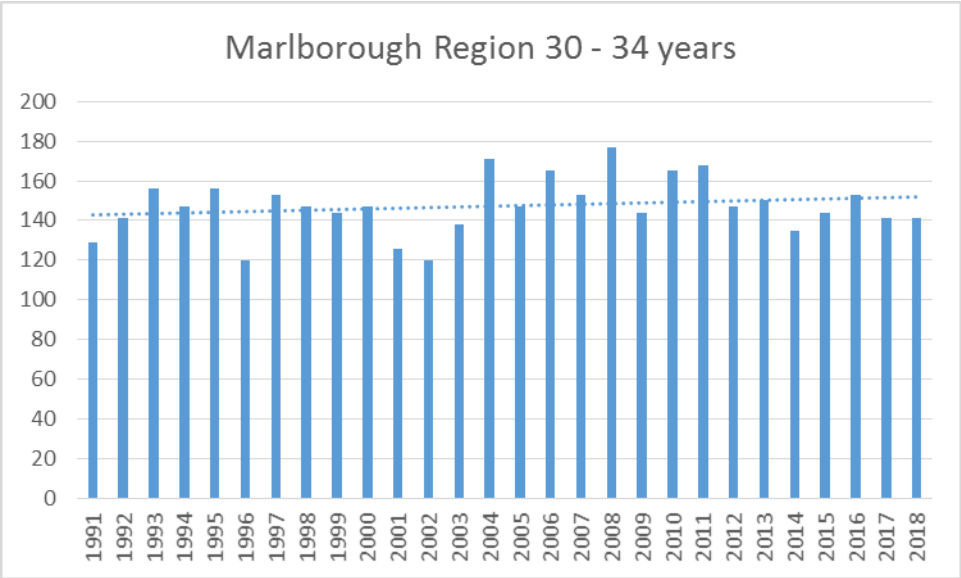


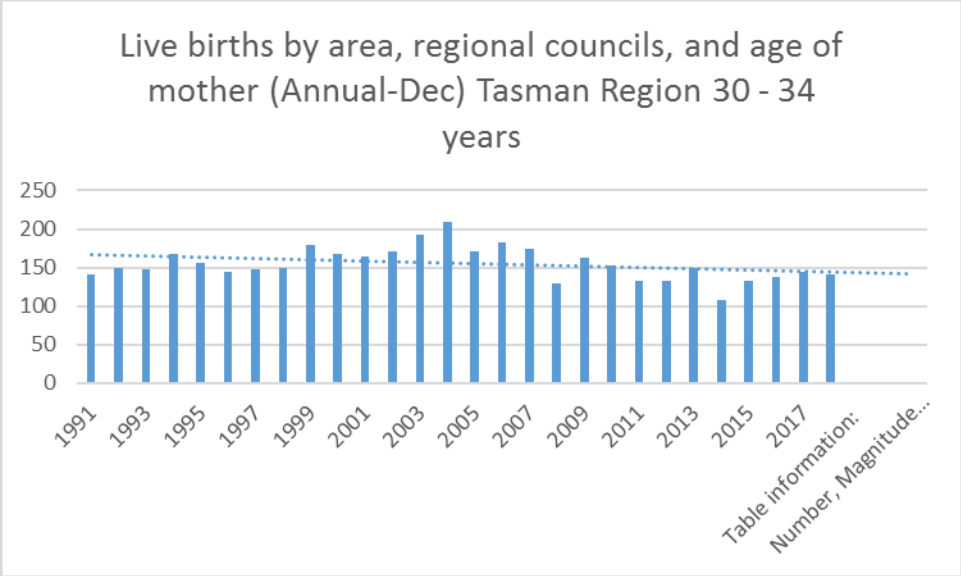




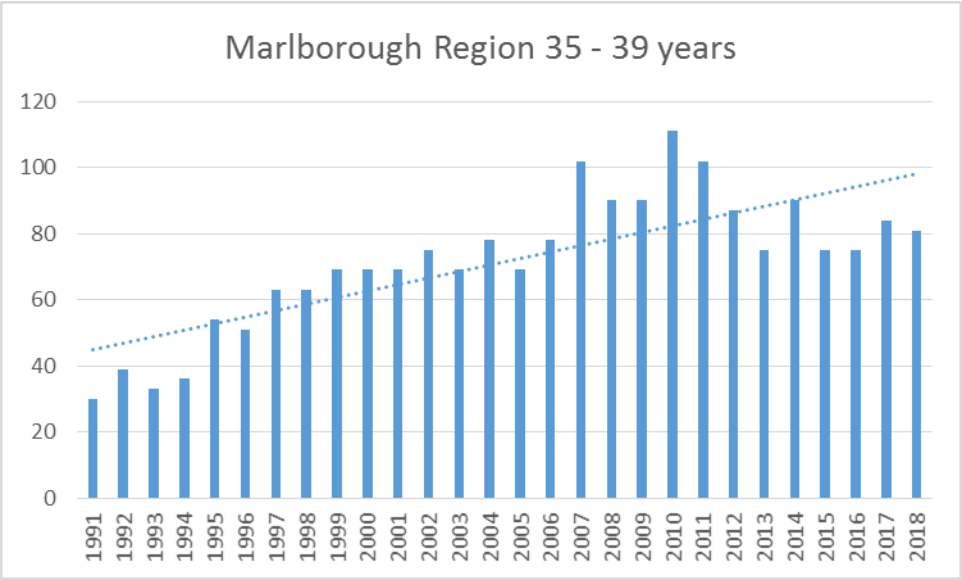
Comment: Note Nelson and Marlborough have downward trending mothers aged under 20 years however Tasman continues to have a more stable trend in this age group.







Comment: Across the age groups 25-34 there is a fairly stable trend compared with the mothers aged 25 and younger and 35 and older.


Marlborough Region 35 - 39 years
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100
80
60
40
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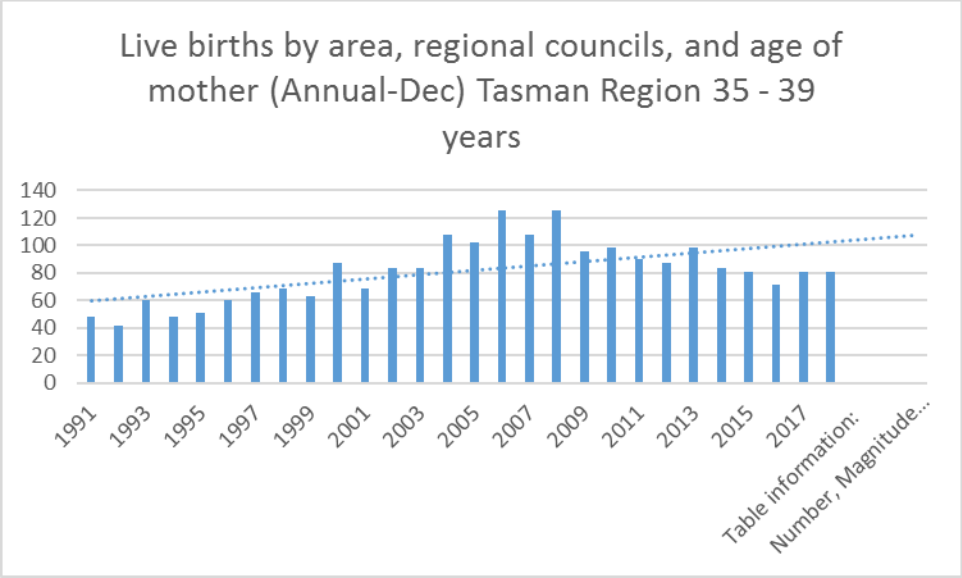
1991 1992 1993 1994 1995 1996 1997 1998 1999 2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 2017 2018


Live births by area, regional councils, and age of mother (Annual-Dec) Tasman Region 35 - 39 years
140
120
100
80
60
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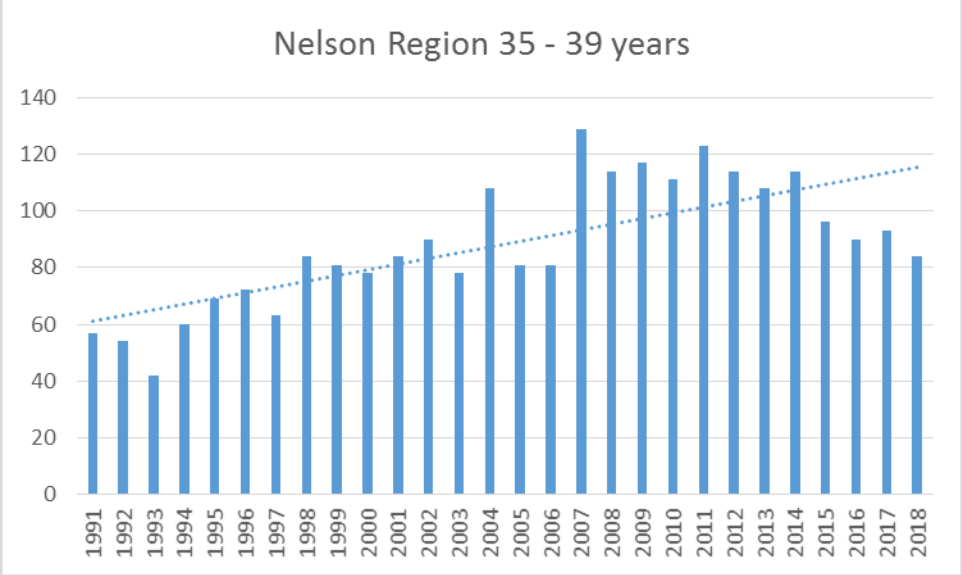
0
1991 1993 1995 1997 1999 2001 2003 2005 2007 2009 2011 2013 2015 2017
Table information: Number, Magnitude...


Nelson Region 35 - 39 years
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120
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80
60
40
20
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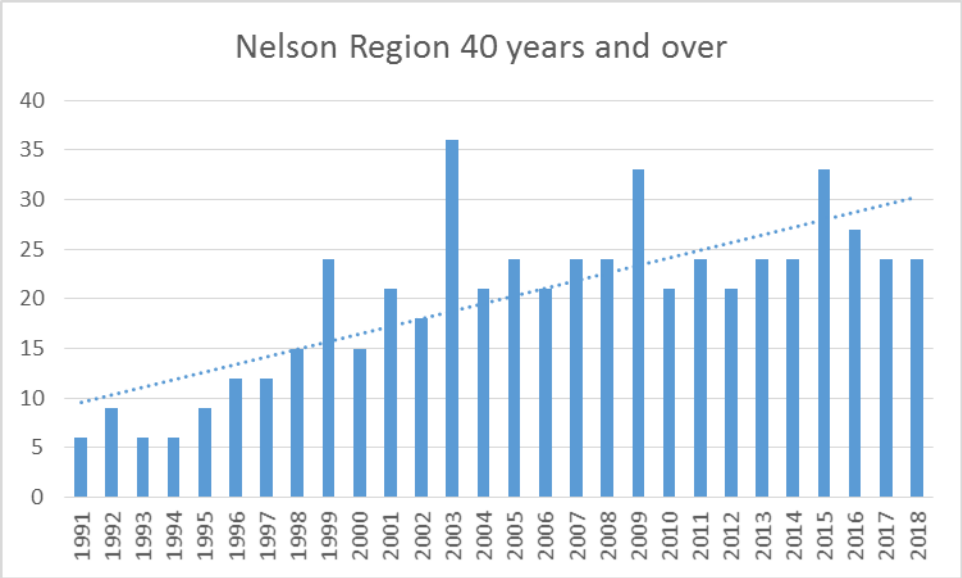
1991 1992 1993 1994 1995 1996 1997 1998 1999 2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 2017 2018


Nelson Region 40 years and over
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35
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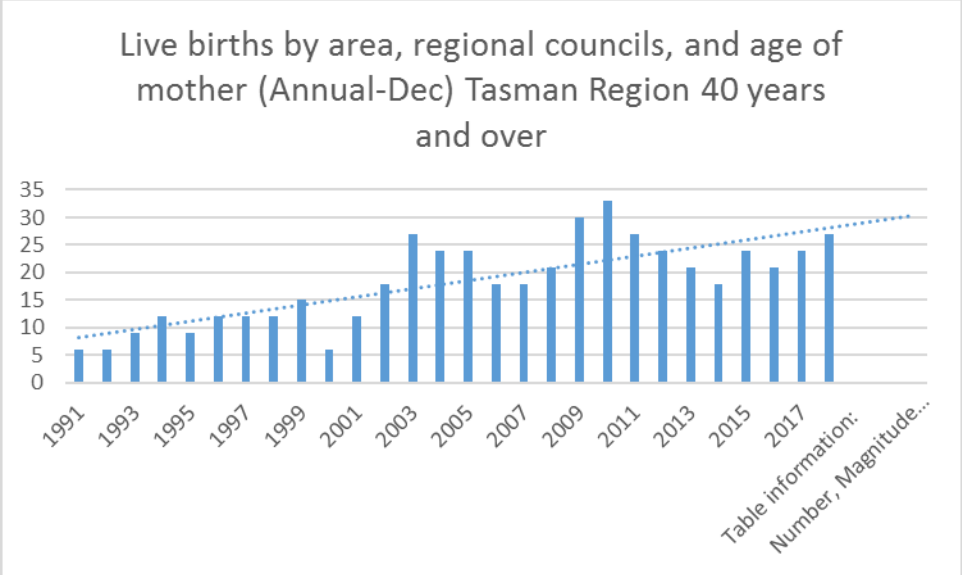
Live births by area, regional councils, and age of mother (Annual-Dec) Tasman Region 40 years and over
35
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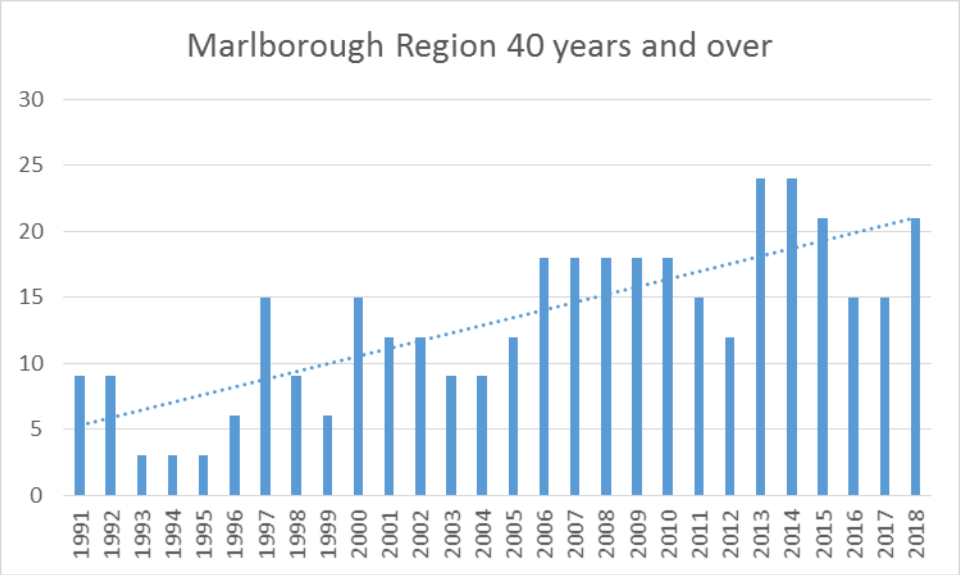
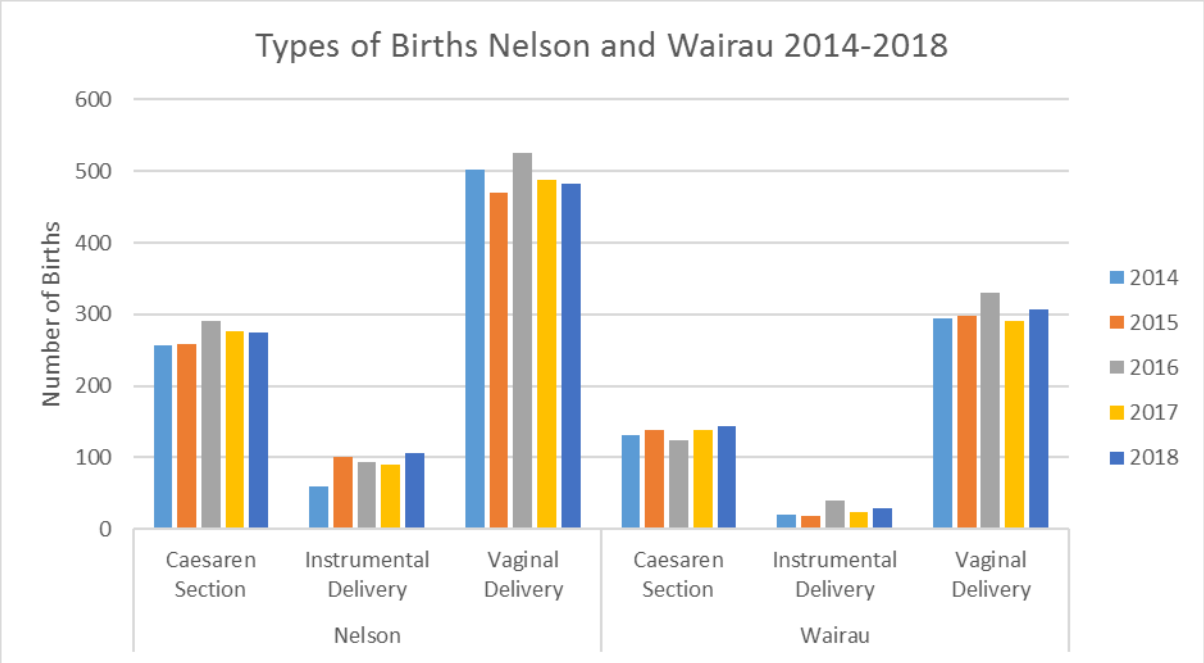
Table information:
Number, Magnitude...



Comment: In Nelson, Tasman and Marlborough maternity services are seeing a significant increase in the number of mothers aged 35 yrs and older over the past 20 years. A changing birthing demographic has resulted in significant changes to maternity service provision and service planning for the future. (Data source: Infoshare NZ, 2019)

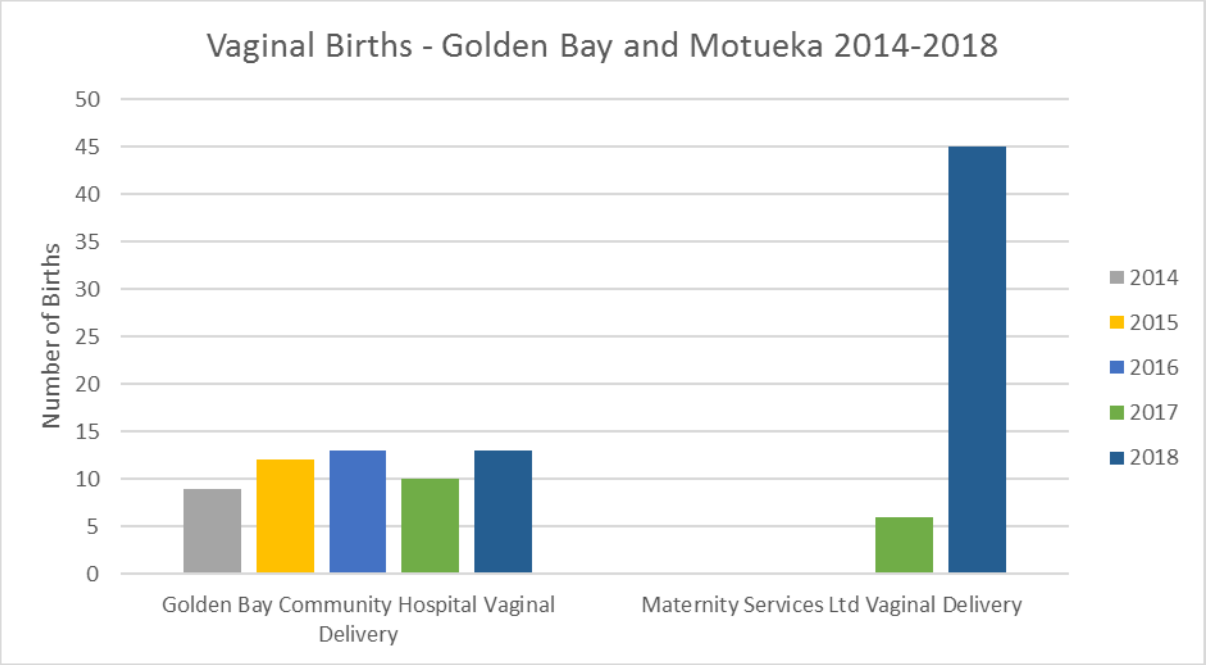
Birth Types Nelson and Wairau 2014-2018



Types of births Nelson and Wairau 2014-2018

Comment: It is noted that the birth numbers at Nelson and Wairau Hospitals are consistent for each birth type.

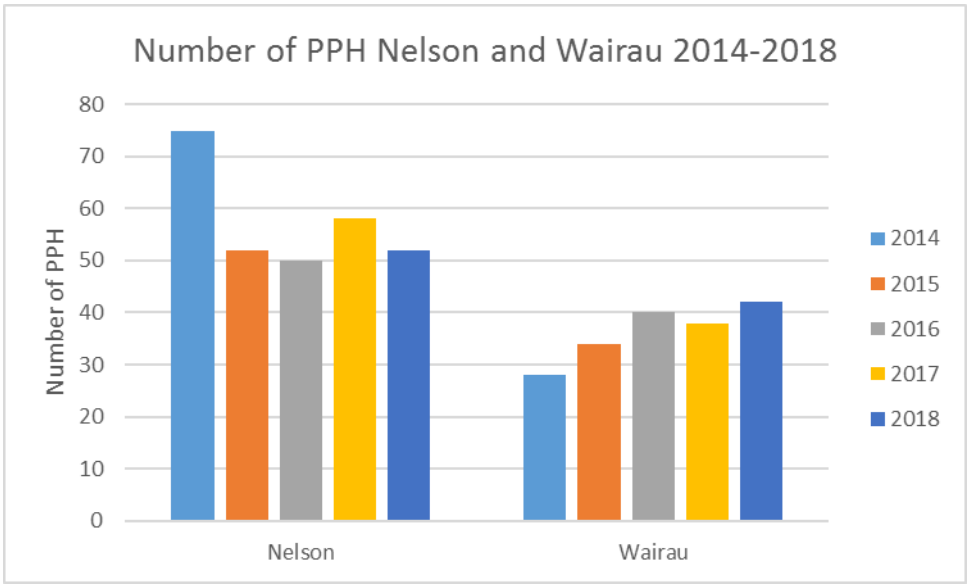
Vaginal Births Golden Bay and Motueka



Vaginal births – Golden Bay and Motueka 2014-2018

Comment: It is noted that birth numbers at Golden Bay maternity unit remain consistent, while birth rates at Motueka maternity unit have increased in 2018.

Postpartum Haemorrhage Numbers - Nelson Marlborough 2014-2018



Comment: It is noted that the numbers of PPH has increased at Wairau since 2014.

Golden Bay & Motueka

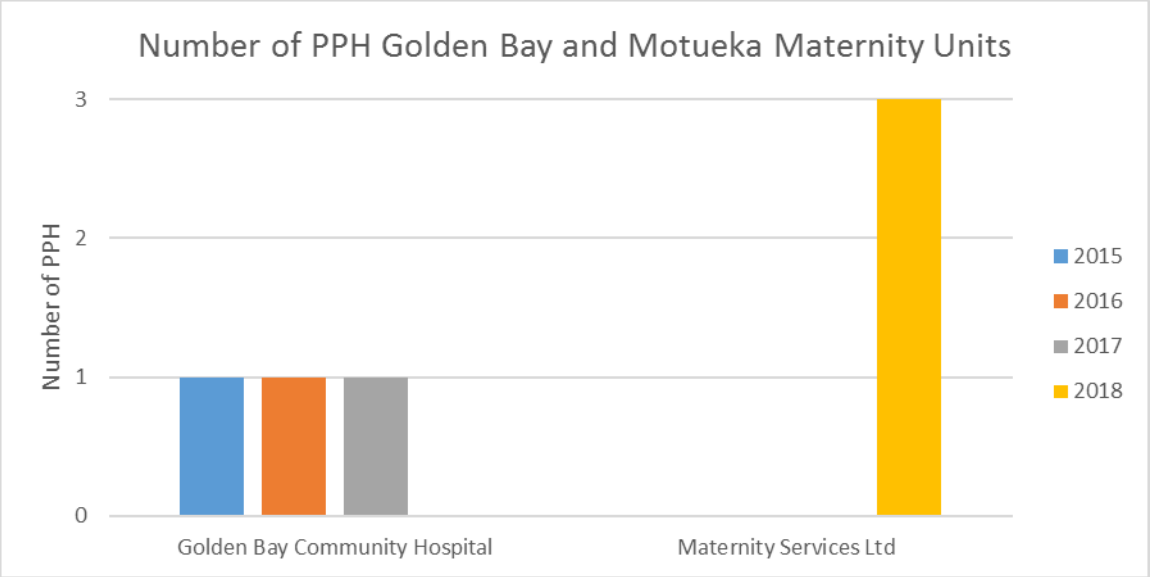


Figure 21: Number of PPH Golden Bay and Motueka

Comment: It is noted that Motueka maternity unit reports 3 PPH events in 2018. This represents 6% of the total births occurring at the Motueka maternity unit.

Action: Audit the PPH's at Motueka to identify any service improvements.

Special Care Baby Unit (SCBU) Nelson

At Nelson Hospital, a dedicated Special Care Baby Unit (SCBU) provides 10 cots, caring for neonates from 32/40 weeks gestation. The SCBU is staffed with Registered Nurses.

The SCBU has the ability to undertake CPAP, Optiflow, and short term neonatal ventilation. Babies requiring intensive specialist care are transferred to tertiary level care when required.

Nelson SCBU statistics

	2016	2017	2018
Total admissions	180	224	198
Transfer out Tertiary	12	13	17
Transfer in	16	0	20
HIE diagnosis	67	3	5
<37/40weeks		154	65
>37/40 weeks		-	119
<2500gm	46	91	47
IUGR	27	35	32
>37/40 weeks requiring respiratory support	Not defined	Not defined	16

Nelson SCBU Breast Feeding Data on Discharge from the SCBU

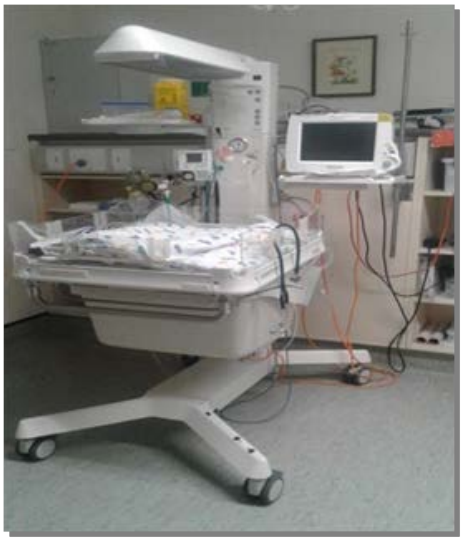
	2016	2017	2018
Exclusive	45%	43%	38%
Fully	12%	0%	0%
Partial	18%	52%	51%
Formula	25%	5%	11%

Comment: 38% of babies discharged from Nelson Hospital SCBU are exclusively breastfeeding, with nil fully breastfeeding. This is a 5% decrease in exclusive breastfeeding rates from 2017.

What more can I say, you guys are absolute legends and we couldn't have done it without … Quite literally!!! We will actually miss you all.

Consumer Comment

Paediatrics and Neonatal Care Wairau



At Wairau Hospital, neonatal care is provided by the paediatric service within the paediatric ward, caring for neonates from 34/40 weeks.

The neonatal service has the ability to undertake CPAP and Optiflow. Babies requiring more complex specialist intervention are transferred to tertiary services./

Wairau SCBU statistics

	2016	2017	2018
Total admissions	100	115	103
Transfer out Tertiary	10	7	10
Transfer in	18	19	17
HIE diagnosis	1	6	4
<37/40weeks	31	49	28
>37/40 weeks	69	66	64
<2500gm	27	38	19
IUGR	20	12	10
>37/40 weeks requiring respiratory support	Not defined	Not defined	22

Wairau SCBU Breast Feeding Data on Discharge

	2016	2017	2018
Exclusive	42%	53%	60%
Fully	30%	21%	22%
Partial	18%	8%	7%
Formula	10%	18%	11%

Comment: there has been a 18% increase in babies discharged from Wairau Hospital neonatal care are exclusively breastfeed since 2016

Maternity Workforce – 2018

Nelson Marlborough's maternity and new born services are provided by our multidisciplinary teams of core midwives, Lead Maternity Carers (LMCs), obstetricians,

obstetric registrars, anaesthetists, paediatricians, physicians, registered nurses, lactation consultant, and Allied Health staff.

We are proud of our workforce which is an enthusiastic group of people committed to achieving the best outcomes for our mothers and babies.

Nelson and Wairau Maternity Services provide antenatal clinic care, which includes obstetric specialist clinics for high risk pregnancies, for example, diabetes, and methadone use in pregnancy management, foetal growth monitoring, pre-eclampsia management, previous caesarean section birth management, and any other presenting condition that may impact on the health of the mother, foetus and/or newborn.

As well, there is an additional core midwifery resource service providing antenatal care to women who may not be able to access LMC community care. These midwifery-led services provide antenatal clinic care, which may include care for any high risk pregnancy, including increased social risk.

Golden Bay community midwives are able to access secondary maternity services at Nelson via contact with specialist obstetric services for advice and management of maternity care, with good inter-service maternity support available.

Dedicated weekly diabetes clinics, managed by an obstetrician and specialist diabetes nurse, are held at Nelson Hospital. These clinics are an exciting quality development in the care of women with diabetes.

Additional midwife resources have been introduced within the DHB-provided maternity services, both at Wairau and Nelson, to provide antenatal care to women who may not be able to secure LMC community services.

"… Thank you for the amazing job you're doing taking care of mums and bubs. I have appreciated the support you give…"

Consumer Comment

Primary Maternity Services

Primary maternity services are provided across the Nelson Marlborough region aligning with the DHB Strategic health care priorities to ensure women and their families experience improved health, reduced inequities, a joined up care team and care provided closer to home.

In Tasman and Nelson there are sufficient LMC's for the birthing population, however in Wairau there is a 50% shortage of LMC's for the birthing population, and, therefore, the DHB is currently providing a large proportion of primary maternity care in Wairau.

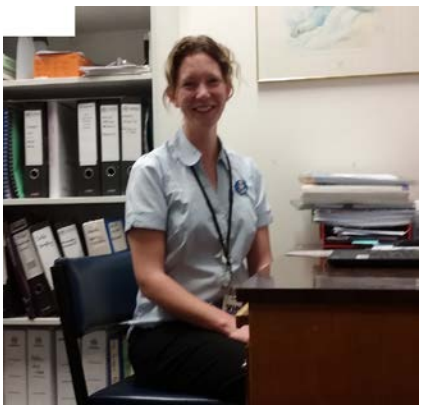
ACTIONS:

Ensuring continuity of care and access to care has been a priority for women experiencing additional health challenges. Clinical Coordinator Midwifery roles

In Nelson and Core Resource midwifery roles in Wairau have been established to link across primary and secondary (and tertiary) maternity services to provide better quality and seamless care for women experiencing health inequalities.

The Midwifery workforce strategy can be found in the NMH Annual report.

New Clinical Midwifery Roles



In 2018-2019 Antenatal clinic midwifery roles were trialled and changed to better meet the needs of women with additional health care needs and to support our primary maternity workforce. A Clinical Midwife Coordinator – antenatal outreach role has been established in Nelson with a focus on picking up high risk pregnancies, and providing antenatal assessments and care to women who identify with high social risk, and are not enrolled with a LMC.

This service is available to women who may present during busy hours of work within the maternity service, and is able to provide acute and planned antenatal assessments of women on referral from their LMC or Obstetric team.

In Wairau Resource Core midwifery roles have been established to provide additional staffing for variance response in the maternity unit and provide care for women without an LMC. They also play a vital role in supporting LMC's caring for women with more complex health and social care needs.

The midwives in these roles have proactively developed the roles over the year to meet the needs of women in our community and to support the primary and secondary maternity workforces.

Midwifery Education

The Nelson Marlborough Health midwifery education programme supports midwives across the region in meeting their Midwifery Council education and professional development requirements and NMH requirements.

The programme incorporates an annual calendar open to all midwives, free of charge, and also incorporates education sessions in response to reportable events, RCA recommendations, PMMRC recommendations, NMMG recommendations, and national midwifery issues and concerns.

The programme collaborates with NZCOM and other educational providers and local stakeholders to ensure midwives have access locally to a variety of educational, networking and professional development opportunities. A recent midwifery workforce survey will also inform the local midwifery education programme planning for the future.

Education sessions are well attended and midwives report enjoying the discussions, learning, collegial interactions, and networking offered via the education format.

Ashleigh Foord

Silke Powell

SECTION FOUR

Wider supports and care for women and babies after birth

Universal New Born Hearing Screening and Early Intervention Programme (UNHSEIP)

Along with all other District Health Boards in New Zealand, we offer New Born Hearing Screening (UNHSEIP) to all babies in the Nelson Marlborough region.

The service covers a wide regional area reaching populations across Nelson, Tasman, Golden Bay, and Marlborough, (north of Kaikoura to Blenheim, and west to the Rai Valley in Marlborough).

Identifying early hearing loss, and the potential for permanent congenital hearing loss, sees the programme meeting specific goals of completing screening by 1 month of age, diagnosis by 3 months of age, and early intervention offered by 6 months of age.

At NMH the UNHSEIP is managed through the Directorate of Women, Child and Youth, and is included in the MQSP Clinical Governance Group reporting.

We offer screening to all new borns in the Nelson Marlborough region, either through inpatient service, or as an outpatient service. The service operates 5 days per week – Monday to Friday - in the Maternity Units and Special Care Baby Units. Weekend screening may also be undertaken to meet demand.

At Wairau, along with regular hearing clinics, there is a drop in clinic on a Monday when mothers are unable to attend a clinic during the week, and this works well.

There is a weekly new born hearing clinic held at Motueka, and a clinic at Golden Bay as required.

There is a team of 3 screeners, 2 located at Nelson Hospital, and 1 located at Wairau Hospital, with the regional coordinator role located at Nelson, and who may also undertake screening on both sites.

Nelson Marlborough UNHSEIP Report

Screening activity in this reporting period January 1st to December 31st 2018	**Number of babies**	**%**
Babies born locally in this reporting period suitable for screening	1466	**-**
Families offered screening	1466	**100%**
Declined screening (includes disengaged)[1]	14	**0.9%**
Screening passed, hearing surveillance required[4]	15	**1.02%**
Did not pass screening and referred for audiology assessment	13	**0.8%**
DNAs[3]	0	**0%**
Lost contacts	0	**0%**
Missed babies[5]	0	**0%**
Screening activity in this reporting period January 1st to December 31st 2017	**Number of babies**	
Babies born locally in this reporting period suitable for screening	1360	**-**
Families offered screening (including babies born in other centres and returned to the district and families moved into the district)	1473	**>100%**
Declined screening (includes disengaged)[1]	13	**0.88%**
Screening passed, hearing surveillance required[4]	10	**0.67%**
Did not pass screening and referred for audiology assessment	20	**1.36%**
Bilateral Hearing Loss – cochlear implants	5	**0.34%**
Unilateral hearing loss – under audio care	2	**0.1%**
Discharge from care	1	**0.06%**
Ongoing audio monitoring	12	**0.8%**
DNAs[3]	0	**0%**
Lost contacts	0	**0%**
Missed babies[5]	0	**0%**

Nelson Marlborough New Born Enrolment with General Practice by Quarter 2018

Month	New Born	Forms Not Received	Total % Not Received
January	129	33	**25.6%**
February	137	54	**39.4%**
March	130	30	**23.1%**
April	125	29	**23.2%**
May	128	24	**18.7%**
June	115	29	**25.2%**
July	123	25	**20.3%**
August	148	34	**22.9%**
September	87	19	**21.8%**
October	134	28	**20.9%**
November	119	18	**15.1%**
December	127	21	**16.5%**

Comment: We have identified the current process has challenges to ensuring 100% completion rate, however we have continued to see increasing rates of newborn enrolment with General Practice by six weeks and 3 months:

MOH Measure: 55% newborns enrolled with GP by six weeks: Overall NMH has increased enrolments this quarter by 8.6 % and 10.8% since June 2018 to **85.4%** - ranked 2nd DHB. This exceeds the target of 55%. Kimi Hauora PHO demonstrating the most significant change over the past quarter with a 15% increase.

MOH Measure: 85% of newborns are enrolled with GP by 3 months: Overall NMH has increased enrolments this quarter by 3.2% to **94.6%** (with only 5 babies not registered) and once again exceeds the target of 85%.

The work undertaken by LMC's, maternity units, clerical teams, our NIR team and PHO's have all worked together consistently to improve this process and ensure the best start for newborns by ensuring continued access to primary health care.

Immunisation

NMDHB IMMUNISATION COVERAGE AT MILESTONE AGE (8 months) 2018-19

	Total %	NZE	Maori	Pacific
Jan-March	**87%**	89%	8%	100%
April-June	**90%**	94%	88%	91%
July-Sept	**91%**	92%	90%	100%
Oct-Dec	**86%**	88%	84%	93%
Jan-Mar	**88%**	89%	90%	100%
April-June	**89%**	91%	83%	100%

Comment: We note that immunisation rates in Nelson Marlborough are not consistently meeting the national target of 95% fully immunised at 8 months. The region has approximately 5-9% decliner rate and therefore achieving immunisation rates above 90% is a challenge.

A small local audit undertaken in the winter of 2018 identified that over 70% of women had vaccination against flu and vaccination against whooping cough in pregnancy. Vaccination in pregnancy is a health target for Nelson Marlborough Health to protect women and their babies from these infectious diseases which carry high morbidity and mortality risks during pregnancy and infancy.

Safe Sleep – Every Sleep

As part of the Safe Sleep programme going forward, NMH is committed to supporting the quality safe sleep key objectives, undertaking local safe sleep audits, and creating a more visible regional Pēpi -Pod program relating to safe sleep practices.

A fresh emphasis on safe sleep has seen engagement of a regional coordinator, and a focus on the key objectives of the Safe Sleep programme:

- Support and engage with the South Island Safe Sleep Policy review and update
- Safe Sleep device – further develop the distribution pathway for Pēpi -Pods and create a more visible Pēpi -Pod programme with a distribution data base for safe sleep audit purposes
- Provide training and education to key stakeholders

With these objectives in mind, the following initiatives have been undertaken to strengthen and highlight the importance of safe sleep practices within the region of Nelson Tasman and Marlborough:

Te Waka Hauora (TWH) has undertaken the revitalisation of the Nelson Marlborough Health (NMH) Safe Sleep Device (SSD) programme. We have implemented a system to monitor the distribution of SSD and ensure the evaluative component of the programme is followed.

There is a focus on removing barriers to access. A new pathway for assessing and distributing Pēpi – pods will be implemented across maternity in the last quarter of the year, with a view to extending knowledge of safe sleep principles and devices further into the hospital setting over 2020.

TWH facilitated x3 Safe Sleep Device Distributor Trainings throughout Te Tau Ihu o te Waka a Maui. The development of this distribution network is focused on increasing awareness of SUDI risk factors, like smoking in pregnancy, and on supporting engagement of vulnerable whānau and hapū mama throughout our community. Further Safe Sleep Device training is being undertaken in Golden Bay – Where currently there is no distribution network for safe sleep devices and associated messaging.

NMH has a number of Safe Sleep devices such as mini Pēpi - pods – Used in the hospital setting, Pēpi -Pods, and wahakura available for distribution. The devices come with safe sleep messages and practices attached to them and they act as a practical tool that aims to enable behaviour change to support safe sleep.

It is noted that over 80% of infants dying from SUDI in NZ are Maori. To connect with these whānau NMH has helped facilitate three wahakura wānanga held across our DHB district, with the wahakura woven used by the weaving whānau or distributed at hapū wānanga. The intent is to establish a sustainable approach to the production of wahakura and the distribution of safe sleep messages within our top of the south region.

…. Key Safe Sleep Messages ….

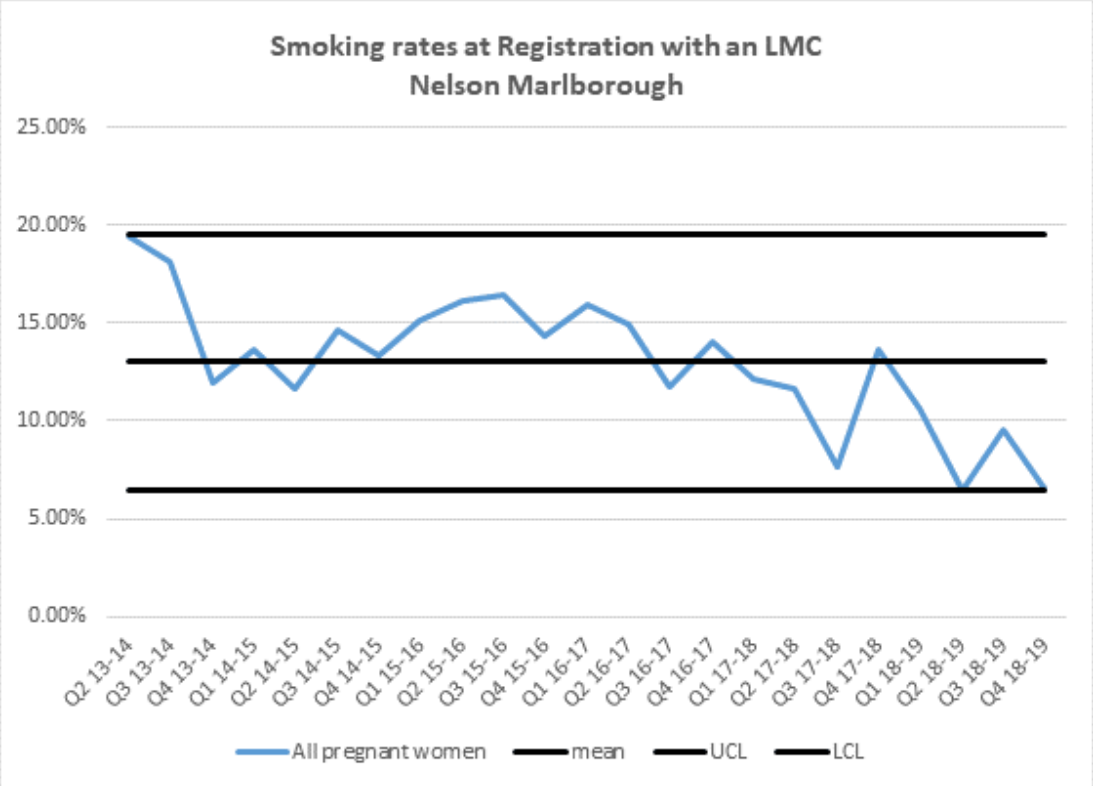
Pepi-First Quit Smoking Incentivisation Programme

This initiative focuses on pregnant women to provide support to these women to reduce and to stop smoking.

The programme uses incentivisation through the use of CO monitors which graphically shows the pregnant mother in relation to the effect on their baby. The programme also provides quit coach support, nicotine replacement therapy, and vouchers to the value of six hundred dollars across specific time periods for remaining smoke free.

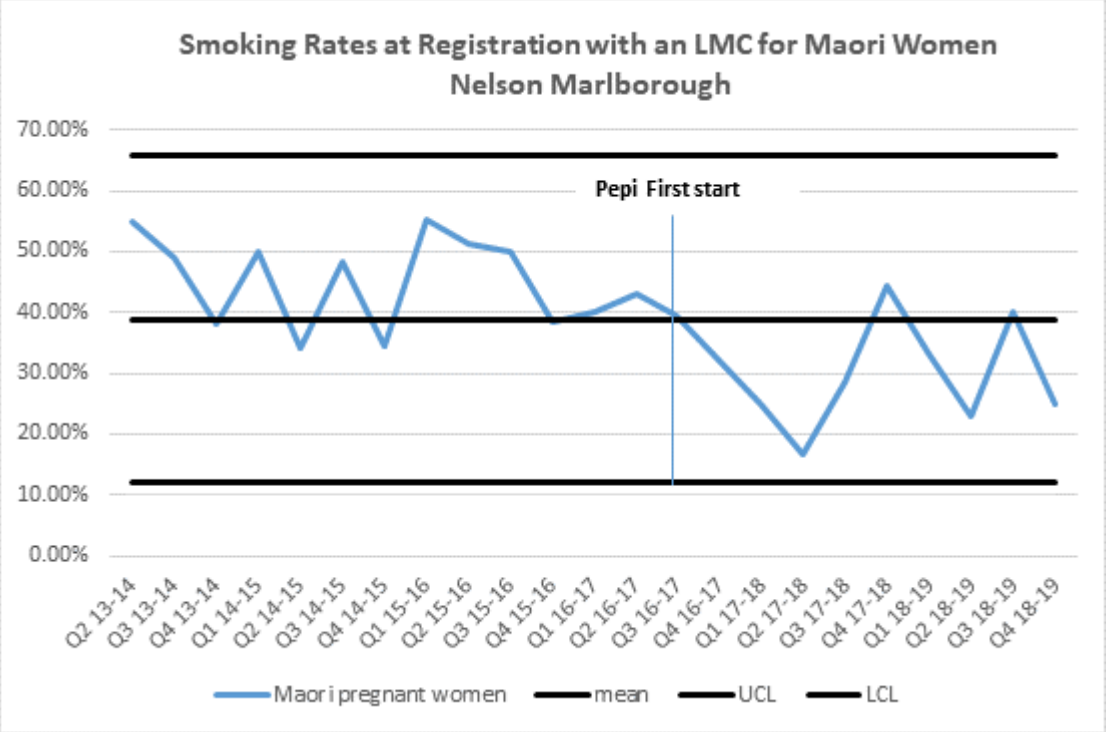
Such programmes have been shown nationally to improve quit rates for Maori and other high need population groups.

The Manager of Maori Health and Vulnerable Populations is a champion for the local programme. While numbers on the programme are low given the launch timeframe 2018-19 smoke free success rates are sitting at around 60% which is encouraging.



Smoking Prevalence in Pregnant Women 2014 - 2019 – MMPO NMDHB Data.

Comment: It is noted that there is a statistically valid decrease in the overall numbers of women smoking at booking-in with a Lead Maternity Carer



Smoking prevalence in Maori Pregnant Women 2014 - 2019

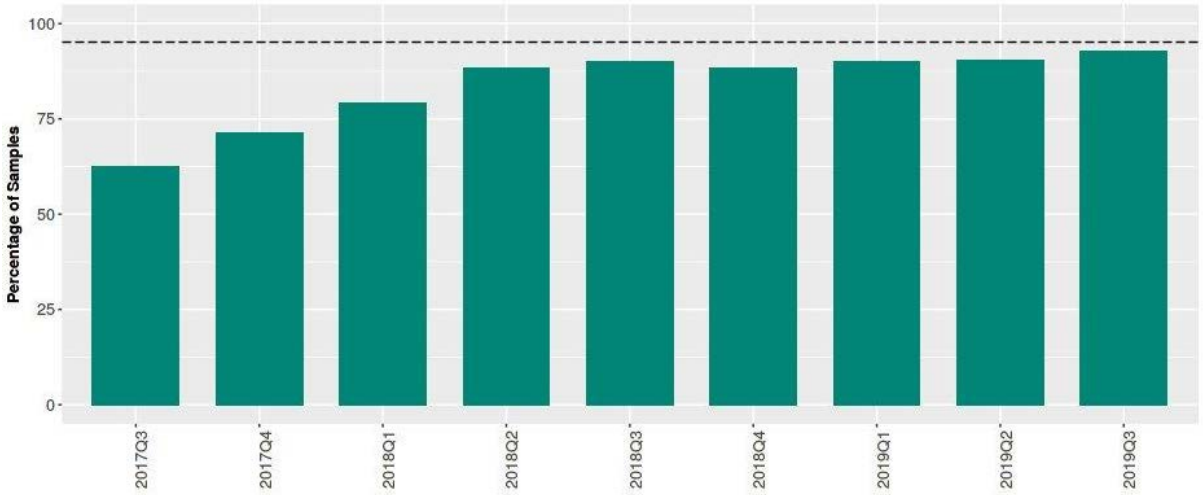
Comment: Smoking rates for Maori are relatively unchanged and not statistically valid.

It is noted that, overall, smoking rates for the general population, and for Maori, at LMC registration are declining, and the gap between these two groups is closing.

New Born Metabolic Screening Programme 2017-18

The national standard is that 95% of blood spot samples are received at the laboratory within four calendar days of being taken. Transit times are a priority because delays can lead to delayed diagnosis of treatable congenital metabolic conditions in newborns.

Percent of samples that reached the lab in 4 days or fewer, July 2017 to September 2019, Nelson Marlborough

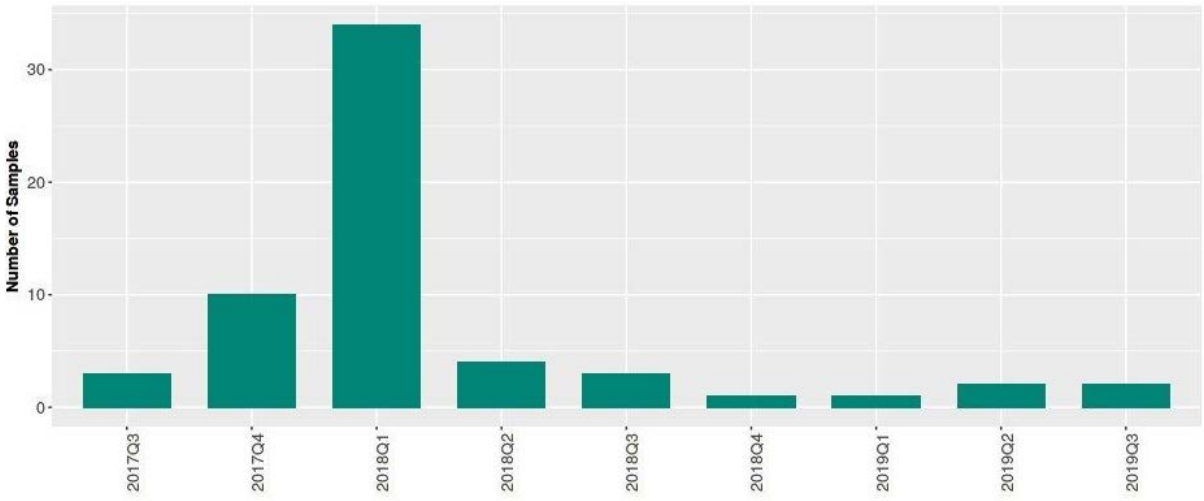


Comment: It is noted that Nelson Marlborough is not reaching the target of 95% within the four day standard, and is meeting the target within the 7 day standard. As a remedy to reaching the 4 day target, we plan to liaise with the National Screening Unit and identify where, and why, delays are occurring.

Summary July to September 2019

- 92.7% of Nelson Marlborough's blood spot cards reached the laboratory in the four-day standard
- 98.7% reached the laboratory within a week of being sampled
- 2 took more than 7 days to arrive at the lab
- 0 took more than 28 days to arrive at the lab
- 3 blood spot cards had no date of sampling.

Number of samples that reached the laboratory after more than 7 days, July 2017 to September 2019, Nelson Marlborough



Comments:

Achieving the four-day transit time standard should be a continued quality improvement focus for the DHB in order to ensure early diagnosis and treatment.

Pregnancy and Parenting Education (PPE) Classes

NMH provides parenting and pregnancy education programmes across the district. There are also private programmes available locally through a variety of providers.

In 2018, approximately 1/3 of the total birthing population engage with publically funded parenting and pregnancy education classes whilst a similar proportion attend privately run programmes. Completion rate varies between 55%-93%. 95.9% were primips with attendees being in the age range of 20-42 years. Maori and vulnerable populations are less likely to access antenatal education programmes that are not specific to meet their cultural and social needs. Hapu Wananaga development in 2018 has been a quality improvement initiative to address inequalities and improve uptake of parenting and pregnancy education for Maori.

"… I found the classes to be really helpful. And I liked how my partner was included in the discussions. We learned a lot and it made us feel that we were almost a family…"

Consumer Comment

Consumer Comment

Hapū Wānanga (wānanga hapūtanga) – Kaupapa Māori pregnancy and parenting programme

In 2017-2018 Māori Health proposed to launch the Nelson Marlborough DHB's first kaupapa Māori pregnancy and parenting programme. The programme "Hapū wānanga" launched in Wairau in November 2018 - with the vision to provide support and education within a kaupapa Māori framework. It now offers programmes across the region.

The programme seeks to support wāhine and their whānau from vulnerable populations who are about to have a pēpi, who traditionally have not engaged with antenatal education. Operating over two full day sessions in local communities, hapū wānanga embraces the principles of te reo, tikanga and mātauranga Māori to share knowledge and key messages around immunisation, labour and birth options, safe sleep, gentle handling of pēpi and other issues identified by those whānau attending, in a way that upholds and acknowledges Te Ao Māori. Strong engagement with and linking to local support services is also important to the ethos of the wānanga – with local presenters and services such as smoking cessation, whanau support services and poumanaaki also attending to extend knowledge sharing of locally available supports with the whānau.

At the completion of the programme – wāhine are gifted a wahakura woven by local weavers, to support the safe sleep message, and an Aroha pack filled with items for mama and pēpi.

Hapu Wānanga Pregnancy and Parenting Classes 2018 - 2019

	Total Hapū Wānanga Number %	% Total of attended wānanga
Registered	104	
Attendance	76	73.1%
Completion	74	97.4%
Primips	38	50%
Age Range	17-46	
Average Age	26.5	
NZ Mâori*	60	81.1%
Smokefree at enrolment	42	55%
Smoking at enrolment	15	20%
Quit Support accepted (% of smokers)	9	60%
Unknown smoking status	13	17%

Based on pēpi ethnicity

Child and Family Safety Service – Violence Intervention Programme (VIP)

Background

NMH and all other DHB's have been contracted by the Ministry of health to deliver VIP since 2007. VIP aims to reduce and prevent the negative health and social impacts of family violence and child abuse and neglect through early identification, assessment and referral of victims presenting to Health services in hospital and community setting by improving NMH responsiveness.

In 2016 NMH changed the name of the service from VIP to Child and Family Safety Service (CFSS) as we work towards consistency within the Southern DHB's Child Protection processes.

Summary of programme

- MOH mandated 5 priority areas that all staff must attend the family violence core training day, these areas are; Maternity, Paediatrics, Emergency Department, Public Health, Mental Health and AOD. NMH has rolled this training out into Allied Health.
- MOH updated the training we present to staff, these changes have captured changes to Oranga Tamariki Act 1989 and Family Violence Act 2018 as well as incorporating some recommendations from the recent Family Violence death review committee.
- CFSS staff meet with a panel of clinicians monthly to discuss the placing of National Child Protection alerts where there are concerns re the safety of a pregnant woman and her unborn child.
- CFSS are required by The MOH to audit all priority areas on a 6 monthly basis to check the screening for IPV. Screening rates vary in maternity but there are champions supporting this work.
- CFSS run an MDT for Vulnerable pregnant women, these meetings are to ensure that all supports are available for these women to ensure the best possible outcome for them and their baby. To support this work we work closely with the DHB's Maternity Social worker and the NMH /DHB Oranga Tamariki Liaison person.

Highlights for 2018

Interest from community agencies and primary health, such as, the Salvation Army, Victory Community Health, and Crisis Pregnancy, is still increasing in being part of the vulnerable pregnant pathway.

Changes to laws have further defined and clarified how we can share client information safely.

Members of our dedicated social/FVIP team

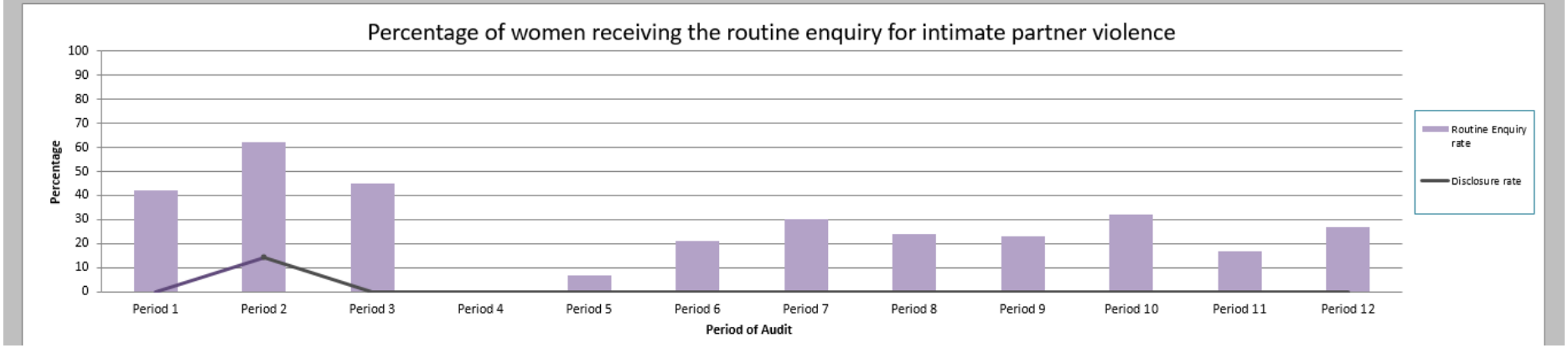
> ***"...I was amazed at how much people respected me and helped me, and I was able to keep my children with me with the good support given to me..."***
>
> ***Consumer Comment***

Maternity Nelson

Jan-Mar16 Apr-Jun16 Jul-Sep16 Oct-Dec16 Jan-Mar17 Apr-Jun17 Jul-Sep17 Oct-Dec17 Jan-Feb18 Mar-Jun 18 Jul-Sep18 Oct- Dec 18

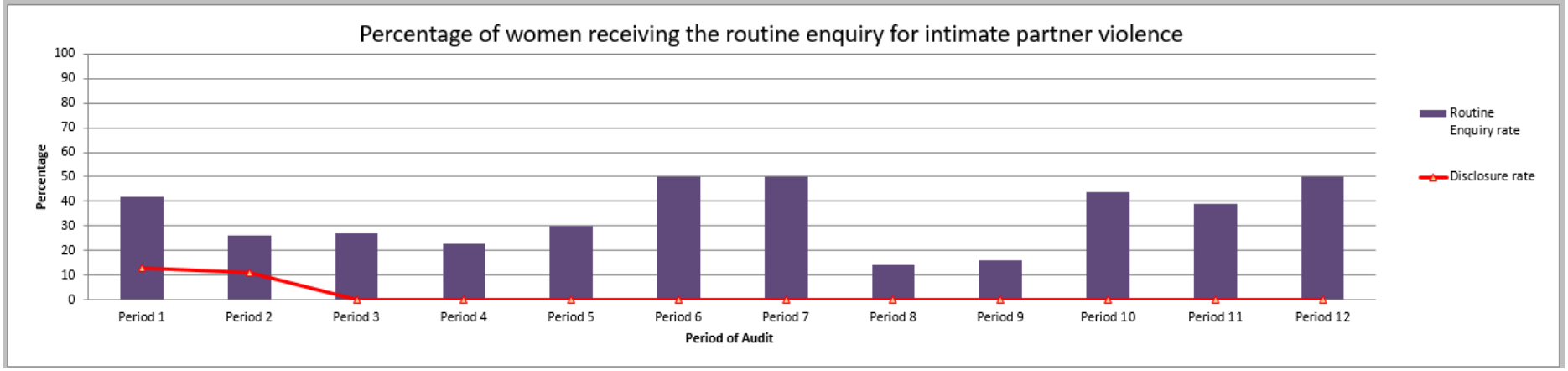
Maternity Antenatal

	Period 1	Period 2	Period 3	Period 4	Period 5	Period 6	Period 7	Period 8	Period 9	Period 10	Period 11	Period 12
Routine Enquiry rate	42	62	45	0	7	21	30	24	23	32	17	27
Disclosure rate	0	14	0	0	0	0	0	0	0	0	0	0



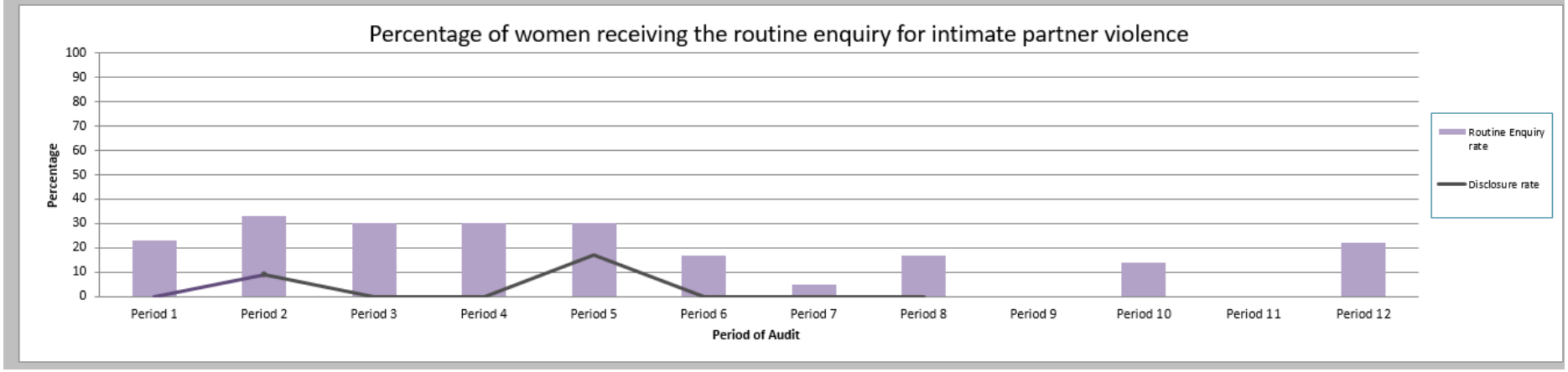
Maternity Postnatal

	Period 1	Period 2	Period 3	Period 4	Period 5	Period 6	Period 7	Period 8	Period 9	Period 10	Period 11	Period 12
Routine Enquiry rate	42	26	27	23	30	50	50	14	16	44	39	50
Disclosure rate	13	11	0	0	0	0	0	0	0	0	0	0



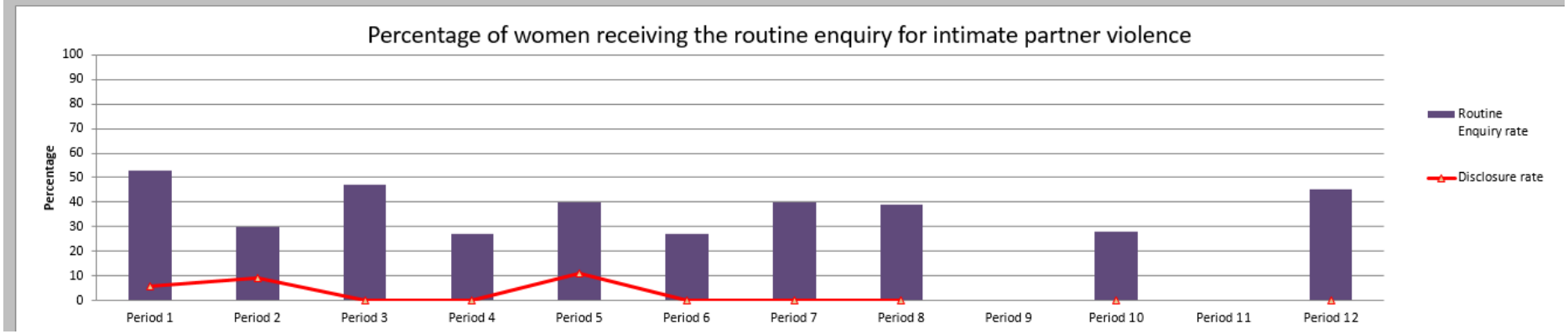
Maternity Antenatal

	Period 1	Period 2	Period 3	Period 4	Period 5	Period 6	Period 7	Period 8	Period 9	Period 10	Period 11	Period 12
Routine Enquiry rate	23	33	30	30	30	17	5	17		14		22
Disclosure rate	0	9	0	0	17	0	0	0		0		0

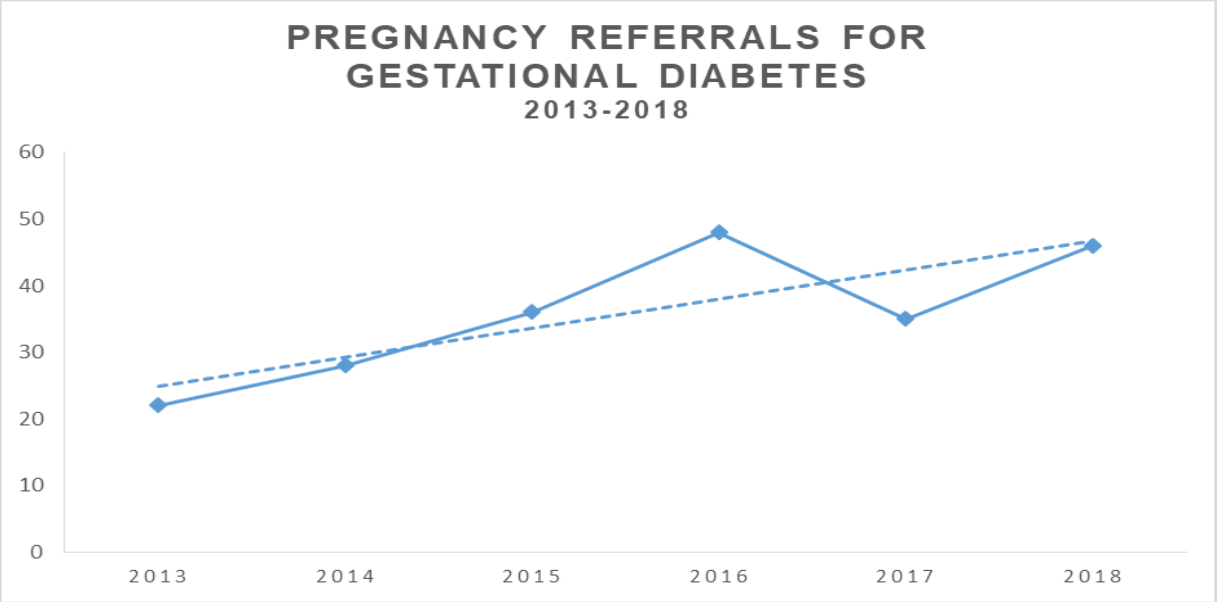


Maternity Postnatal

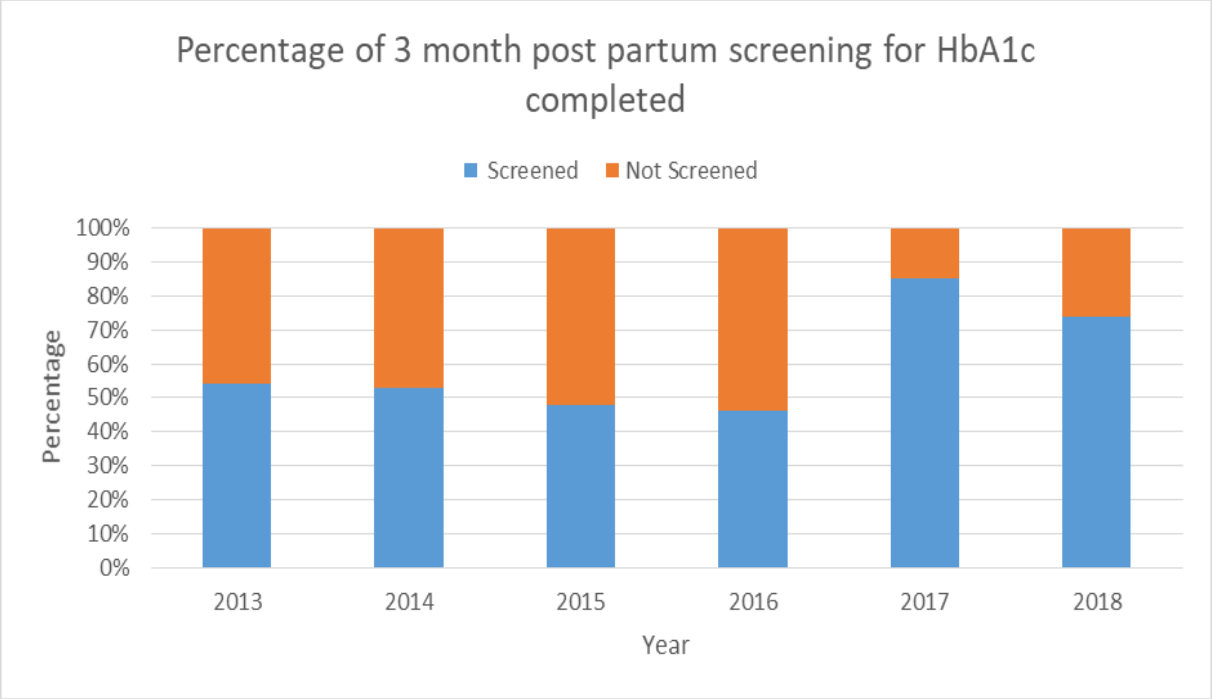
	Period 1	Period 2	Period 3	Period 4	Period 5	Period 6	Period 7	Period 8	Period 9	Period 10	Period 11	Period 12
Routine Enquiry rate	53	30	47	27	40	27	40	39		28		45
Disclosure rate	6	9	0	0	11	0	0	0		0		0



Gestational Diabetes in Pregnancy Referrals - Nelson



Comment: It is noted that referral for gestational diabetes at NMH are trending upwards in 2018. We are interested to compare this data with national data, and to identify common factors that may be influencing the onset of gestational diabetes.



Comment: While the uptake of HbA1c in Marlborough was near 100% at 3 months postpartum, HbA1c uptake in Nelson Tasman was variable between 30%-45%. A focus on uptake in Nelson Tasman saw an increase in the uptake of HbA1c to 85% at 3 months postpartum in 2017. This continues to be monitored closely to sustain improvement.

Improving care for women with gestational diabetes

As a quality improvement initiative, setting up a multidisciplinary team outpatient clinic is being planned as part of the care package for pregnant women with gestational diabetes, and Type 1 or Type 2 diabetes, at Nelson Hospital.

We have established a weekly antenatal clinic which comprises of a diabetes specialist nurse and obstetrician working together to assess pregnant women during the antenatal period.

Currently, as part of the diabetes clinical nurse specialist role, we see women referred in with gestational diabetes (GDM), to help manage their food and activity levels alongside their blood glucose levels, to provide the best environment for the baby to grow.

Women who have had gestational diabetes are at increased risk of GDM in subsequent pregnancies and they are also at a higher risk for developing type 2 diabetes in later life.

Audit:

Extensive data is collected for yearly audit and includes referral numbers, medication required, weight gain with outcomes; baby weight, complications and co-morbidities, and HbA1c follow up at three months postnatal.

Diabetes Education Package:

An educational pamphlet has been developed for women outlining the importance of continued healthy lifestyle choices due to the increase risk of Type II diabetes in later life. This is to be taken out to primary care so that opportunistic education can be undertaken by practice nurses at baby checks for immunisations. Follow up 3/12 HbA1c should be encouraged at the 6 week check-up. This continues to be a work in progress in Nelson Tasman region.

"… I was given advice and assistance with my diabetes and felt very well looked after by the team of midwives at Nelson Hospital…"

Consumer Comment

Breastfeeding

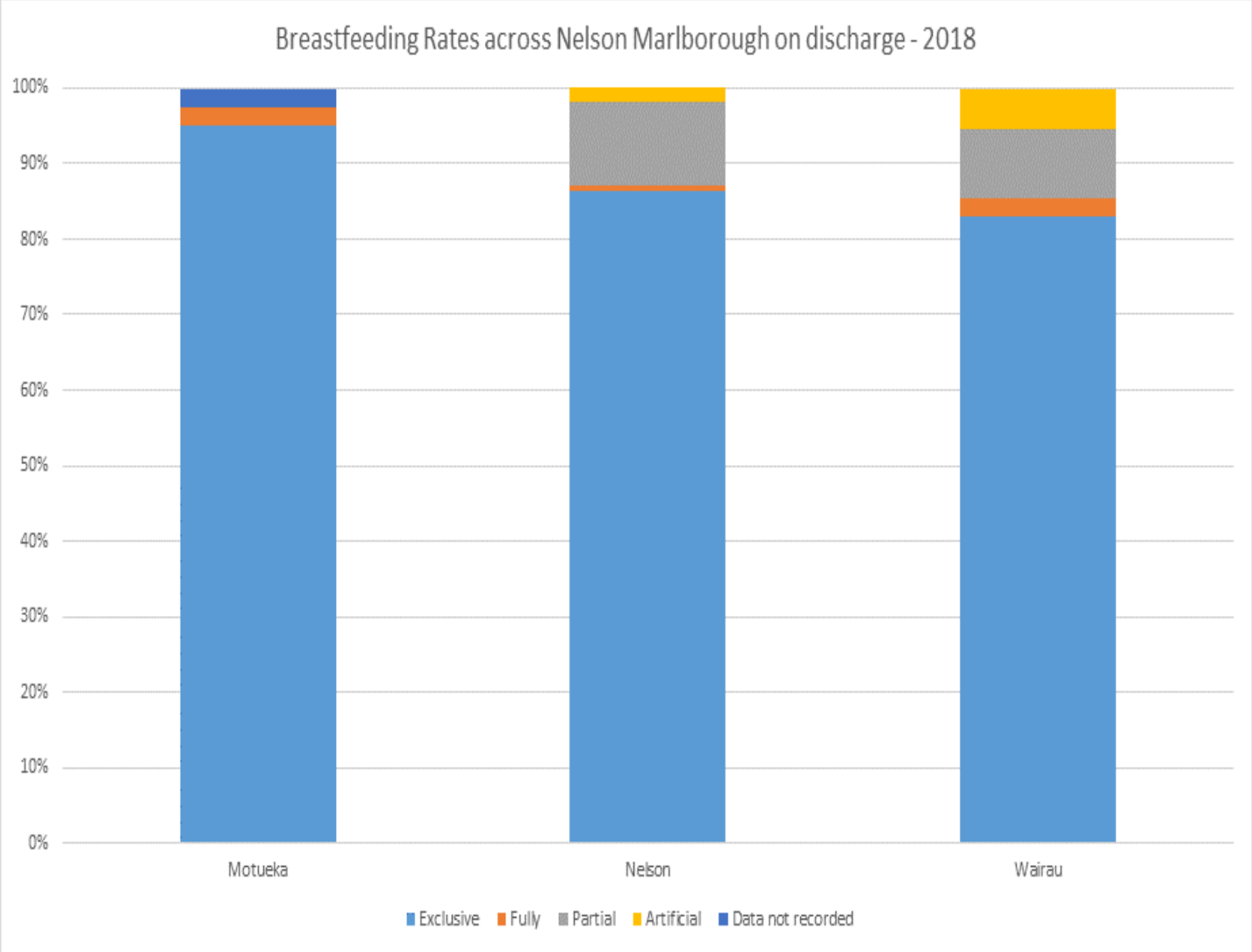
In 2018 Nelson Marlborough region participated in a two quality improvement projects undertaken by the South Island Health Alliance. The projects included:

1. "**South Island Breastfeeding Report Regional activities to protect, promote and support breastfeeding"** The link to the publication can be found here: https://www.sialliance.health.nz/UserFiles/SouthIslandAlliance/File/South%20Island%20Breastfeeding%20Report%20April%2018(1).pdf

2. "**Māori and Pasifika women's experiences of breastfeeding across the South Island Consumer stories: Quality Improvement Project"** The link to the publication can be found here:https://www.sialliance.health.nz/UserFiles/SouthIslandAlliance/File/South%20Island%20breastfeeding%20project%205%20Feb%202019(1).pdf

Recommendations have been considered locally and implemented where possible.

Breastfeeding rates at discharge from maternity facilities



Comment: It is noted that Motueka, Nelson and Wairau exclusive breastfeeding rate exceeds the national BFHI accreditation target of 75%.

Well Child Tamariki Ora Quality Improvement Framework Indicators for Breastfeeding Nelson Marlborough Region

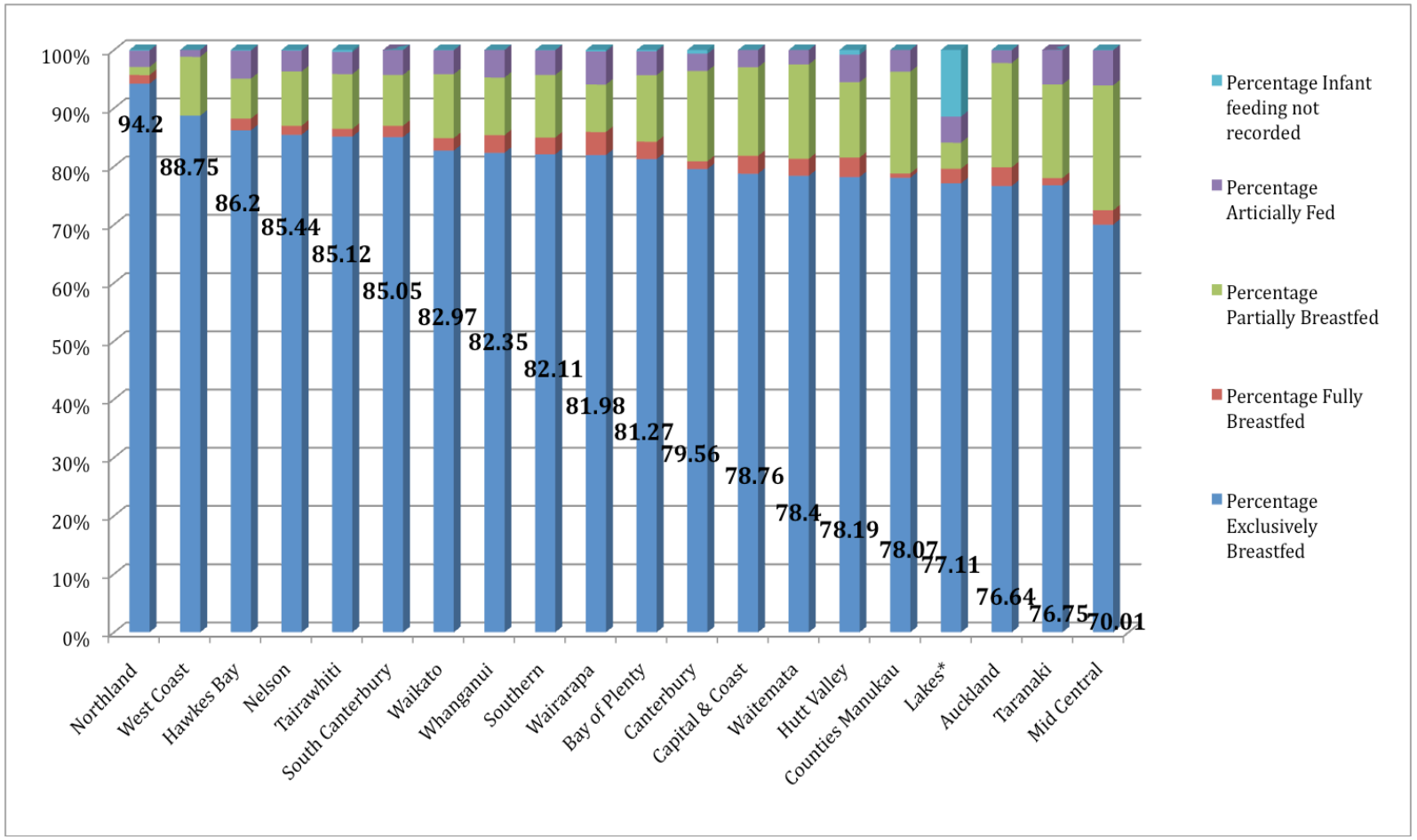
Age	Year	Total	Maori	Pacific	High Deprivation	National Target
At discharge from facility	2017	85.9%	85.2%	n/a	n/a	90%
	2018	85.44%	85.99%	83.33%	n/a	90%
	2019	Not yet complete	Not yet complete	Not yet complete	Not yet complete	90%
2 weeks	2017	79%	75%	72%	82%	90%
	2018	78%	76%	72%	71%	90%
	2019 (Jan-May)	78%	77%	80%	77%	90%
6 weeks	2017	71%	67%	50%	76%	60%
	2018	70%	64%	64%	58%	60%
	2019 (Jan-May)	68%	66%	60%	73%	60%
3 months	2017	61%	41%	33%	64%	60%
	2018	61%	51%	50%	67%	60%
	2019 (Jan-May)	61%	53%	60%	57%	60%

(Data source: WCTO indicators South Island Alliance 2019 and NZBA 2019)

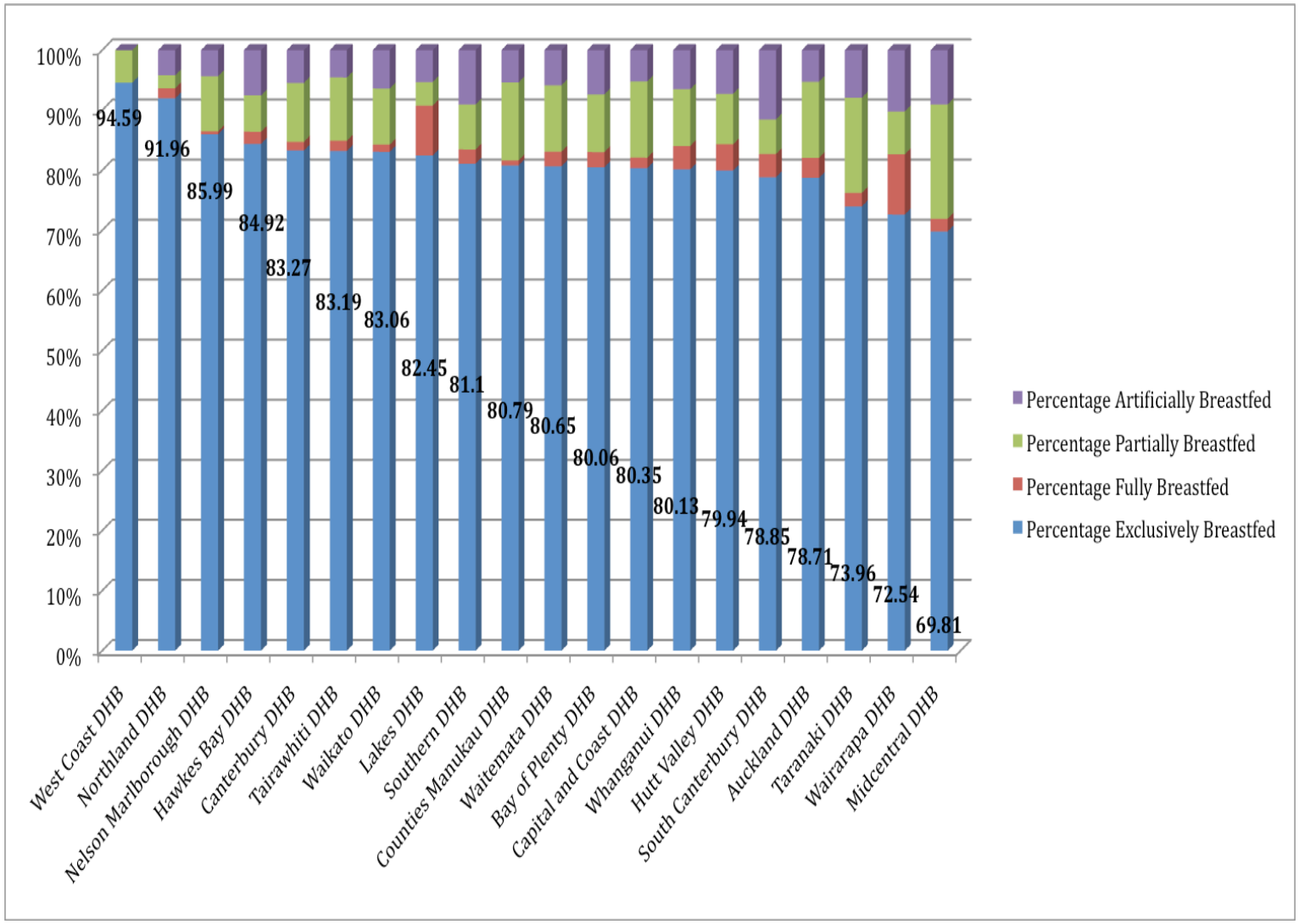
Although in 2018 exclusive breastfeeding rates at discharge from facility are 85.44%, which is higher than the national average of 79%, and improvements have been made in supporting women to breastfeed for longer, exclusive breastfeeding rates at 2 weeks of age do not meet the national target.

Baby Friendly Aotearoa – Infant feeding data at discharge by DHB 2018

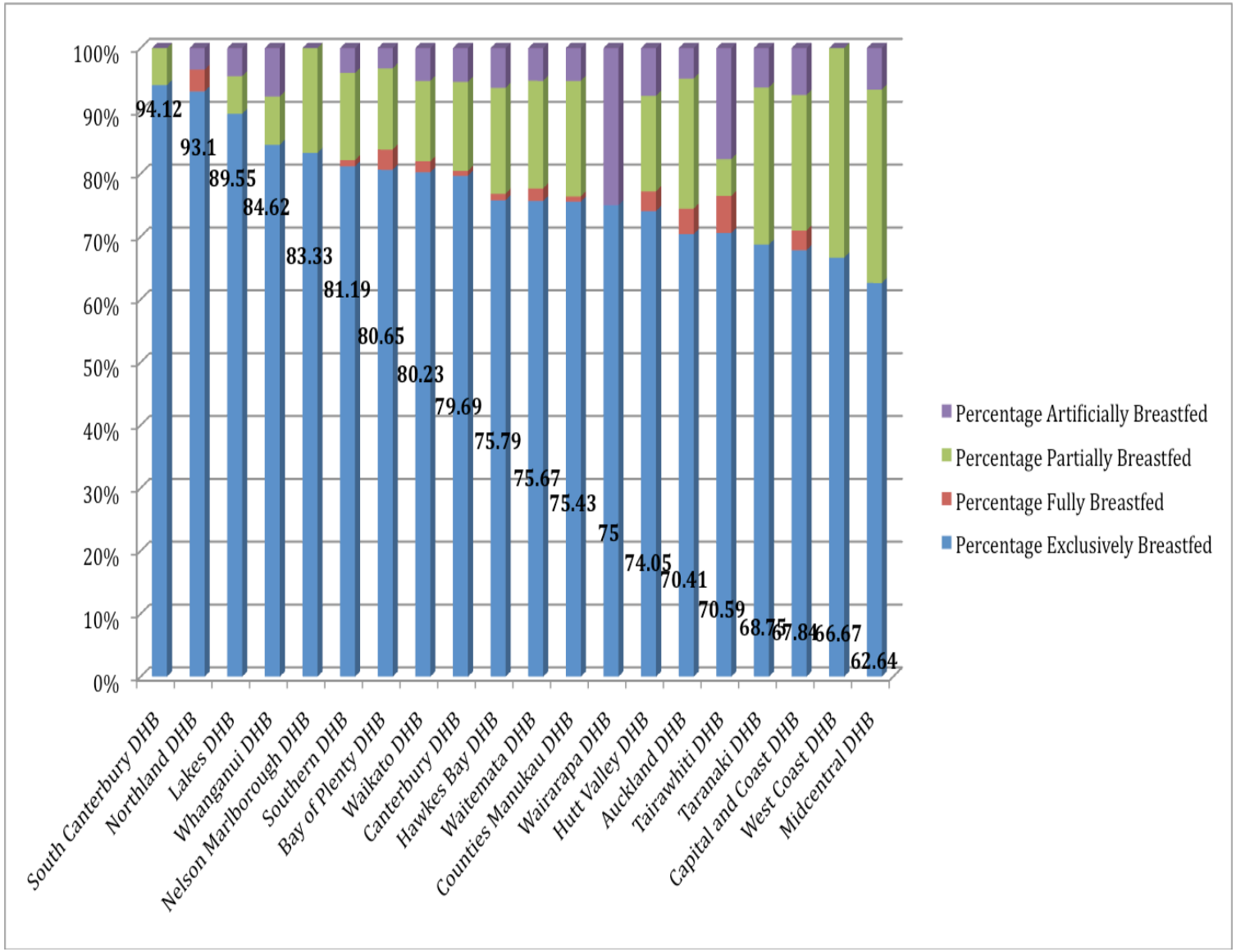
(Data source: NZBA Baby Friendly National Breastfeeding Data at discharge for 2018 https://www.babyfriendly.org.nz) Note: Wairau excluded on this graph.



Baby Friendly Aotearoa – Infant feeding data NZ Māori by DHB 2018



Baby Friendly Aotearoa – Infant feeding data Pasifika by DHB 2018



Baby Friendly Hospital Initiative (BFHI)

We are pleased to report that NMH successfully met the WHO/UNICEF standard required by the New Zealand Breastfeeding Authority (NZBA), and achieved Baby Friendly Hospital Initiative (BFHI) accreditation for the fourth time at Nelson and Motueka Maternity Units in 2019, with Wairau Hospital achieving accreditation in 2018.

All NMH maternity services demonstrated a commitment to implementing:

- The Ten Steps to Successful Breastfeeding and
- The WHO International Code of Marketing of Breastmilk Substitutes

The certification is for a period of three years and follows a focussed and dedicated audit process with women, practitioners, and educators fully participating.

The BFHI audit requires a focussed approach to complete, and it is a gratifying experience to succeed and achieve audit certification. Well done to the teams involved.

Motueka Maternity Services BFHI Certification Ceremony – August 2019

…To All the Amazing Midwives at Motueka Hospital☺
We would like to thank you significantly for all the help and support you have given us, especially in the first few days of child birth! We couldn't have done it without you! Keep up your incredible spirit & enjoy all the new babies you come into contact with. You lot are angels….

SECTION FIVE

Maternity Clinical Indicators

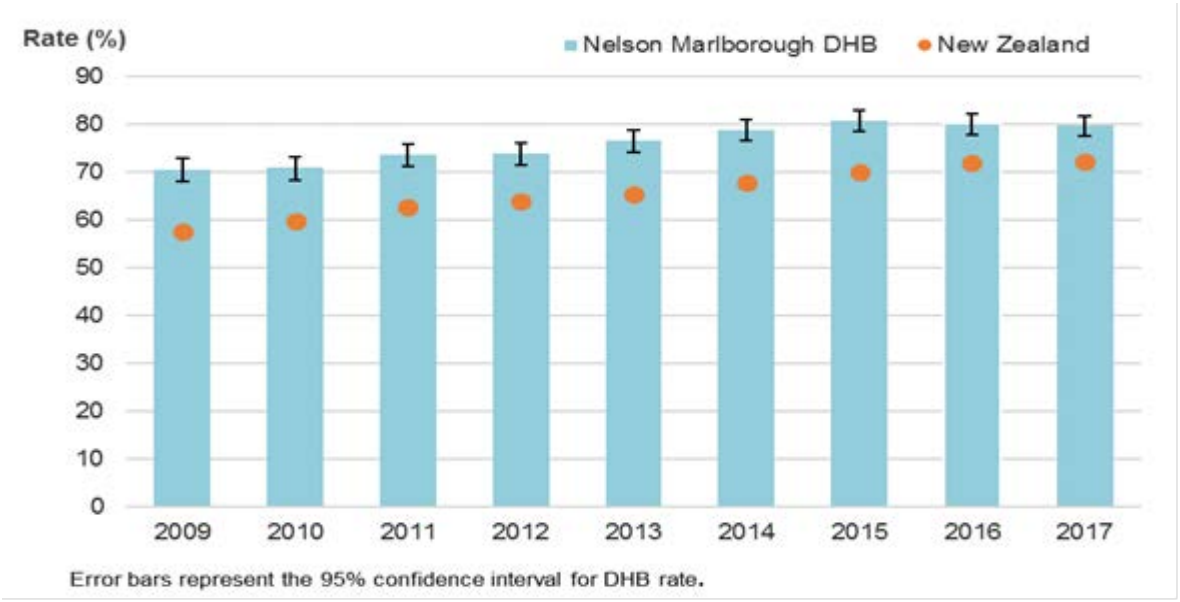
This section outlines NMH maternity data on the MOH 21 New Zealand Maternity Clinical Indicators 2017. While the MOH publishes New Zealand Maternity Clinical Indicator reports annually, the reports are at least one year behind in the data reported. **The data up until and including 2017 is only available.**

The data in this section of the Report is based on births in Nelson Marlborough. We have aligned our reporting with the MOH Clinical Indicators 2017 numbers, as outlined below:

1. Registration with an LMC in the first trimester of pregnancy
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 3rd or 4th degree tear or episiotomy)
7. Standard primiparae undergoing episiotomy and no 3rd or 4th degree perineal tear
8. Standard primiparae sustaining 3rd/4th degree perineal tear and no episiotomy
9. Standard primiparae undergoing episiotomy/sustaining 3rd or 4th degree perineal tear
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
15. Women admitted to ICU and requiring ventilation during the pregnancy or postnatal period
16. Maternal tobacco use during the postnatal period
17. Preterm birth
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+ week's gestation requiring respiratory support.

Indicator 1: Registration with a Lead Maternity Carer in the first trimester of pregnancy:

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

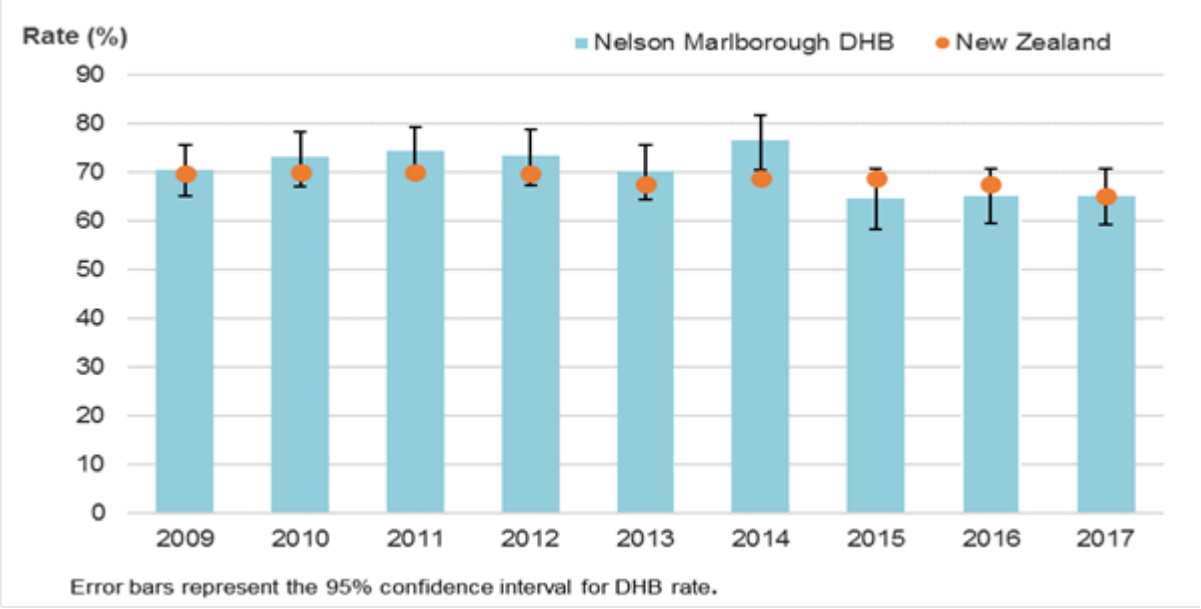


ber of women who register with an LMC

Figure 28. Registration with a Lead Maternity Carer in the first trimester of pregnancy, 2009 - 2017.

Comment: While there is a general increasing trend overall for registration with an LMC, and NM remains above the national average, there is an intention to increase registration to 85%. **Actions:** 1.Increase advertising of the need to register with an LMC 2. Increase the LMC workforce in Marlborough 3.Coordinate client linkage with a LMC.

Indicator 2: Standard Primiparae who have a spontaneous vaginal birth

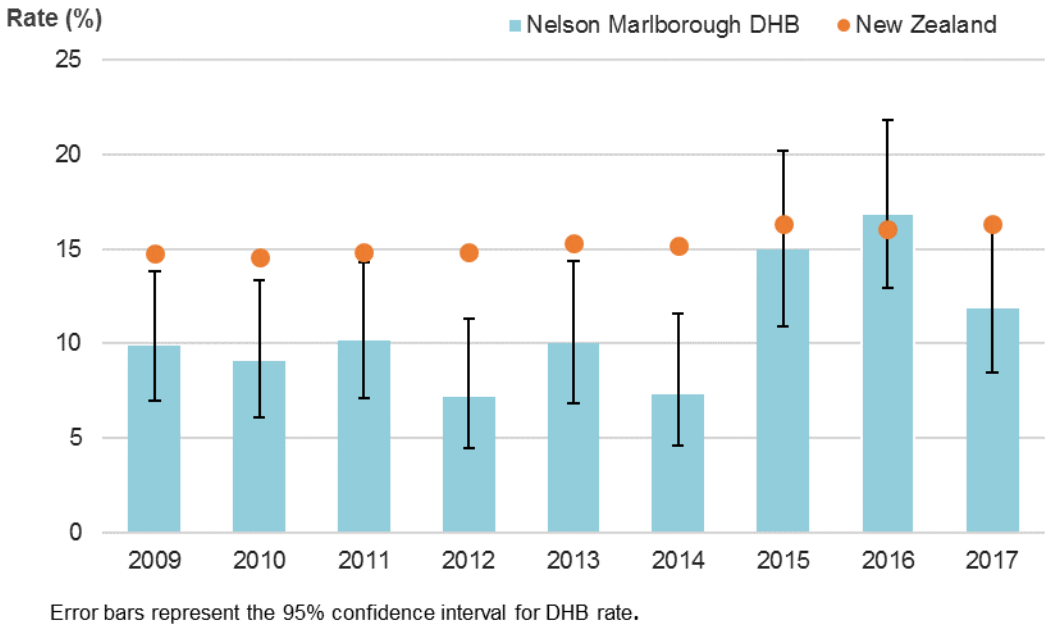


Numerator: Total number of standard primiparae who have a spontaneous vaginal birth at a maternity facility
Denominator: Total number of standard primiparae

Figure 29. Standard primiparare who have a spontaneous vaginal birth.

Comment: The number of Standard Primiparae having a spontaneous vaginal birth from 2015 to 2017 has remained relatively consistent, with 2017 data showing rates to be nearer to the national average. **Actions**: 1. Continue to implement normal birth midwifery education workshops 2. A programme to support normal birth was introduced at Motueka Primary Birth Unit in 2018.

Indicator 3: Standard primiparae who undergo an instrumental vaginal birth

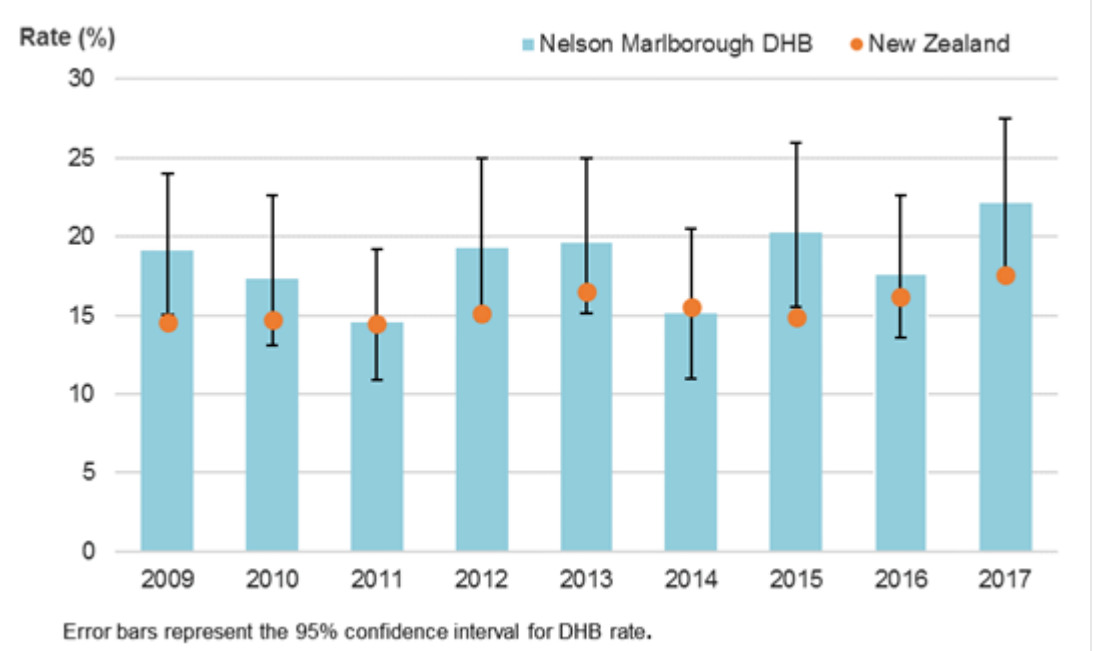


Numerator: Total number of standard primiparae who undergo an instrumental vaginal birth
Denominator: Total number of standard primiparae

Figure 30. Standard primiparae who undergo an instrumental vaginal birth.

Comment: This Indicator has had a decrease in the national average from 2016 data and again tracking below the national average for 2017

Indicator 4: Standard primiparae undergoing caesarean section

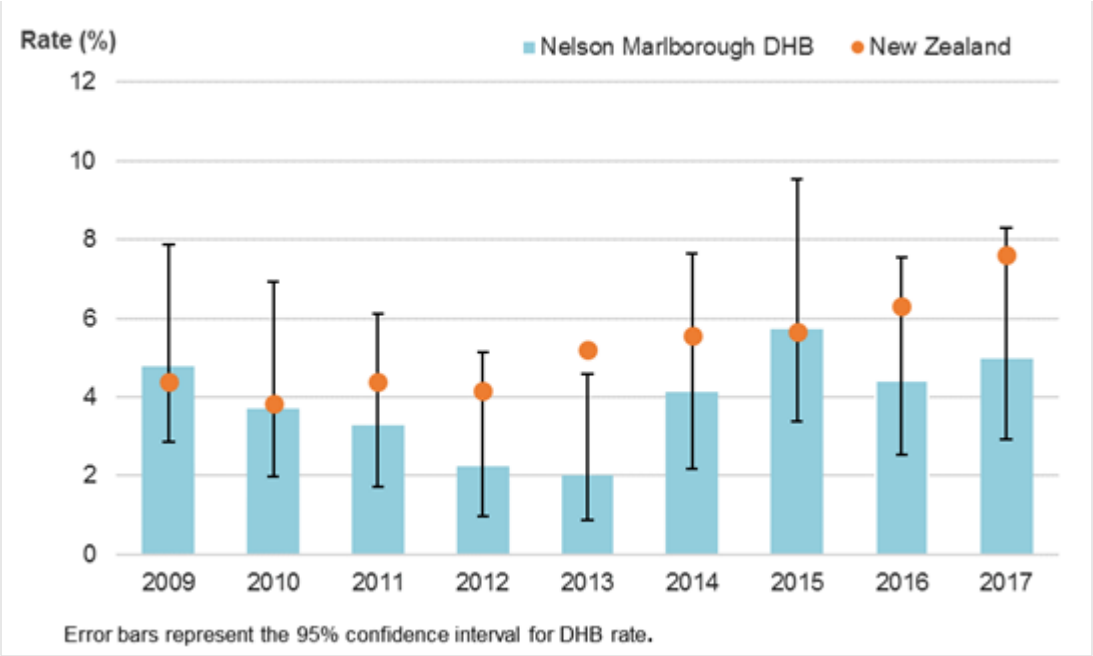


Numerator: Total number of standard primiparae who undergo an caesarean section
Denominator: Total number of standard primiparae

Figure 31. Standard primiparae undergoing caesarean section.

Comment: The caesarean section rate for standard primiparae at NMH has increased in 2017 from being near the national average in 2016 to above the national average. **Action:** There is a plan to audit reasons for caesarean section at NMH in 2020.

Indicator 5: Standard primiparae who undergo induction of labour

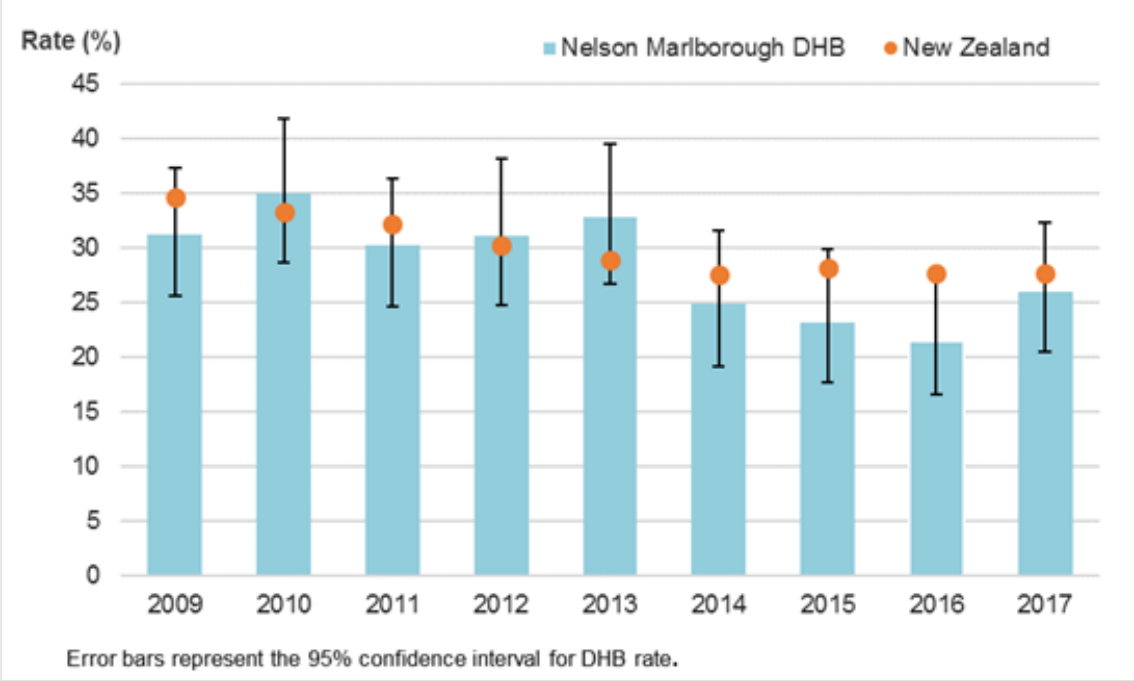


Numerator: Total number of standard primiparae who undergo induction of labour
Denominator: Total number of standard primiparae

Figure 32. Standard primiparae who undergo induction of labour.

Comment: NMH is generally below the national average with this measure, although there has been some variation noted since the 2009 rates.

Indicator 6: Standard primiparae with an intact lower genital tract (no 1st- 4th degree tear or episiotomy)

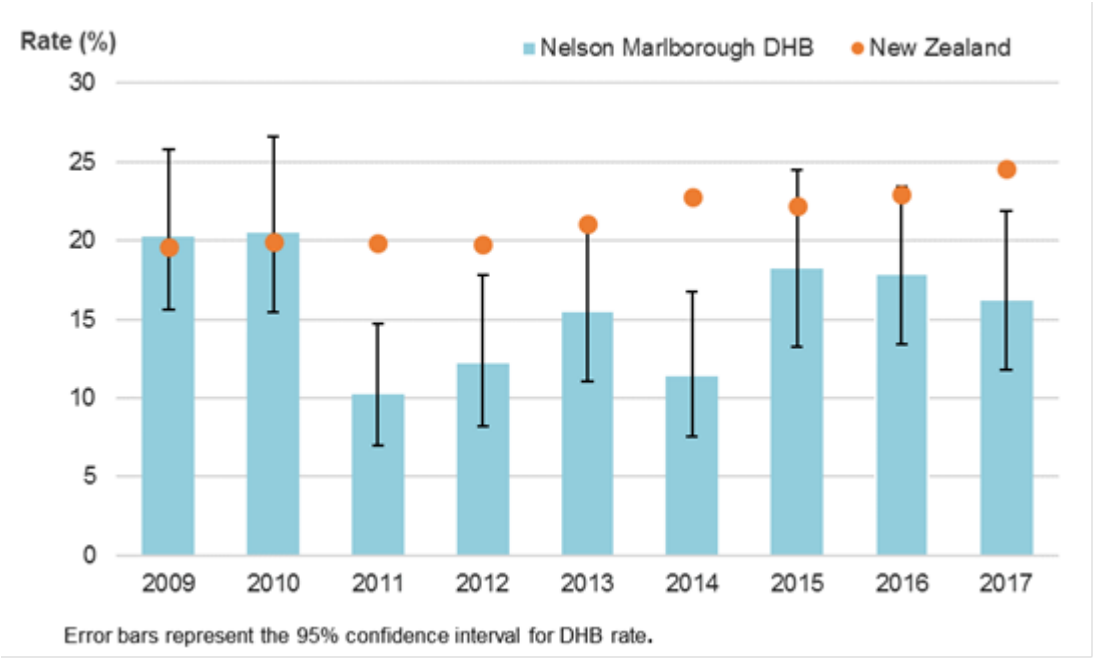


Numerator: Total number of standard primiparae who have an intact lower genital tract, 2009-2017
Denominator: Total number of standard primiparae

Figure 33. Standard primiparae with an intact lower genital tract (no 1st-4th degree tear or episiotomy)

Comment: In 2017 there is a slight increase in numbers of women who gave birth with an intact lower genital tract than in the previous three years, and remaining below the national average.

Indicator 7: Standard Primipara undergoing episiotomy and no 3rd or 4th degree perineal tear

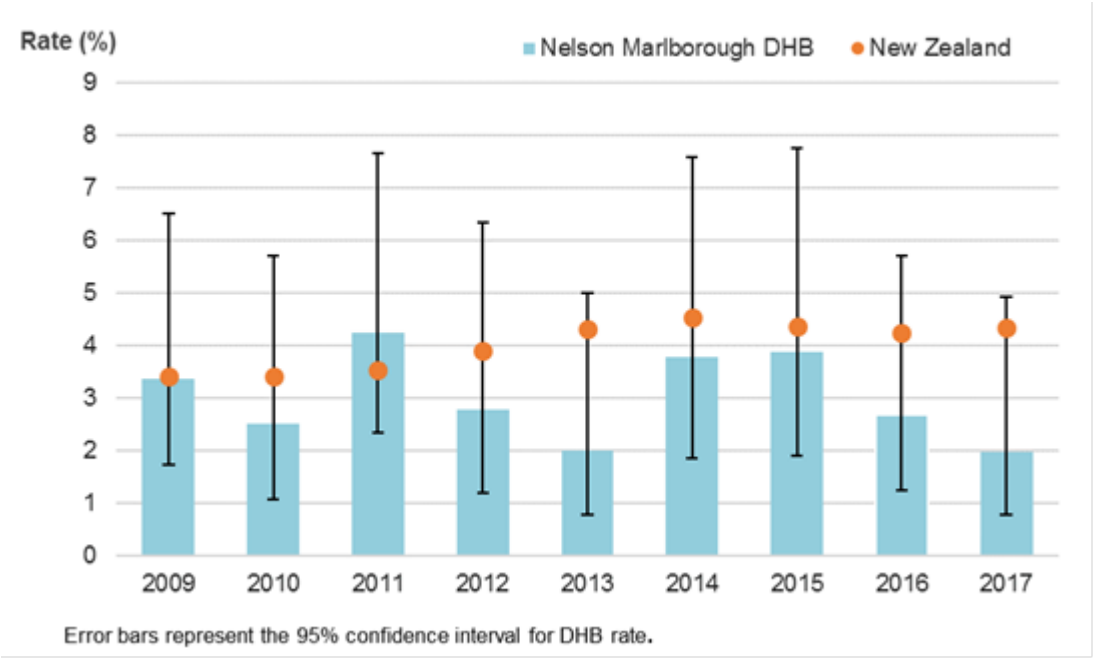


Numerator: Total number of standard primiparae undergoing episiotomy and no 3rd or 4th degree perineal tear with vaginal birth
Denominator: Total number of primiparae who give birth vaginally

Figure 34. Standard primiparae undergoing episiotomy and no 3rd or 4th degree perineal tear.

Comment: The rate of standard primiparae undergoing episiotomy and no 3rd or 4th degree perineal tear is below the national average, with the rate decreasing from 2015 and 2016 rates.

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

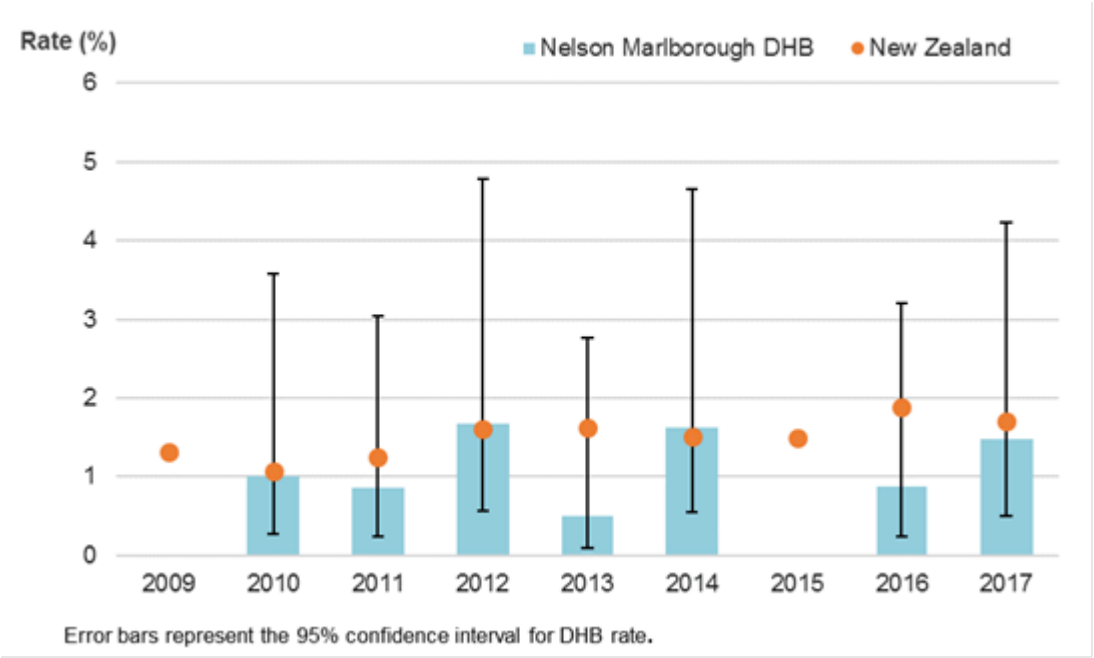


Numerator: Total number of standard primiparae undergoing episiotomy and no 3rd or 4th degree perineal tear and no episiotomy with vaginal birth
Denominator: Total number of primiparae who give birth vaginally

Figure 35. Standard primiparae sustaining a 3rd/4th degree perineal tear and no episiotomy.

Comment: There is a range of 2% – 4% variation in sustaining a 3rd/4th degree perineal tear between 2009 and 2016, with a trend downward noted.

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

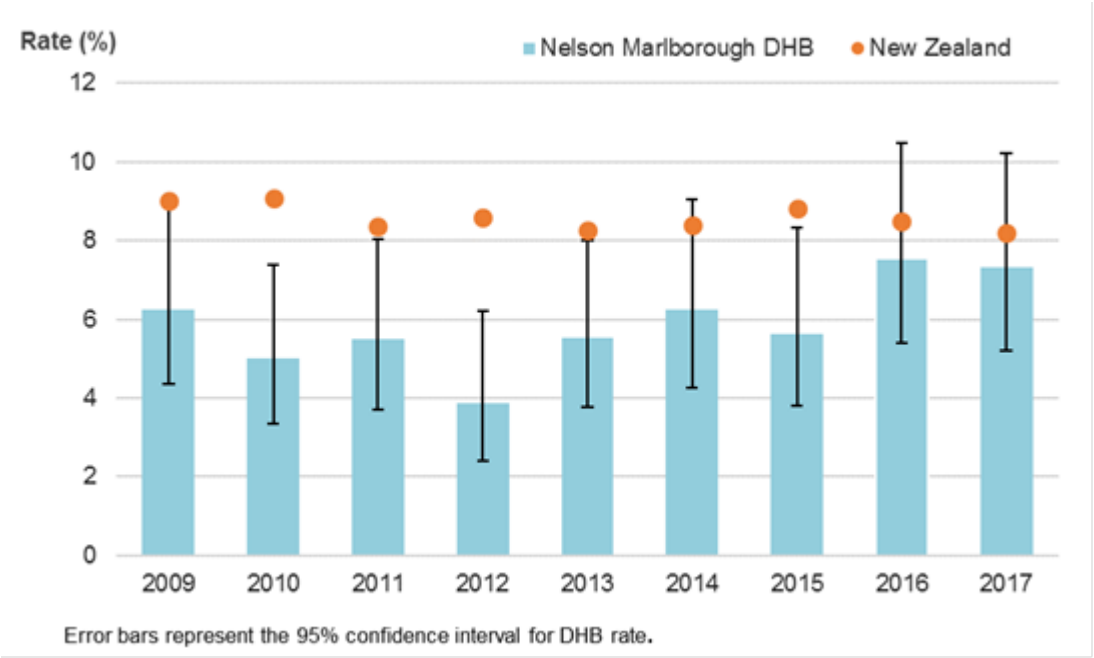


Numerator: Total number of standard primiparae undergoing episiotomy and sustaining 3rd or 4th degree perineal tear with vaginal birth
Denominator: Total number of primiparae who give birth vaginally

Figure 36. Standard primiparae undergoing episiotomy and sustaining a 3rd/4th degree perineal tear.

Comment: It is noted that, while there is a slight trending upward of this Indicator, the data show the rate continues to remain below the national average.

Indicator 10: Standard primiparae undergoing general anaesthesia for all Caesarean Sections

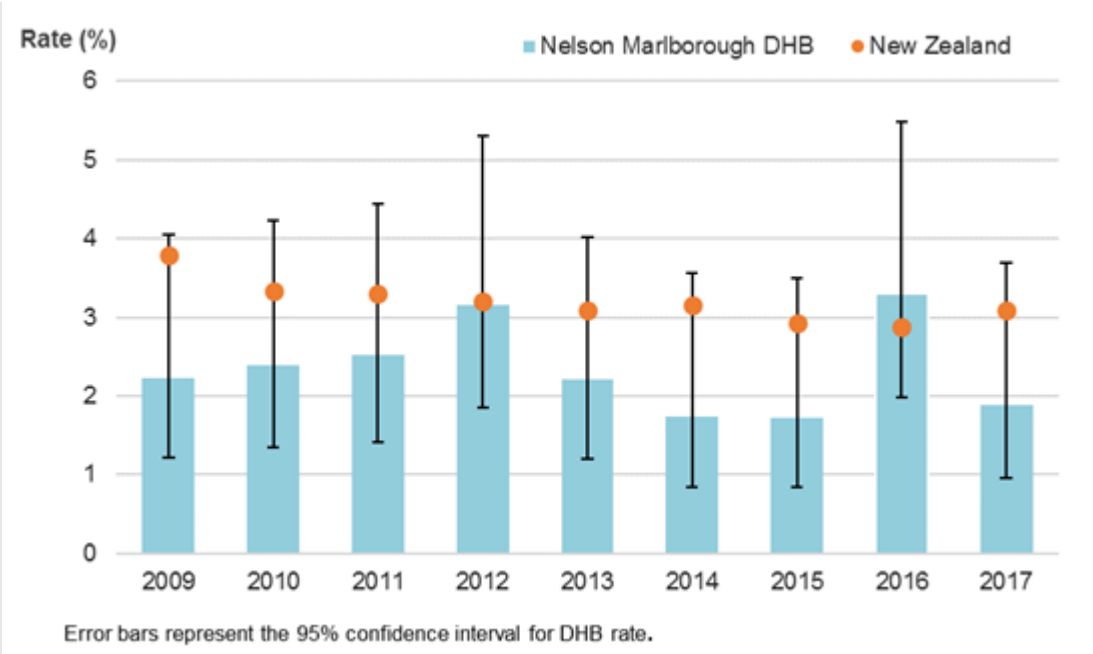


Numerator: Total number of women having a general anaesthetic for a caesarean section
Denominator: Total number of women having a caesarean section

Figure 37. Standard primiparae undergoing general anaesthesia for all caesarean sections.

Comment: It is noted that the rates of general anaesthesia are consistently below the national average with a slight decrease in 2017. **Action:** Rates of general anaesthesia will be included in the caesarean section audit being undertaken in 2020.

Indicator 11: Women requiring blood transfusion with caesarean section



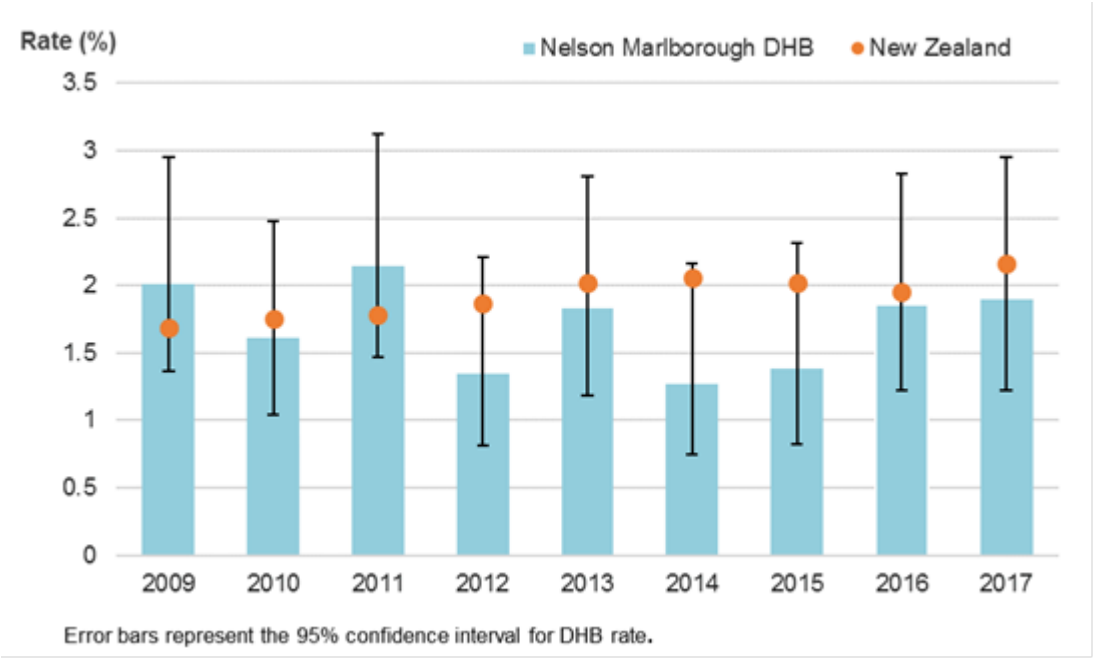
Numerator: Total number of women requiring blood transfusion with caesarean section.

Denominator: Total number of women having a caesarian section

Figure 38. Women requiring blood transfusion with caesarean section.

Comment: It is noted that the rate of women requiring blood transfusion with caesarean in Nelson Marlborough has been generally lower than the national average since 2009. In 2016 the rate was above the national average, the rationale for this is not established, with a decrease in 2017. The percentage of women requiring transfusion with caesarean section overall is low which has created a wide confidence interval.

Indicator 12: Women requiring a blood transfusion with vaginal birth

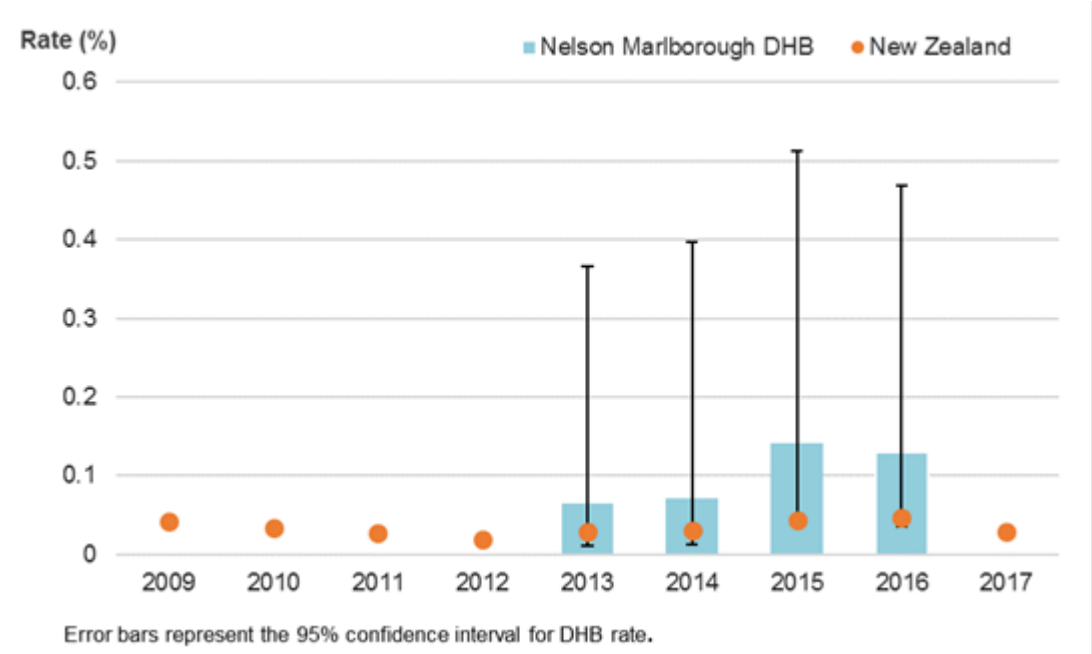


Numerator: Total number of women requiring blood transfusion with vaginal birth Denominator: Total number of women who give birth vaginally

Figure 39. Women requiring a blood transfusion with vaginal birth.

Comment: It is noted that the rate of women requiring blood transfusion with vaginal birth at NMH has remained below the national rate since 2012.

Indicator 13: Diagnosis of eclampsia at birth admission

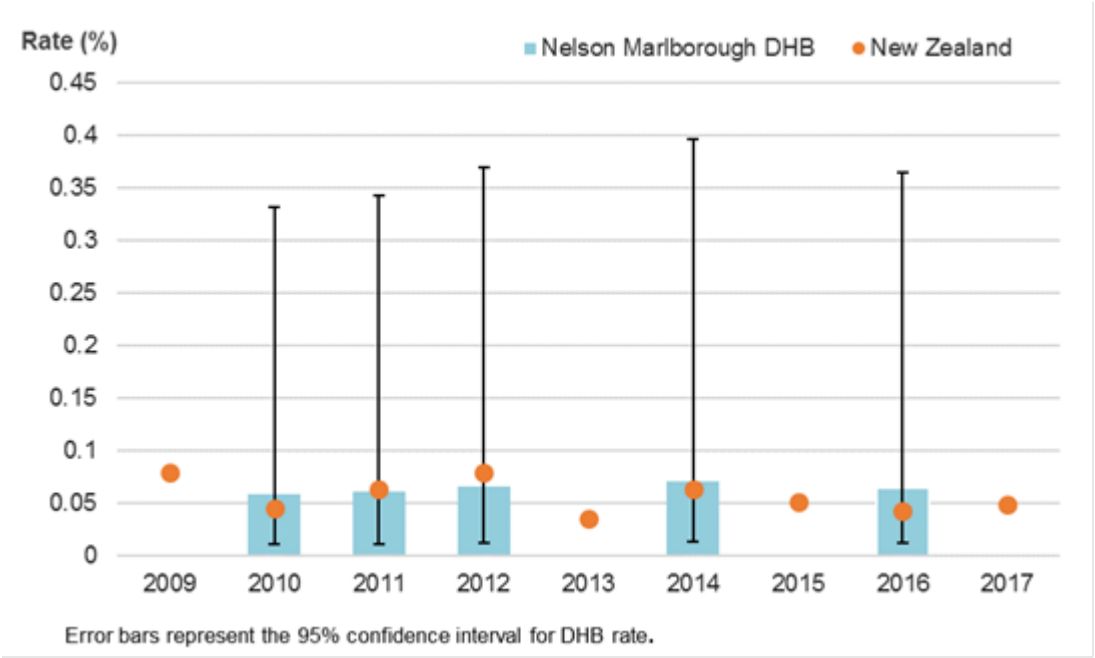


Numerator: Total number of women diagnosed with eclampsia at birth admission
Denominator: Total number of women diagnosed with eclampsia

Figure 40. Diagnosis of eclampsia at birth admission.

Comment: This data shows that this is an uncommon event with nil events in 2017.

Indicator 14: Women having a peripartum hysterectomy

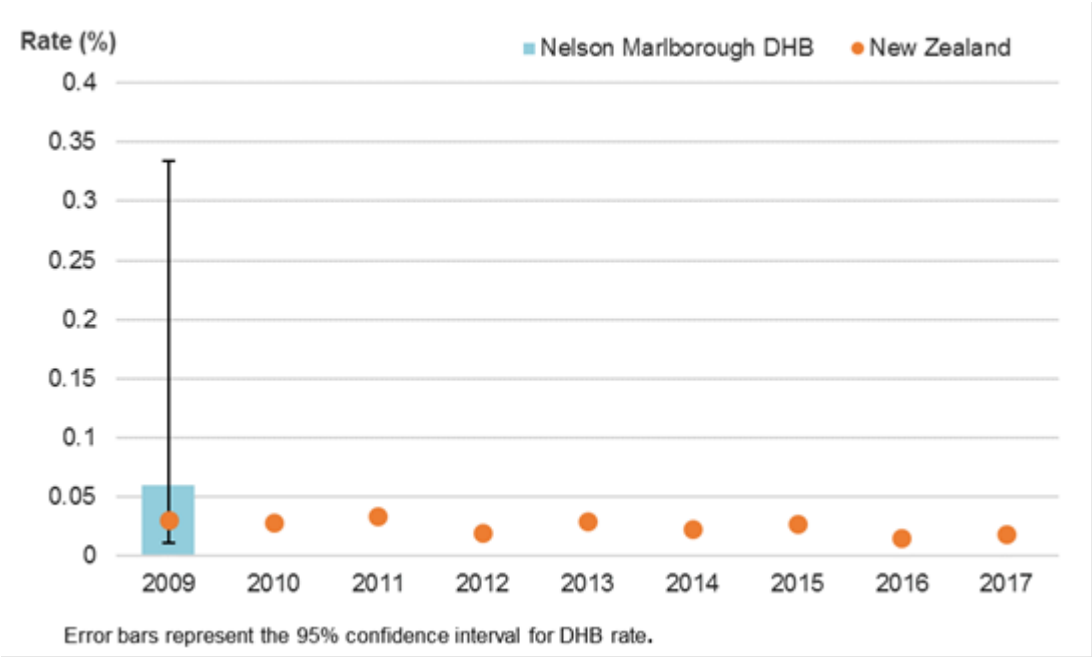


Numerator: Total number of women having an abdominal hysterectomy within 6 weeks after birth
Denominator: Total number of women having a peripartum hysterectomy

Figure 41. Women having a peripartum hysterectomy.

Comment: Data shows that nationally peripartum hysterectomy is a rare event, with NMH data showing zero events for 2017.

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

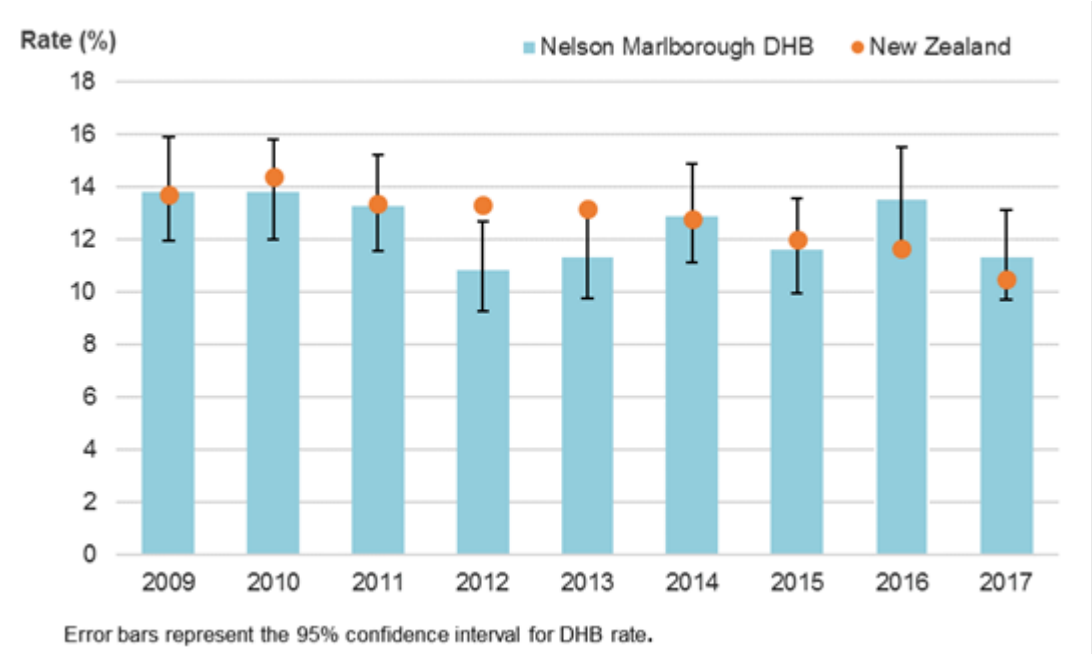


Numerator: Total number of women admitted to ICU and requiring 24 hours of mechanical ventilation during admission any time during pregnancy or the postnatal period.
Denominator: Total number of women admitted to ICU during pregnancy and postpartum

Figure 42. Women admitted to ICU and requiring ventilation during the pregnancy or postnatal period.

Comment: It is noted that there have been no women admitted to ICU since 2009 under this Clinical Indicator measure. Such an event would undergo case review.

Indicator 16 Maternal tobacco use during postnatal period

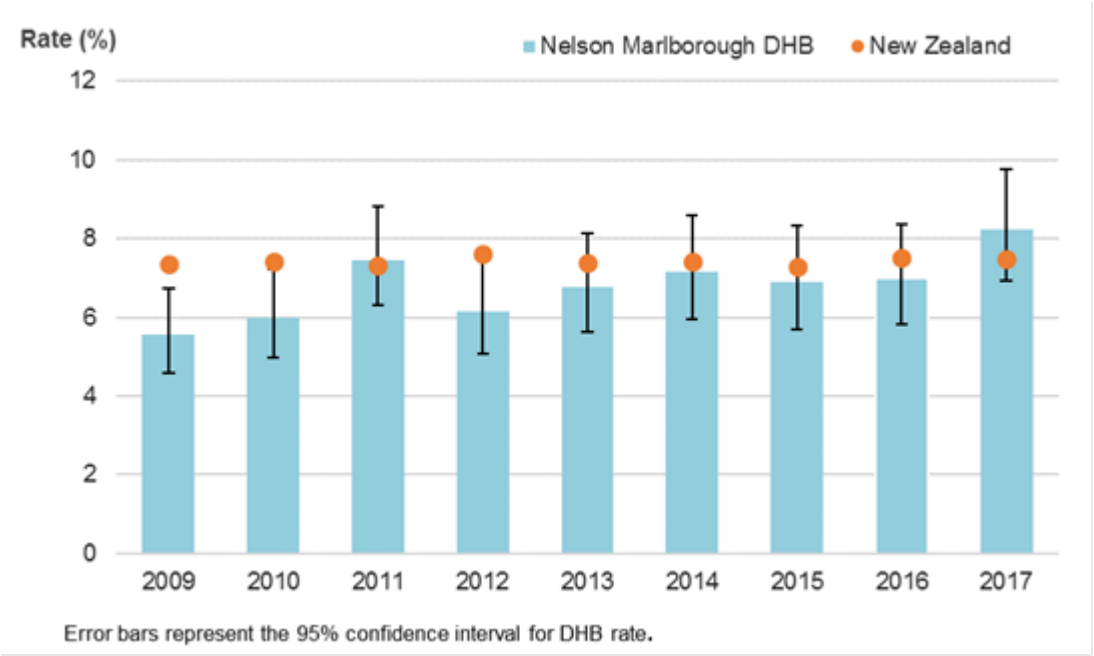


Numerator: Total number of women identified as smokers at 2 weeks after birth.
Denominator: Total number of women with smoking status identified at 2 weeks after birth reported.

Figure 43. Maternal tobacco use during postnatal period.

Comment: It is noted that maternal tobacco use Nelson Marlborough has been above the national average for the past 2 years. **Action:** A smokefree incentivisation programme was launched in 2017, and NMH is awaiting data demonstrating the impact of this programme..

Indicator 17: Preterm Birth

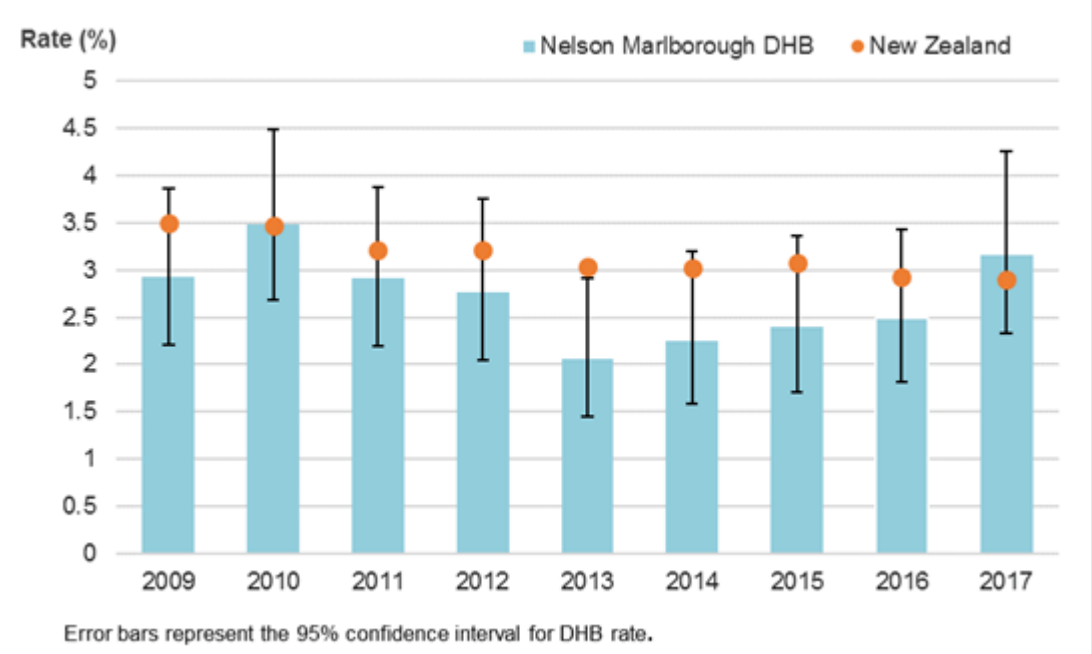


Numerator: Total number of babies born under 37 week's gestation.
Denominator: Total number of babies born (live births).

Figure 44. Preterm birth.

Comment: It is noted that the preterm birth rate has increased and is above the national average for 2017. **Action:** An audit of these data has commenced.

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

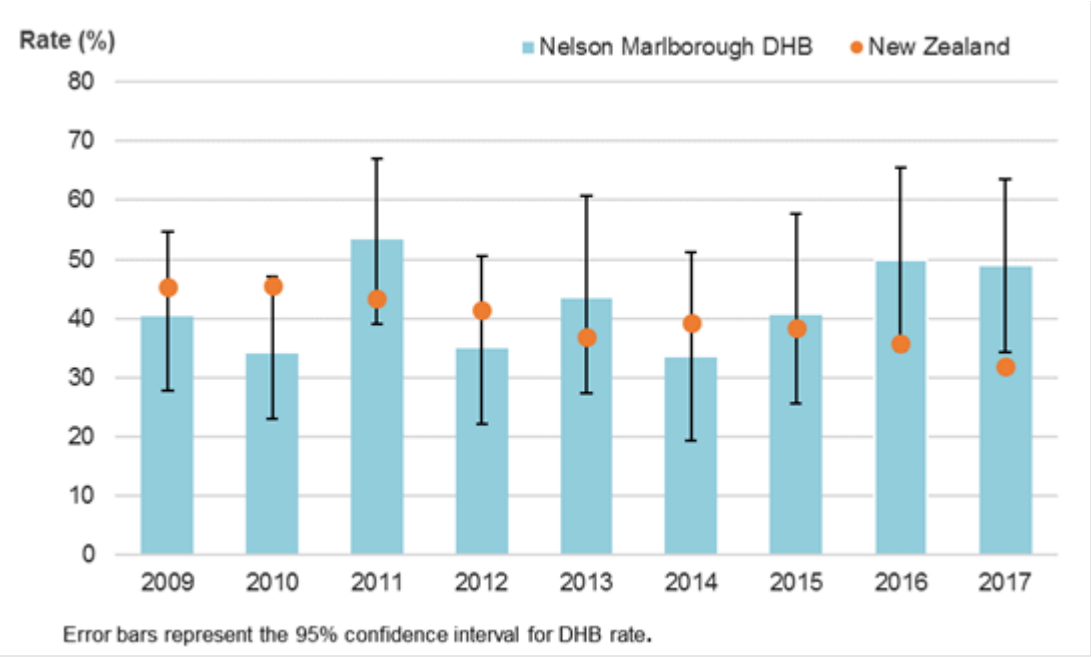


Numerator: Total number of small babies at term
Denominator: Total number of hospital births

Figure 45. Small babies at term (37-42 weeks' gestation)

Comment: A gradual increase in the rate since 2013 is noted, with this data rising above the national average in 2017. **Action:** There is currently an audit to investigate the underpinning rationale for this result, and to discover and address reasons for increasing admissions to SCBU.

Indicator 19: Small babies at term born at 40-42 week's gestation



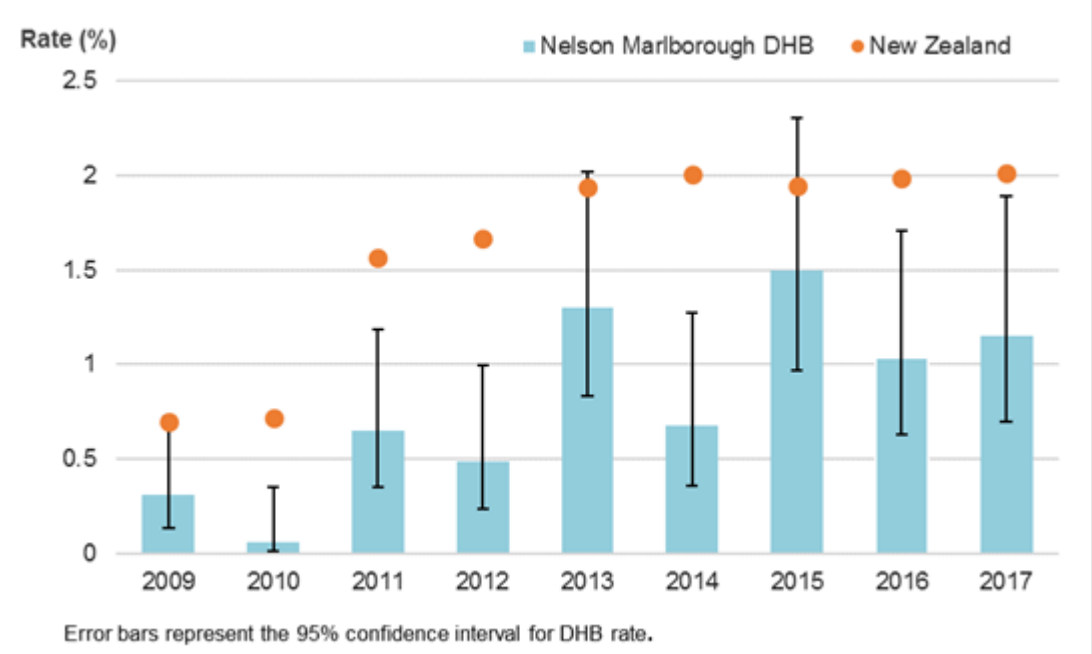
Numerator: Total number of babies born at 40-42 week's gestation with birth weight under the 10th centile for their gestation

Denominator: Total number of babies born at 37-42 week's gestation with birth weight under the 10th centile for their gestation

Figure 46. Small babies at term born at 40-42 weeks' gestation

Comment: NMH data shows as consistently above the national average for the last three years. **Action:** These data will be included in the audit being undertaken for Indicators 17 and 18. Once findings of the audit are established, steps will be taken to address the findings.

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



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

Figure 47. Babies born at 37+ weeks' gestation requiring respiratory support.

Comment: Overall, it is noted that from 2009 there is a variation in the rates. However the rates overall continue to remain below the national average.

SECTION SIX

Quality Initiatives: 2018-2020

Continuing to evaluate and improve our maternity services is important to NMH, and continuing quality improvement activities underpins our vision, our values, and our goals for women and children's health, with quality improvements being supported in ways that become embedded as "everyday business" for maternity services and teams.

We are involved in the quality activities of our wider services, and draw improvement projects from the following:

- Maternity Clinical Indicator outcomes
- Audit sources
- Clinical case reviews
- Incident investigations
- New evidence for clinical practice changes
- Consumer feedback

In our quality activities we always try to ensure that the women's experience is optimal by reducing variation and being evidence based. During 2018/2019 our teams worked on a number of quality projects, of which we have chosen a few for this report.

Maternal Mental Health Referral Pathway (MMHRP)

The national Perinatal and Maternal Mortality Committee (PMMRC) in the national report (2015) recommended that DHBs develop and implement a maternal mental health pathway.

Our MQSP formed a working group comprising a wide range of health professionals, both within the hospital setting, and community based.

Development of the referral pathway was completed in 2017. However, when planning to load the pathway onto the NMH Health Pathways web site it became evident that the referral pathway, while a valuable guideline, was not an "easy use" referral document for health practitioners. It was agreed that the pathway would benefit from a revision and developed as a simpler version.

Due to a comprehensive review of NMH Mental Health Services during 2018-2019, some delay in completing revision of the pathway occurred, with a need to delay development of the pathway until renewed mental health service configurations and mental health service contact telephone numbers became available.

We are pleased to report that the revised version of the pathway is now complete, and awaiting loading onto the NMH Health Pathways site for practitioner access.

Development and Introduction of MEWS Charts

NMH joined a national pilot **M**aternity **E**arly **W**arning **S**ystem (**MEWS**) chart development project.

The maternity early warning system (MEWS) involves using a national vital signs chart and a system which includes a localized escalation pathway, effective clinical governance and leadership, education and ongoing measurement for improvement (audit).

The aim of the MEWS is to reduce harm by recognizing and responding in a timely and consistent manner deteriorating conditions of pregnant women. Overall the MEWS should reduce maternity admissions to our high dependency unit and intensive care unit.

In 2017 NMH notified the Health Quality and Safety Commission (HQSC) about developing a local MEWS while it waited for a national MEWS to be developed. Our local MEWS was implemented across the whole health service. We indicated that we would be supportive of developing and testing a national system across both maternity, adult inpatient areas, and within our primary maternity units. We were excited to be approached by HQSC to be a pilot site and between May and October 2018, the MMWG supported the implementation of the MEWS in three test sites which included NMH.

Overall the implementation of the maternity early warning system has gone well - replacing our previous early warning score system. Following the testing period, the final national MEWS chart has been adopted into practice. Ongoing audits will be undertaken annually to ensure continued improvements are made. The two primary maternity units are using a primary-modified MEWS chart.

For the full report please click on the link below:
https://www.hqsc.govt.nz/assets/MEWS/PR/MEWS-early-implementation-evaluation-FINAL.pdf

Clinical Indicators 18-20: Admissions to Neonatal Care Audit

With the publication of the 2017 Maternity Clinical Indicators Report, it was noted that data indicated a trending up of admissions to Neonatal care, with an increase in new born admissions at Wairau Hospital.

It is an exciting project, and is in progress at the time of reporting.

A project team has been established, an audit template developed, and audit of reasons for admission of newborns to Neonatal care has commenced in accordance with the above Clinical Indicators. It is planned to have the audit completed in December 2019, with any recommendations made available as part of the audit outcomes.

The audit will include all admissions to neonatal care, at both Wairau and Nelson Hospitals, with a plan to compare reasons for admissions, any similarities and differences, and to develop a work plan to reduce the number of unexpected admissions to neonatal care.

ACC HIE Audit

In 2018 NMH participated in an ACC-sponsored Neonatal Encephalopathy (NE) audit.

A review team was established, 12 cases from 2017 were selected for review, themes from the case reviews were identified, recommendations advised, and national and regional actions were to be implemented.

There was also a plan to share findings of the audit via a report to families and clinicians, and to share findings nationally to increase understanding of the occurrence, with recommended management, of NE at a national level.

The audit was completed, and we are working with ACC to progress the final report and recommendations for implementation.

Perinatal and Maternal Review Committee (PMMRC) Recommendations

PMMRC is an independent committee that reviews the deaths of babies and mothers in New Zealand. As well, PMMRC may review cases where significant maternal or new born morbidity has occurred.

Each year the National PMMRC releases a report which may include a range of recommendations. And, in accordance with Standard One of the New Zealand Maternity Standards, the MQSP requires DHBs to establish systems and frameworks to support case review and clinical audit.

One of the tools used for this purpose is the Perinatal and Maternal Mortality Review Committee (PMMRC).

At NMH, PMMRC meetings are held monthly, at Wairau Hospital and Nelson Hospital, and are usually well attended.

Discussion of the cases is a protected activity, with discussion remaining confidential, while recommendations arising from the reviews are published.

This year Nelson has introduced an educational component relating to any condition which may have impacted on the wellbeing and pregnancy/birth outcome of a mother or new born. The education session occurs at completion of the PMMRC review meeting, and this is proving a popular development, and adding learning value to discussion.

The agenda of the meeting is formatted to include the cases for review, and provision for recommendations resulting from the case reviews.

Community midwives are encouraged to attend the meetings, and are supported to participate in the presentation of cases. As well, other practitioners who have been involved in the care of client cases for review are invited to the meeting. This may include core

midwives, anaesthetists, physicians, emergency department staff, nurses, Maori health services, social workers, GPs, and, rarely, the police.

A PMMRC case review template provides an efficient method for presenting information at the meetings, with power-point adding value and clarity.

The PMMRC meeting provides learning outcomes and recommendations for practice, and quality improvement planning actions for implementation into clinical care and systems. For example, amendment of a clinical guideline, or additional clinical education, may result from a PMMRC review meeting recommendation.

At each case review meeting, the following framework items are considered:

1. Are there any contributory factors?
2. If so, what are the contributory factors?
3. Was the outcome avoidable/preventable?
4. What are the learnings?
5. What are the recommendations?
6. How can quality improvements be made/implemented?

Implementation of PMMRC recommendations is usually undertaken by the Charge Midwife Managers, with support from other clinical practitioners, for example, Obstetric and/or Paediatric HOD, Operational Manager, SCBU Charge Nurse Managers, and the MQSP Coordinator.

Improving safety in clinical care

There were two SAC events that met the thresholds for SAC 1 and 2 in 2018/2019.

Event One

Action	Completed by	Who is responsible
Quality audit on ultrasound reports where discrepancies were found between scan findings and birth outcomes	March 2018	Associate Director of Midwifery (ADOM)
Guideline on reduced fetal movements management	April 2019	ADOM
Ensure all staff and LMC's have access to fetal heart rate monitoring education packages and current guidelines on fetal movement assessment and fetal monitoring	Completed August 2019 with DHB hosting RANZCOG FSEP education workshop in addition to online education package and guidelines	Service Manager Women, Child and Youth, ADOM and Charge midwife Managers

Event Two

Action	Completed by	Who is responsible
Consider delivery by 38 weeks if there are more than 1 abnormal features in management of IUGR (NZ MFM Guideline)	September 2019	Obstetrics
Advise women to present early in labour if a concern with fetal wellbeing	Ongoing	All Clinicians and include in birth plan
Consider tocolysis (Terbutaline 250mcg subcutaneous) as a resuscitation measure while	Guideline development underway	Obstetrics

preparing for urgent delivery		
The maternity unit should consider instituting a protocol which will allow the clinicians to call for urgent delivery if bradycardia for > 5 minutes. The RCOG guideline suggests “Move to Theatre” by 6 minutes, that is, make a decision by 6 minutes.	Guideline development underway	HOD Obstetrics & Associate Director of Midwifery/ADOM
Obstetric consultant should be involved in the management of prolonged bradycardia/Category1 Caesarean section	In process	Associate Director of Midwifery/ADOM
Improve documentation/keep timeline of events in an emergency	In-service education to adopt	Associate Director of Midwifery/ADOM/ Midwifery Educators
Paediatric consultant staff to ensure optimal support from clinical team to document the medical notes when critically unwell infants being cared for.	In process	Lead Paediatrician/ Associate Director of Midwifery/ADOM
Recommend that weekend paediatric call be split from weekday paediatric call to help minimize fatigue.	In process	Service Manager, Women Child & Youth/Lead paediatrician
Wellington Hospital neonatal unit is asked to ensure that all discharge documentation is forwarded to the referring neonatal unit.	In process	Lead paediatrician/ Associate Director of Midwifery/ADOM

Comment: These recommendations were received in September 2019 and are being progressed.

SECTION SEVEN

Forward Planning Report 2018-2020

Planned Quality Improvement Activities 2020:

1. **Admissions to Neonatal Care audit**

   Complete Admissions to Neonatal Care audit December 2019.

2. **NEWS - chart development**

   As a recommendation from a PMMRC case review, NMH is a member of the national NEWS development and will be a pilot site in 2020. NEWS: **N**eonatal **E**arly **W**arning **S**core (**NEWS**). This work is progressing. **PLAN:** 1. On-going consultation regarding development of a MEWS chart. 2. Introduce a trial period of chart use. 3. Implement the chart for use in clinical areas. 4. Proposed commencement timeline of later in 2019. 5. Completion timeline with implementation in 2020.

3. **Audit - caesarean section rates at Nelson and Wairau Hospitals**

   It is noted in the Maternity Clinical Indicators 2017 Report that at NMH caesarean section rates have been trending upwards. We also note that there is a continuing trending upwards of rates in 2018 from our own data collections. As a consequence of these trends, we are keen to undertake an audit of factors contributing to caesarean section rates, and to undertake an analysis of these factors, with a plan to developing clinical initiatives which result in a reduction in caesarean section rates. Audit is proposed for 2020.

4. **Ensuring equity in health care provision**

   As a community, we are committed to developing health care that is available to all women, babies, and whanau accessing maternity and new born health services. Building on Pepi-First Quit Smoking Incentivization, Hapu Wananga, Safe sleep every sleep, increasing access to Lead Maternity Carers, Health care home and coordinated care initiatives, reducing inequalities in acces to breastfeeding support and immunisation and maternal and infant mental health and wellbeing through our First 1,000 days initiative are all quality improvement initiatives specifically targeting improving health outcomes for all.

Appendices

Appendix One: NMH Maternity Quality and Safety Programme (MQSP) Work Plan 2018 – 2020

NMH MQSP Work Plan for 2019 New V

Appendix Two: Maternal Mental Health Referral Pathway (MMHRP)

Mat MH referral pathway V3 Sept 20

Appendix Three: Maternal Early Warning Score (MEWS) Chart

24-06-2019 Nelson Mat final version M\

References

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