MATERNITY QUALITY AND SAFETY PROGRAMME

Canterbury District Health Board

Annual Report

2016 -17

Canterbury
District Health Board
Te Poari Hauora ō Waitaha

Acknowledgements

The following people are acknowledged for their participation in compiling this report:

Jon Amos - Service Development Manager, Planning & Funding, CDHB

Karyn Bousfield - Director of Nursing, WCDHB

Sam Burke – Maternity Quality and Safety Programme Coordinator, CDHB

Norma Campbell, Director of Midwifery, CDHB and WCDHB

Ian Chen – Information Analyst, CDHB

Sonya Conner - Maternity Consumer representative, CDHB

Jen Coster - Maternity Consumer representative, CDHB

Vivian Daley - Smokefree Manager, CDHB

Bronwyn Dixon - Consultant Neonatologist, CDHB

Christine Dwyer – Midwife Coordinator - Quality, CDHB

Marnie Erkkilä – Maternity Consumer representative, CDHB

Janelle Flynn – Clinical Coder, CDHB

Rebecca Harris – LMC Liaison, Co - Chair Canterbury and West Coast Regional NZCOM

Ruth Hughes – Medical Specialist, CDHB

Natalie King – Service Manager, Women's Health, CDHB

Bridget Lester - Project Specialist, Planning and Funding, CDHB

Adrienne Lynn – Clinical Director, Neonatology

Claire MacDonald – Midwife Liaison, Canterbury Initiative

Chris Mahon - Medical Photographer, Medical Illustration, CDHB

Win McDonald – Transition Programme Manager, Rural Health Services, CDHB

Lisa McKechie - Quality Manager, Women's & Children's Health, CDHB

Shanti Paudel - Maternity Consumer representative, CDHB

Jean Peters – Midwife, CDHB

Matthew Reid – Public Health Physician, Planning and Funding, CDHB

Andrea Robinson – Charge Midwife, St. George's Hospital, Maternity Centre, CDHB

Suzanne Salton – Charge Midwife /Nurse Manager, Rangiora Hospital

Nigel Skjellerup - Medical Specialist, Anaesthesia, CDHB

Anna van Uden – Charge Midwife Manager - Maternity ward, Christchurch Women's Hospital

Graeme Webb – Quality Coordinator – Child Health, CDHB

Janet Whineray – Clinical Director, Obstetrics & Gynaecology, CDHB

Canterbury DHB & West Coast DHB Maternity Clinical Governance Committee members

A big thank you to the families, staff and LMC's that so kindly gave their time and permission to take photographs to illustrate our Annual Report.

Disclaimer

While every effort is made to ensure the accuracy of the information contained in this report, Canterbury District Health Board cannot guarantee the accuracy of the information or data supplied.

Front cover photo – Rangiora Health Hub, Rangiora.

Foreword

The Canterbury and West Coast District Health Boards are pleased to present the Maternity Quality and Safety Programme Annual Report for 2016/17.

Canterbury and the West Coast work collaboratively under a transalpine arrangement to provide health care services to a large portion of the South Island. This way of working across the Southern Alps ensures a partnership approach and supports seamless service delivery, continuity and excellence in care. The Canterbury and West Coast Maternity Quality and Safety Programmes, structure and governance has provided a platform for our respective and combined maternity services to develop robust quality processes and improved outcomes for our mothers and babies. This year sees us presenting our own separate reports. The West Coast now stands proudly on its own within the shared Maternity Quality and Safety Programme. Whilst both District Health Boards share many policies, procedures and expertise, they are very different services, reflective of their unique geography and demographics. For this reason, while we share the transalpine approach and come together to drive the programme, we do have, by necessity, our own respective programmes of work. The Maternity Quality and Safety Programme continues to add significant value to our maternity systems, and planning is underway for progression of the DHBs to the excelling tier of the national programme.

As the outgoing and incoming Chairs, we are pleased to present the respective reports for both the Canterbury and West Coast District Health Boards.

Karyn Bousfield

Director of Nursing, West Coast DHB

(Immediate past Chair, CDHB & WCDHB Maternity Clinical Governance Committee)

Norma Campbell

Director of Midwifery, Canterbury and West Coast DHB

(Chair, CDHB & WCDHB Maternity Clinical Governance Committee)

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Overview

Background

This is the fourth Canterbury DHB Maternity Quality and Safety Annual Report since the establishment of the Ministry of Health (MoH) Maternity Quality and Safety Programme (MQSP) in 2011.

The National Maternity Monitoring Group (NMMG) came into operation in 2012, as part of this programme, to oversee the maternity system in general and the implementation of the New Zealand Maternity Standards.

The high-level strategic statements of the New Zealand Maternity Standards (MoH, 2011) are:

- Provide safe, high-quality maternity services that are nationally consistent and achieve optimal health outcomes for mothers and babies;
- Ensure a women-centred approach that acknowledges pregnancy and childbirth as a normal life stage;
- 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.

Aims and Objectives

Canterbury DHB is committed to improving the quality and safety of maternity services for consumers.

The Canterbury DHB maternity services' aims and objectives are to:

- Provide woman-centred maternity care that meets the needs of the population
- Continue to implement, review and establish as required, systems and processes to support the provision of quality and safe care
- Take a whole of systems approach towards improving the health of women and children as guided by the Ministry of Health's goals and targets
- Align the maternity workforce to meet the needs of the population
- Align and strengthen regional links

The Maternity aims and objectives align with the wider CDHB Mission, Vision, Values and Way of working as outlined on Page 12.

Purpose

The purpose of this report is to provide information about the DHB's:

- Improvements in relation to the overall aims and objectives
- Achievements against the quality improvement goals set for 2016/17
- Contribution towards addressing the priorities of the NMMG and Perinatal and Maternal Mortality Review Committee (PMMRC)
- Performance in relation to the Ministry of Health's New Zealand Maternity Clinical Indicators 2015 (MoH, 2016)
- Response to consumer feedback and ongoing consumer involvement
- Quality initiative goals for 2017/18

Canterbury and West Coast 'Transalpine' Relationship

Canterbury provides many services for the population of the West Coast DHB. The shared service and clinical partnership arrangements that have been developed are also part of the MQSP. This 'transalpine' approach to service provision has allowed better planning for the assistance and services Canterbury DHB provides to the West Coast DHB, so people can access services as close as possible to where they live.

In previous years we have submitted submit a joint Annual Report to reflect the shared governance model and 'transalpine' relationship, whilst acknowledging the DHB's are at different stages of progress in terms of the Maternity Quality and Safety Programme national tiers. This year each DHB will produce a separate Annual Report to acknowledge the very different community demographics and needs.

The content in this report demonstrates the collaboration between professional disciplines, managers and consumers and it should therefore serve as a useful resource for a range of stakeholders including the NMMG, local clinicians, planners and funders as well as consumers.

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). This section describes women giving birth at a maternity facility.
Neonatal Death	Death of a baby within 28 days of life.
Parity	Number of previous births a woman has had.
Primiparous	A woman who is pregnant for the first time; multiparous is a woman who has given birth two or more times.
Primary Facility	Refers to a maternity unit that provides care for women expected to experience normal birth with care provision from midwives. It is usually community-based and specifically for women assessed as being at low risk of complications for labour and birth care. 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. Birthing units are considered to be primary facilities. Primary maternity facilities provide inpatient services for labour and birth and the immediate postnatal period.
Postpartum Haemorrhage	Excessive bleeding after birth that causes a woman to become unwell.
Primary Maternity Services	Primary maternity services are provided to women and their babies for an uncomplicated pregnancy, labour and birth, and postnatal period. They are based on continuity of care. The majority of these maternity services are provided by Lead Maternity Carers (LMCs).
Secondary Facility	Refers to a hospital that can provide care for normal births, complicated pregnancies and births including operative births and Caesarean Sections plus specialist adjunct services including anaesthetics and paediatrics. As a minimum, secondary facilities include an obstetrician rostered on site during working hours and on call after hours, with access to support from an anaesthetist, paediatrician, radiological, laboratory and neonatal services.
Standard Primiparae	A group of mothers considered to be clinically comparable and 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 facility • are aged between 20 and 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: between 37 and 41 weeks inclusive • have no recorded obstetric complications in the present pregnancy that are indications for specific obstetric interventions. Intervention and complication 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, p 29).
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 specialised multidisciplinary teams. Tertiary maternity care includes an obstetric specialist or registrar immediately available on site 24 hours a day. Tertiary maternity care includes an on-site, level 3, neonatal service.
Weeks' Gestation	The 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.

Abbreviations

CDHB	Canterbury District Health Board
DHB	District Health Board
GDM	Gestational Diabetes Mellitus
GP	General Practitioner
HDU	High Dependency Unit
ICU	Intensive Care Unit
IOL	Induction Of Labour
LARC	Long-acting reversible contraceptives
LMC	Lead Maternity Carer
MQSP	Maternity Quality and Safety Programme
NICU	Neonatal Intensive Care Unit
NMMG	National Maternity Monitoring Group
PMMRC	Perinatal and Maternal Mortality Review Committee
PPH	Postpartum Haemorrhage
RMO	Resident Medical Officer
SUDI	Sudden Unexpected Death in Infancy
SMO	Senior Medical Officer
VBAC	Vaginal birth after Caesarean
WCDHB	West Coast District Health Board
W&CH	Women's and Children's Health

Our Mission

To improve, promote and protect the health of the people in the community and foster the well-being and independence of people who experience disabilities and reduce disparities.

Our Vision - Tā Mātou Matakite

To improve, promote, and protect the health and well-being of the Canterbury community.
Ki te whakapakari, whakamanawa me te tiaki i te hauora mō te oranga pai o ngā tāngata o te rohe o Waitaha.

Our Values - Ā Mātou Uara

Care and respect for others. Manaaki me te whakaute i te tangata.
Integrity in all we do. Hāpai i ā mātou mahi katoa i runga i te pono.
Responsibility for outcomes. Te Takohanga i ngā hua.

Our Way of Working - Kā Huari Mahi

Be people and community focused. Arotahi atu ki te tangata me te hapori.
Demonstrate innovation. Whakaatu te ihumanea hou.
Engage with stakeholders. Kia tau ki ngā tāngata whai pānga.

Our Region

The Canterbury DHB is the second largest DHB in the country by both geographical area and population size - serving 543,820 people (11.5% of the New Zealand population) and covering 26,881 square kilometres.

There are three separate divisions within Canterbury DHB responsible for providing the maternity services; Women's and Children's Health (W&CH), Ashburton and Rural Health services, which includes the Chatham Islands. The DHB also has a contract with St George's Hospital, Maternity Centre to provide maternity care.

The Canterbury DHB provides an extensive range of specialist services on a regional basis - to people referred from other DHBs where these services are not available. This includes neonatal services.

More than three-fifths (62%) of the year's South Island growth in 2015 came from the greater Christchurch area (Waimakariri, Christchurch, and Selwyn). All three areas had sizeable gains from net migration as well as smaller gains from natural increase Stats NZ 2017 (NZ, 2017).

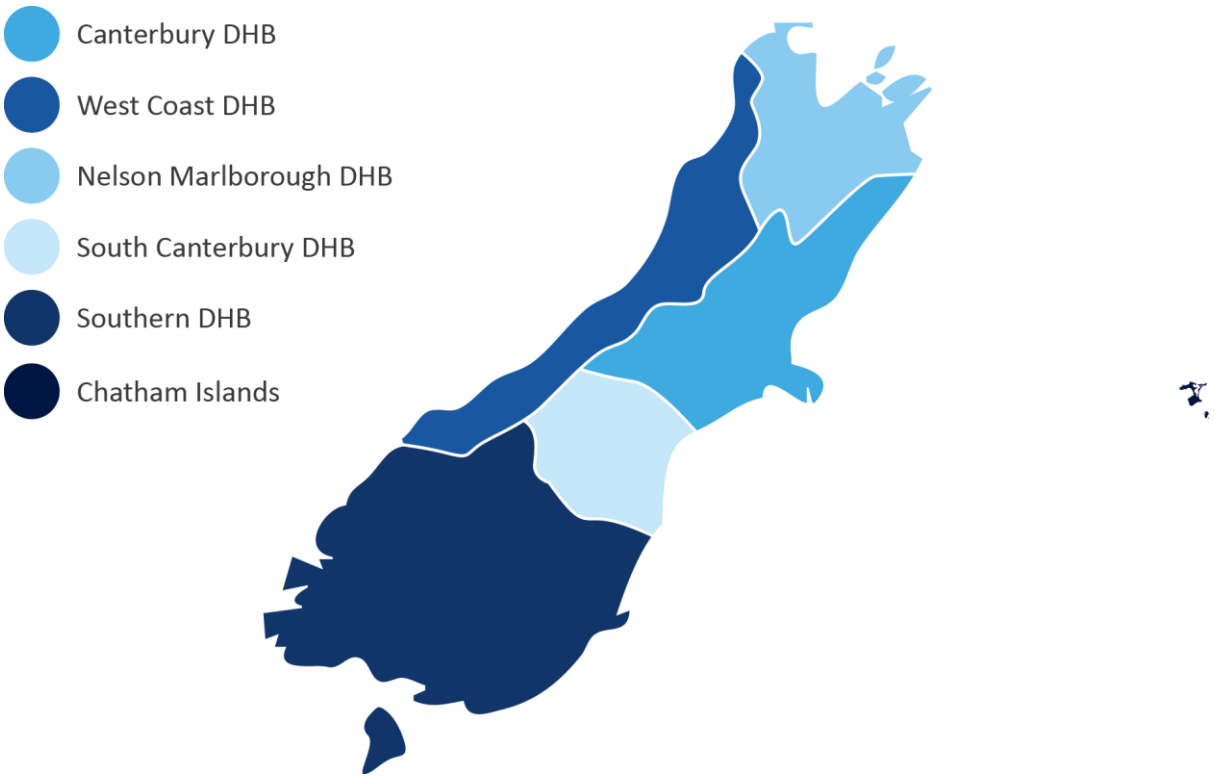


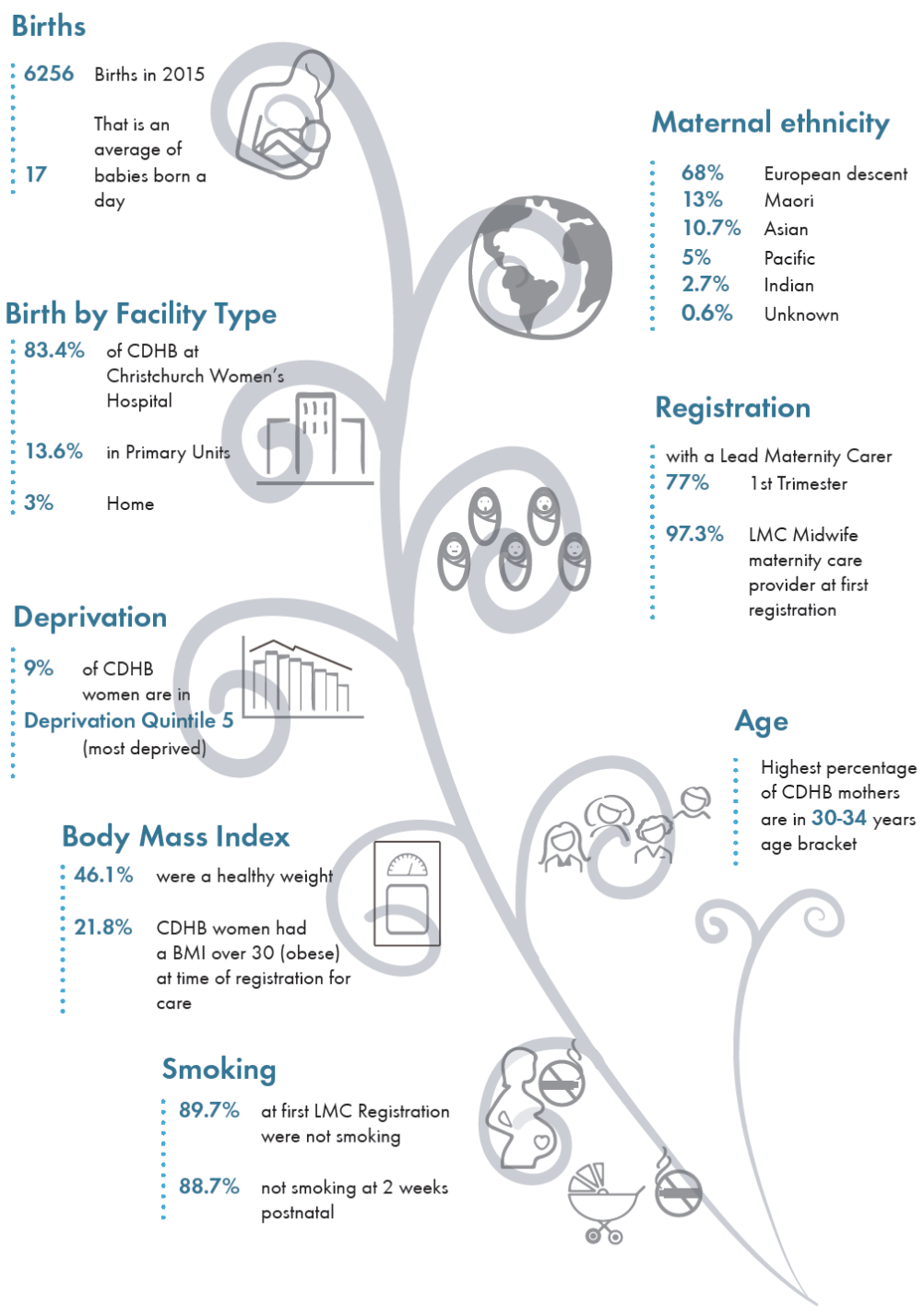
FIGURE 1 SOUTH ISLAND DHB BOUNDARIES

Our Community

Our community demographics are taken from the New Zealand Maternity Clinical Indicators 2015 (MoH, 2016), Report on Maternity 2015 (MoH, 2017), 2015 MAT data, (MoH, 2016) and our CDHB database.

Table 1 provides a visual picture of health statistics for women giving birth in Canterbury in 2015.

TABLE 1 CANTERBURY DHB SNAPSHOT FOR WOMEN GIVING BIRTH IN 2015



Our Maternity Services

There are a range of facilities available to women in Canterbury (Table 2). Christchurch Women's Hospital (CWH) is the only tertiary facility and accepts referrals from Canterbury and the West Coast regions as well as throughout the South Island for women who are presenting with complex pregnancies.

All referrals for tertiary care from West Coast DHB primary and secondary units, Canterbury DHB primary units and homebirths go to Christchurch Women's Hospital.

Women on the Chatham Islands have antenatal and postnatal care provided by a Lead Maternity Carer (LMC). This is a contracted service between the DHB and LMC. Chatham Islands have a backup emergency service through the health centre in Waitangi. Women leave the Islands to birth.

TABLE 2 CANTERBURY MATERNITY FACILITIES

	Women's and Children's Health Division	Ashburton	Rural Health Services
Primary	○ Burwood Birthing Unit (closed June 2016) ○ Lincoln Maternity Hospital ○ Rangiora Hospital ○ St George's Maternity Centre (contract with CDHB)	○ Ashburton Maternity Centre	○ Chatham Islands (since 2015) ○ Darfield Hospital ○ Kaikoura Hospital ○ Waikari Hospital (Ceased maternity care August 2016) ○ Akaroa Hospital (ceased maternity care December 2011 following earthquake damage)
Tertiary	Christchurch Women's Hospital		

TABLE 3 BIRTH NUMBERS AT OUR DHB MATERNITY FACILITIES AND HOME BIRTH RATE 2014 AND 2015

CDHB Maternity Facility	Number of Births	
	2014	2015
Ashburton Hospital	**117**	**134**
Burwood Birthing Unit	**147**	**185**
Christchurch Women's Hospital	**5165**	**5220**
Darfield Hospital	**6**	**5**
Kaikoura Hospital	**11**	**9**
Lincoln Hospital	**107**	**129**
Rangiora Hospital	**125**	**178**
St. George's	**141** (from February 2014)	**214**
Home birth	**236**	**182**
Grand Total	**6055**	**6256**

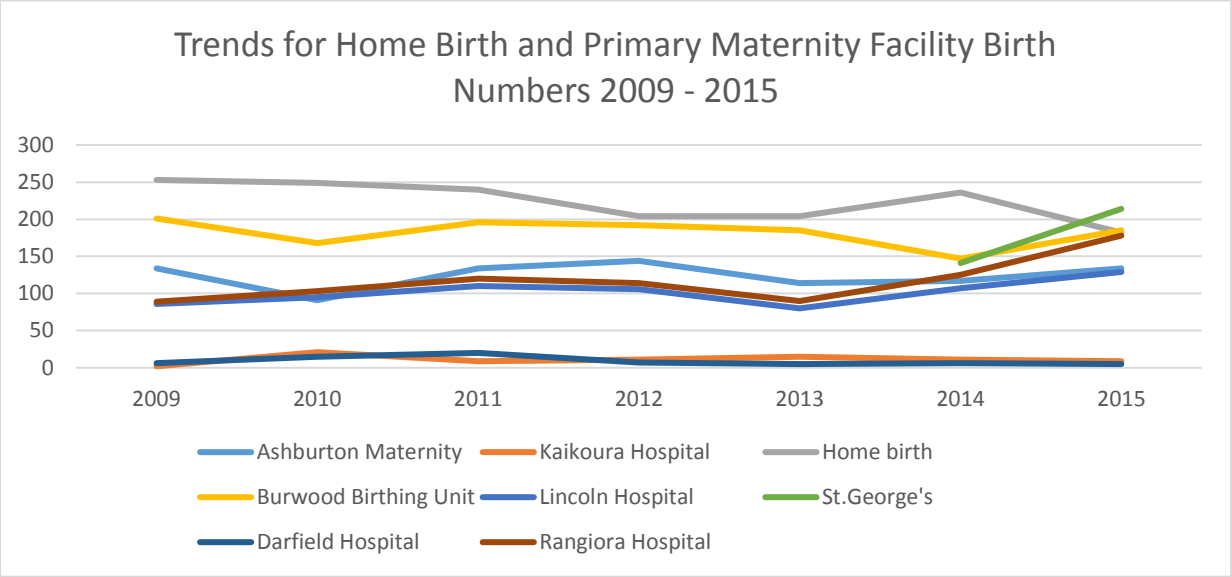


FIGURE 2 CDHB TRENDS FOR HOME BIRTH AND PRIMARY MATERNITY FACILITY BIRTH NUMBERS 2009-2015

Birth rates in our primary maternity units have historically been low, with a high proportion of our birthing women choosing Christchurch Women's Hospital as their place of birth, as Table 3 demonstrates.

This is consistent with birthing populations nationally. The Report on Maternity 2015 (MoH, 2017) stated most women (86%) gave birth at a secondary or tertiary maternity facility. With only 10% birthing at a primary maternity facility.

Work to increase birth numbers in our primary units has been active and ongoing since 2010, and it remains a priority as a part of our planned work for 2017/18.

Figure 2 shows the consistent and upward trend in primary unit birthing, particulary since 2013.

In November 2015 and April 2016 respectively the new Rangiora and Kaikoura health hubs were officially opened. Providing new and fresh facilities for the community and continued provision of antenatal, intrapartum and postnatal care, these are meeting the CDHB commitment to have better access to services closer to home.

Just want to compliment everyone. Transitions were smooth and I felt well looked after by each and every midwife. They were all well informed of our needs and I felt mothered! Thanks a lot.

Lincoln Maternity Hospital

CDHB Maternity Hospitals and Primary Maternity Units

Our Maternity facilities extend across Canterbury from Kaikoura to Ashburton. Despite the high birth rate at our main centre, Christchurch Women's Hospital, a high proportion of women will transfer for postnatal care to one of our primary maternity units. The following information provides an overview of these facilities and their activity during 2015.

Christchurch Women's Hospital

Births = **5220**

Transfers in for postnatal care = **51**

Overview:

Tertiary Hospital - designed for women with complex maternity needs which require specialist multidisciplinary care.

- **13** Rooms for labour and birth
- **2** Pools for water birth
- **2** Acute Observation beds
- **2** Multi-purpose rooms
- **5** Assessment rooms
- **2** Operating theatres
- **45** Antenatal / postnatal unit beds
- **16** Clinic rooms
- **10** Intensive care cots
- **28** Special care cots
- Day Assessment Unit
- Fetal Medicine Unit
- 'The Garden Room' is available for women experiencing fetal loss in the latter half of pregnancy

Safe Sleep Day 2017

Rangiora Hospital

Births = **178**

Transfers in for postnatal care = **257**

Distance **35km, 41mins from Christchurch**

Overview:

Primary Maternity Unit - designed for well women who have no complications during pregnancy.

- **2** Rooms for labour and birth
- **2** Pools for water birth
- **4** Assessment rooms
- **12** Postnatal rooms

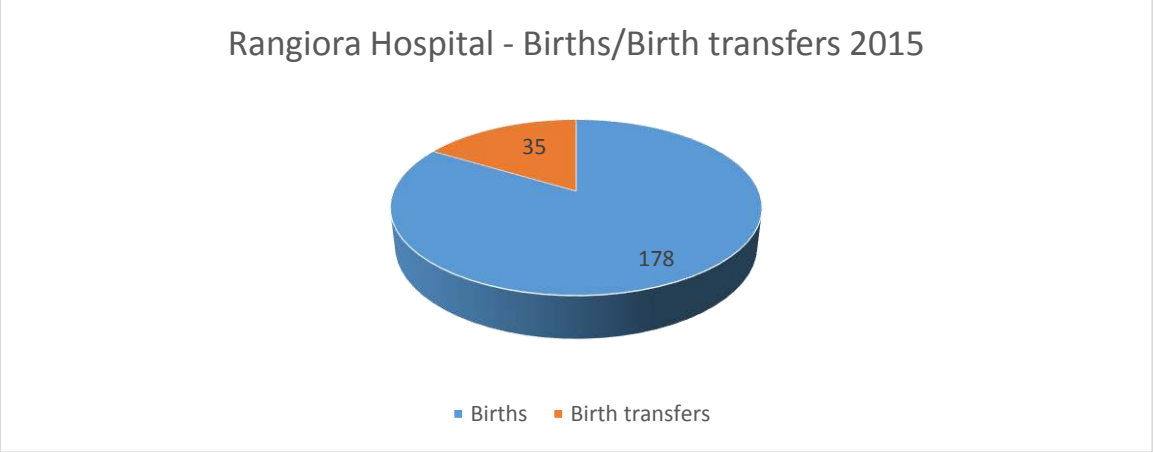


FIGURE 3 RANGIORA HOSPITAL - BIRTHS AND BIRTH TRANSFERS 2015

Burwood Birthing Unit
(Closed June 2016)

Births = **185**

Transfers in for postnatal care = **504**

Distance **10.3km, 19mins from Christchurch Women's Hospital**

Overview:

Primary Maternity Unit.

- **2** Rooms for labour and birth
- **1** Pool for water birth
- **3** Assessment rooms
- **6** Postnatal rooms

Lincoln Maternity Hospital

Births = **129**

Transfers in for postnatal care = **425**

Distance **19.7km, 30mins from Christchurch**

Overview:

Primary Maternity Unit.

- **2** Room for labour and birth
- **1** Pool for water birth
- **6** Postnatal rooms
- **1** Assessment room

Ashburton Maternity

Births = **134**

Transfers in for postnatal care = **179**

Distance **87km, 1 hour 8mins from Christchurch**

Overview:

Primary Maternity Unit.

- **3** Rooms for labour and birth
- **2** Pools for water birth
- **5** Postnatal rooms

Darfield Hospital

Births = **5**

Transfers in for postnatal care = **16**

Distance **44km, 40mins from Christchurch**

Overview:

Primary Maternity Unit.

- **1** Room for labour and birth
- **1** Pool for water birth
- **2** Postnatal rooms

Waikari Hospital

(Closed for maternity care August 2016)

Births = Not Applicable

Transfers in for postnatal care = 8

Distance **73km, 1hour from Christchurch**

Overview:

2 Postnatal rooms

Kaikoura Hospital

Births = **9**

Transfers in for postnatal care = **11**

Distance **181km, 2 hours 10mins from Christchurch**

Overview:

Primary Maternity Unit.

- **1** Room for labour and birth
- **2** Postnatal rooms

"In January 2017, I offered to go to Kaikoura to provide midwifery care for the women there, as the incumbent midwife was due to leave at the end of January, and there was no one else available. I have done quite a lot of rural and remote rural locum work, so I put my hand up – I am passionate about rural midwifery, and I like a challenge.

Kaikoura has been affected as a community in lots of ways by the earthquake in November 2016. My impression of the women I looked after was that they need an LMC they can count on, who they trust, who feels confident to deliver their care given the unique challenges posed by the earthquake aftermath and the remote locality in general.

The main challenges for maternity care at the present time in Kaikoura are the roads, and the weather, which both impact directly on the ability to either transfer women and/or babies urgently or for women planning to birth in Christchurch. State Highway 1 is currently closed from Tuesday to Thursday inclusive, and also closed every night between 6pm and 7am. It also still closes regularly when there is lots of rain or stormy conditions in general. The inland road is open, unless weather is bad, but it is VERY challenging to drive at night, and has large stretches with no cell phone coverage.

Although there may be good reasons for a woman to birth in CWH, sometimes the logistics of getting there in labour makes alternative plans necessary, and this happened for a couple of women who birthed during my time there.

The team at Kaikoura Hospital, especially the senior GP's, are an invaluable asset to the midwife – they have considerable obstetric experience…as a midwife I felt extremely well supported, and at the same time felt my knowledge and experience was appreciated and valued. All the GPs are very supportive of primary birth. While I had no major obstetric or neonatal emergencies during my time, I did utilise the GP's for birth back up, advice and consultation and always felt this worked well for the women and families as well.

The maternity facilities are part of the new Kaikoura Integrated Health Facility. Unfortunately this room was often being used for general patients, and post birth for three of my women there were less than satisfactory postnatal options available… While it is a lovely new facility, it will benefit from some comfortable furniture, local artwork and a bit of woman friendly decoration. If the community, including local iwi, have input into this and feel it is really 'theirs', I believe the number of women birthing there will increase accordingly…Hopefully the seeds I have planted will grow to fruition soon.

During my time in Kaikoura, I birthed seven women…three were waterbirths, all had a physiological third stage, no babies needed resuscitation and all were exclusively breastfeeding on discharge from the facility… While there will never be enough women to make up a "fulltime" caseload (40-60 per year), there is a stable population, and the women and families of Kaikoura deserve, and are entitled to maternity care. The area is well resourced with the birthing suite, and any midwife working there would be very well supported both clinically and collegially by the GPs and staff at the hospital…"

Jean, LMC employed by DHB for Kaikoura to maintain the service

St. George's Hospital

Births = **214**

Transfers for postnatal care = **1253**

Distance **5.1km, 12min from Christchurch Women's Hospital**

Overview:

Primary Maternity Unit.

- **3** Rooms for labour and birth
- **1** Pool for water birth
- **10** Postnatal rooms + a 'swing' type room

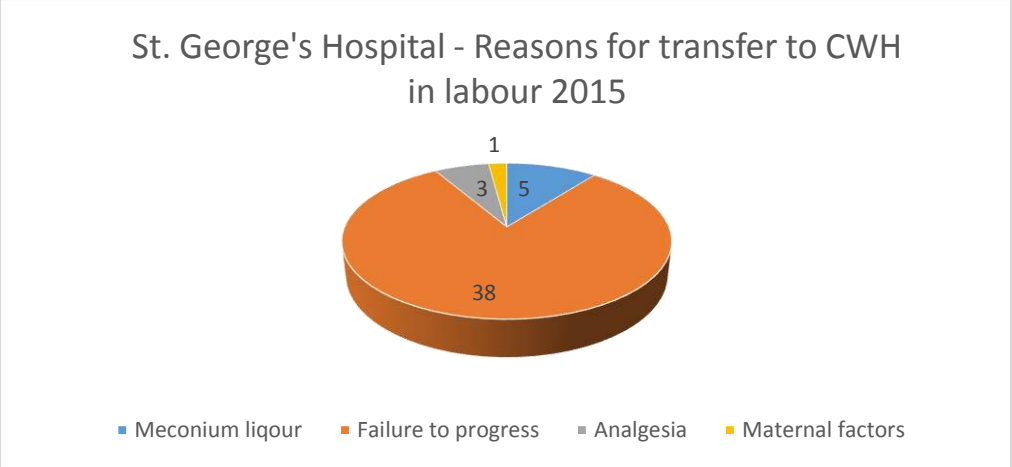


FIGURE 4 ST. GEORGE'S HOSPITAL - REASONS FOR TRANSFER TO CWH IN LABOUR 2015

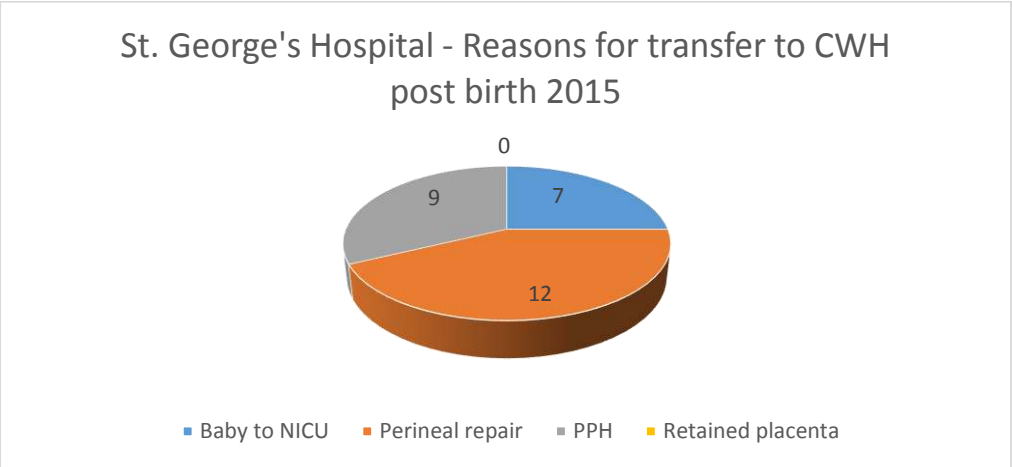


FIGURE 5 ST. GEORGE'S HOSPITAL - REASONS FOR TRANSFER TO CWH POST BIRTH 2015

Our Workforce

Canterbury's maternity service is provided by our multidisciplinary team of Midwives (Lead Maternity Carers and DHB employed Midwives), Obstetric staff, GP's, Physicians, Nurses, Lactation Consultants, Allied Health and support staff.

Christchurch Women's Hospital, which is Canterbury's tertiary unit, provides antenatal clinic care, which includes specialised clinics for high risk pregnancies, diabetes, methadone in pregnancy and fetal medicine. The outpatient clinic also provides antenatal care for women unable to initially secure an LMC.

A day assessment unit provides observational care for women under the care of the obstetric team, reducing the need for inpatient care.

A specialist obstetric clinic is provided at Ashburton Hospital every week to help women stay closer to home.

Christchurch Women's Hospital provides a 24 hour service for consultation and acute care. This includes anaesthetic cover for birthing suite. The medical team consists of:

- 21 Senior Medical Officers
- 16 Registrars (including 2 roster relievers and 2 night cover relievers)
- 8 Resident Medical Officers (including 1 roster reliever and 1 night cover reliever)

In 2015, 326 Midwives identified Canterbury DHB as the primary place of work as a midwife (MCNZ, 2015), and 196 as Midwives who had an access agreement with Maternity facilities across Canterbury, enabling them to practice as a Lead Maternity Carer. This equated to 10.7% of the national workforce.

The head count of Midwives employed by the Canterbury DHB fluctuates but is approximately 150, with a majority working at Christchurch Women's Hospital.

In 2015 there were eight maternity units providing birthing and postnatal care in the primary setting, there are currently six.

Kaikoura, Waikari (now closed) and Darfield are staffed by Registered Nurses and supported by the woman's Lead Maternity Carer.

Four new graduates Midwives were employed by the CDHB in 2015, one in 2016 and six in 2017 to join the new graduate programme.

Our Maternity Quality Governance and Leadership

Who are we?

The Canterbury DHB part of Maternity Clinical Governance Committee comprises of members of the hospital multidisciplinary team as well as primary community and consumer representation.

The entire CDHB/WCDHB Governance group meet once a month via videoconferencing, this brings together Women's and Children's Health (CDHB), Ashburton, rural health services (CDHB), St. George's (CDHB) and the West Coast Maternity group.

CDHB Maternity Clinical Governance Committee. From back left to right: Kathy Simmons, Marnie Erkkilä, Jen Coster, Lisa McKechie, Sam Burke, Violet Clapham

Not Pictured: Andrea Robinson, Norma Campbell, Nat King, Jane Brosnahan, Rebecca Harris, Adrienne Lynn, Janet Whineray, Ralph La Salle

> *Just like being at home. "Relaxing" experience with helpful staff. Great recovery time.*

Rangiora Hospital

Governance Structure

Canterbury DHB and West Coast DHB share governance for the Maternity Quality and Safety programme. Table 4 below illustrates the governance levels of the various groups.

TABLE 4 GOVERNANCE AND LEADERSHIP GROUPS CANTERBURY DHB AND WEST COAST DHB

Governance level	CDHB General Managers' Group	CDHB Clinical Board	WCDHB Clinical Board
	W&CH Clinical Governance Committee	CDHB & WCDHB Maternity Clinical Governance Committee	
Reporting level	W&CH Clinical Audit Committee	W&CH Maternity Operational Group WCDHB Maternity Operational Group	Ashburton and Rural Health Services Group (under review)
	St George's Obstetric Committee	WCDHB Maternity Quality and Safety Group	WCDHB Clinical Quality Improvement team
Operational Level	Perinatal and Maternal Mortality Review Committee	Incident Review Groups	Maternity Clinical Guidelines Group

Quality Planning and Reporting

Each operational group develops a quality plan for their area which includes priorities directed by the Canterbury DHB & West Coast DHB Maternity Clinical Governance Committee. Quality plans and quarterly reports are submitted as outlined below in Table 5.

TABLE 5 REPORTING FLOW CANTERBURY DHB AND WEST COAST DHB

Women's & Children's Clinical Governance Committee	**Canterbury DHB Clinical Board**	**West Coast DHB Clinical Board**
Bi-annual or Annual reports are submitted		
Canterbury DHB & West Coast DHB Maternity Clinical Governance Committee		
Annual Quality Plans and Quarterly Reports are submitted to ensure alignment of work across the services		
W&CH Maternity Operations Group	Ashburton and Rural Health Services group (under review)	St George's Obstetric Committee West Coast DHB Maternity Quality and Safety Group

Contracts relevant to maternity services between the DHB Planning and Funding Department and non-governmental organisations are also reported in a similar way.

Governance Committee Structure

The committee structure in Figure 6 below is complex due to the spread of maternity services and associated groups and committees both within and across the two DHB's. This was reviewed and revised by the CDHB/WCDHB Maternity Clinical Governance Committee in June 2017.

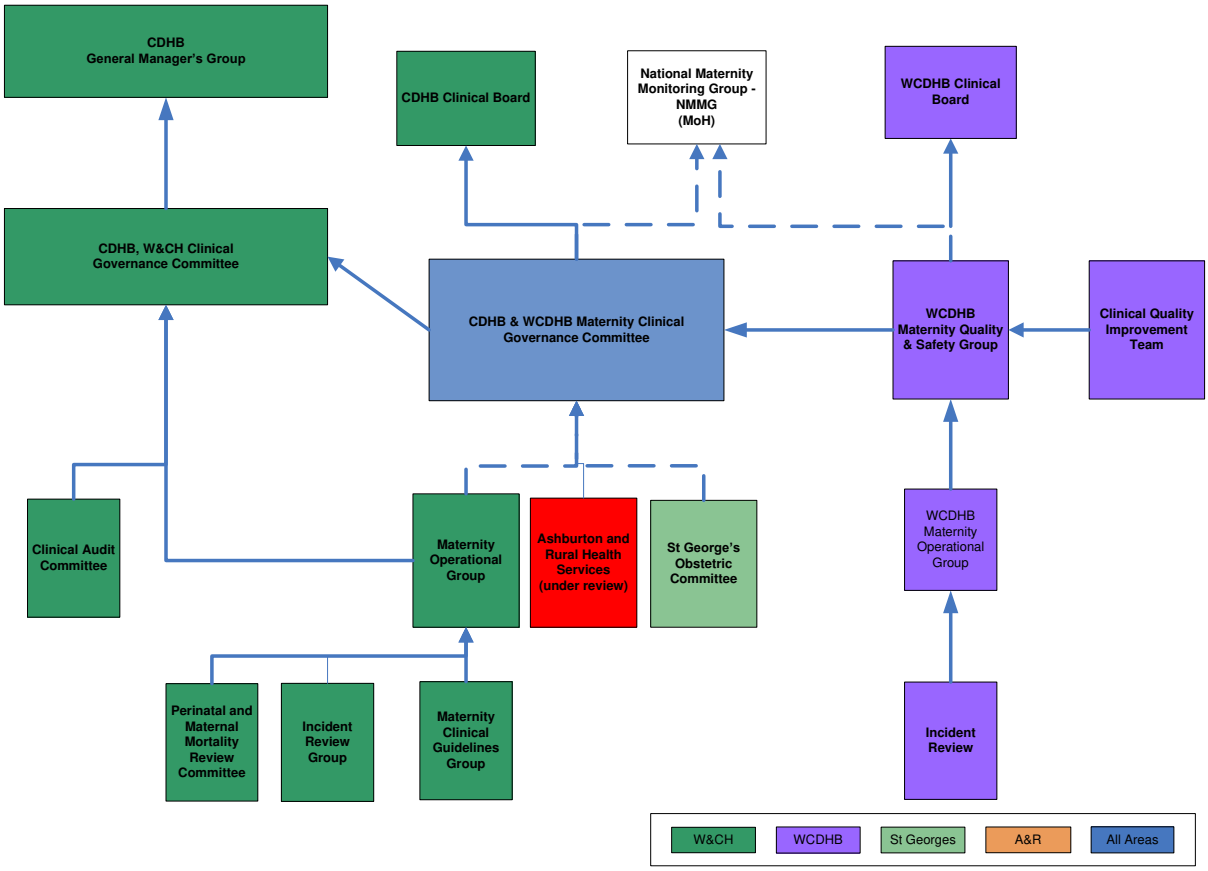


FIGURE 6 GOVERNANCE COMMITTEE STRUCTURE AND REPORTING LINES

Contract Funding for the MQSP Programme

In 2017 the MoH asked each DHB to self-audit and identify themselves within one of three tiers (Emerging, Established and Excelling). Meeting the requirements of each tier were based on the New Zealand Maternity Standards (MoH, 2011) and the service specification for each tier as prescribed by the MoH.

Canterbury DHB have identified themselves as meeting the "Established" tier and have developed a one year plan in line with the current term of contract for twelve months.
This action plan has been included in our priorities for 2017/18

Consumer Engagement

Engaging with our community through consumers of our maternity service continues to be one of the priorities of the Maternity Quality and Safety Programme (MQSP). With the implementation of the MQSP we were able, as a DHB, to formalise consumer member roles, and we currently have five consumer members that are involved in both governance and operational activities across the service and are funded to attend these forums through our MQSP Programme.

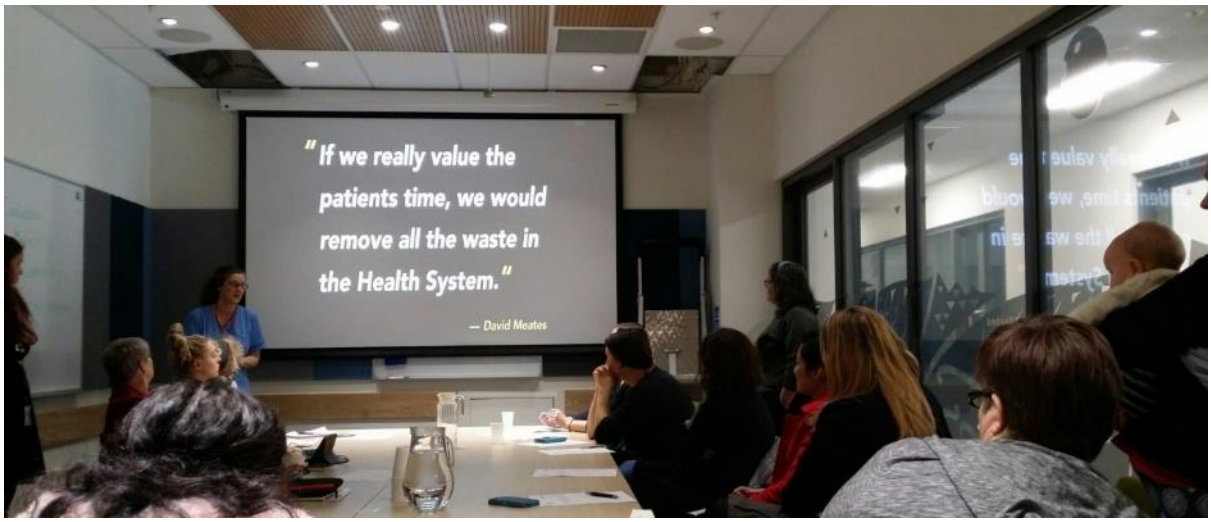
A key priority for our DHB for 2016/17 was to develop our consumer representation further, and be consulting with the local community and Tangata Whenua that aligned with maternity services.

An inaugural Women's Health Advisory Forum was held in July 2017 and attended by various community groups, with representation from Manawhenua ki Waitaha who are a representative collective of the seven Ngāi Tahu Rūnanga that are in the CDHB's district of responsibility.

It is expected that the forum will grow organically and provide the opportunity for information sharing and networking. The meetings will be held every quarter.

"Our role as consumer representatives is to give a consumer perspective to the various committees and groups within the Women's Health Division of the CDHB. Our backgrounds and experiences are different from one another and unique to us as individuals, we all have connections within the community to bring those grassroots experiences from women/wāhine and family/whānau to our roles within the CDHB. Our, aim is to take the consumer perspective from our communities into the health sector within the CDHB, to provide a more holistic view for the policy makers about decisions being made for the women/wāhine and family/ whānau within the CDHB community."

Canterbury Maternity Consumer Representatives: Shanti Paudel, Marnie Erkkilä, Jen Coster and Sonya Conner. Not pictured Lou Cootes.



Women's Health Advisory Forum

LMC Liaison

The LMC Liaison role was developed as a part of setting up our Maternity Quality and Safety Programme. This was in recognition that the maternity workforce extends across the community, with approximately half of the midwifery workforce working in the primary sector.

The purpose of the LMC liaison role was to:

- improve two way communication for the primary-secondary interface as a key stakeholder in the provision of maternity services;
- actively contribute to the maternity clinical governance framework as a representative of the primary midwifery workforce;
- be an advocate for primary care in planning services within limited resources

"I have been in the LMC Liaison Role since August 2016 and I have attended and actively contributed to both clinical governance and the Maternity Operations groups.

I have been involved with the implementation of CDHB wide projects that focus on quality improvement for our maternity areas, and I have been part of the consultation process in the review of clinical documentation.

I am involved in analysis of our clinical outcomes and currently involved in project work to improve our 3rd and 4th degree tear rates.

I was a part of the primary birth focus group which was run as a joint venture between the planning and funding department and the regional Canterbury and West Coast NZCOM.

I liaise daily with both LMC and core staff and support both, in the understandings of each other's roles.

I meet regularly with the Director of Midwifery and I provide a link back to the region on both an individual basis and at our monthly regional NZCOM meetings".

LMC Liaison Midwife

Overview of MQSP Priorities 2016/17

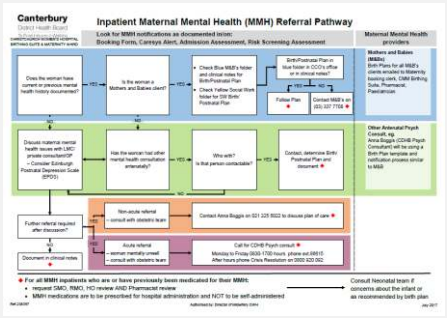
This table summarises the quality improvement work undertaken by our Maternity Services in the 2016/17 years. The work is the result of interdisciplinary collaboration and the involvement of consumer representatives.

- Indicates that the work has been completed and / or in business as usual phase
- Indicates that the work is in progress / underway and nearing completion
- Indicates that there is still a significant amount to achieve before completion

TABLE 6 MQSP PRIORITIES AND ACTION PLAN FOR 2016/17

	Priority Area	Progress Report	Status
1	Monitor the involvement of maternity consumer members in DHBs' MQSPs	We have five Maternity consumer members that are involved in all aspects of our quality project work. They also provide representation at a governance and operational level.	
		The MQSP Coordinator meets regularly with the consumer members to support and work on/develop project plans under the auspices of the MQSP.	
		Consumer members attended Child Health Consumer meetings with the aim of networking and the opportunity to join consumer representative training facilitated by the Health Quality and Safety Commission.	
2	Consumer engagement – actively engage and increase the profile of consumer members (19 & 20 of 2015/16 priorities and action plan)	In our previous MQSP CDHB & WCDHB Annual Report 2015-16 we made a continued commitment to engage consumers that were representative of our changing population and also ensuring we had Maori representation.	
		We also wanted focus on our "at risk" women for example, young mothers and women with mental health issues, which have historically not been well represented.	
		In July we hosted our first Women's Health Advisory Forum to engage further with our community groups that provided maternity related support.	
		The meetings will be held every quarter.	
		Our strategies to wider our consumer engagement always included consideration of social media and Canterbury Maternity Community Facebook page was launched in October 2016 to provide up to date information/postings for consumers on events and resources available in Canterbury.	

	Priority Area	Progress Report	Status
		Profile photos and a short biography was also developed for each of the consumer members to enhance their profile with staff and the community. A working group, including consumer and LMC representation, is underway to review the current "We Care About Your Care" form to make it easier to use and improve return rates and feedback. The CDHB Maternity web pages have been reviewed and updated to reflect any changes and provide up to date information for women. Part of the project plan for 2017/18 is to develop virtual tours for each of the primary maternity units, to showcase what is available for birthing and postnatal care in their communities. St. George's have completed filming of a video tour to place on their web page and this is in the editing stage. Staff and consumers have been involved in this project.	
3	Review the outcomes of work undertaken by the maternity ultrasound advisory group as directed by the NMMG (18 of 2015/16 priorities and action plan)	Recommendations from the Maternity Ultrasound Advisory group, as supported by the NMMG, are yet to be published. In the interim we have implemented the CDHB maternity guideline 'Antenatal ultrasound for obstetric indications: recommended scan frequency' guideline. This includes recommended optimal timing for a first trimester ultrasound at 12 weeks and anatomy ultrasound at 19 weeks. We have made contact with the local Choosing Wisely campaign advocates in the DHB and they have agreed to include the 6 week scan as their next project. This work has been rolled over to our Priorities and Action plan for 17/18.	
4	Support the ratification of national maternity clinical guidelines and implementation of existing guidelines	All nationally developed guidelines have been reviewed, published and disseminated to clinicians. These are readily available on our public CDHB website at CDHB Maternity Guidelines. Our CDHB Maternity Clinical Guidelines group also meets every two weeks, membership consists of representatives from across the multidisciplinary team. Clinical guidelines are developed as a result of changes in best practice, new research and knowledge and recommendations from local and national clinical incident reviews. Five new guidelines were developed, published and implemented in the last 12 months, with thirteen reviewed and updated.	

	Priority Area	Progress Report	Status
5	Continue to review the NZ Clinical indicators data and monitor DHBs variation (4 & 5 of 2015/16 priorities and action plan)	A multidisciplinary review of the maternity clinical indicator data is undertaken with each publication from the MoH. Trends are identified using previous year's data and any outlier in the clinical indicator data is recognised for further review. Further analysis then determines the priority areas to focus on for 2017/18. These are included in this report, specifically, Spontaneous vaginal birth rate/ Instrumental birth rate/Episiotomy/3rd and 4th degree tear rate/Blood transfusion rate.	
6	Promote access to maternal mental health services and the use of the maternal mental health pathway	The Maternal Mental Health Referral Pathway was developed and implemented in 2015. This gave a comprehensive pathway for health professionals caring for women during pregnancy and up to one year postnatally. This is due for review in 2018. An inpatient Maternal Mental Heath pathway has also been developed for health professionals providing inpatient care for women.  	
7	Review key maternity sector publications including the MoH's Report on Maternity, 2014	All key maternity sector publications are reviewed as a part of the MQSP coordinators role, and any recommendations included in the priority and action planning.	
8	Increase use of primary birthing facilities (10 of 2015/16 priorities and action plan)	Increasing birthing numbers and occupancy of our primary maternity units has been a constant focus for the CDHB over the last seven years, and was launched with our 'Improving the Maternity Journey' project in 2010. The project involved planning and funding, health professionals and consumers with an aim to try and understand the barriers to birthing in local communities. Since this time the learnings from the first formal project have been coupled with new research on safe birthing outcomes in the primary setting; and have extended into assignments in their own right. This joint work with the College of Midwives locally continues and has been rolled over into the 2017/18 priorities and action plan. In 2016 a project was initiated to review the St. George's primary maternity services agreement with the CDHB. The project aims were to: • Promote and encourage the use of St Georges maternity as a preferred place for primary birthing • Increase the utilisation of primary maternity units across Canterbury for birthing and postnatal services	

	Priority Area	Progress Report	Status
		The project was collaborative and involved all key stakeholders including CDHB and St Georges Maternity clinical and non-clinical staff, Lead Maternity Carers, Regional NZCOM, CDHB Clinical Coordinators and Management teams. The Admission to Primary Birthing Unit was reviewed to create a more concise guideline for LMCs and staff.	
9	Identify women with modifiable risk factors for perinatal related death and work individually and collectively to address these. (Recommendation 1. Ninth Annual Report of the Perinatal and Maternal Mortality Review Committee (PMMRC, 2015))	These PMMRC recommendations were considered by the CDHB Maternity Clinical Guidelines group and were included where appropriate in Canterbury Community HealthPathways. Canterbury Community HealthPathways is an online application that is available for all health professionals and has a specific focus on the primary sector. It promotes locally agreed information that can be accessed during a patient consultation. Priority areas, for example, smoking cessation that are also ongoing MoH Health targets have been addressed as projects in their own right. On May 1 2017, Te Hā – Waitaha / Stop Smoking Canterbury launched a pregnancy incentives programme, which is discussed in more detail on page 36.	 
10	Offer education to all health clinicians [working in the maternity setting] so they are proficient at screening women, and are aware of local services and pathways to care, for the following: • family violence • smoking • alcohol and other substance use (Recommendation 2. Ninth Annual Report of the Perinatal and Maternal Mortality Review Committee (PMMRC, 2015))	Regular training is available and mandatory for CDHB staff working within the maternity services. Family violence screening rates are currently captured and reported each quarter via the Violence Intervention Programme (VIP) to the MoH. Family Violence screening was considered a priority quality improvement project not only because of the PMMRC recommendations; but also as the reported VIP audit results demonstrated that rates for screening at CWH were low compared to the rest of the Christchurch campus. This project work is ongoing and has been rolled over to the action and priorities plan for 2017/18.	 

	Priority Area	Progress Report	Status
11	Multi-disciplinary fetal surveillance training be mandatory for all clinicians involved in intrapartum care	Fetal monitoring training is mandatory for all CDHB health professionals undertaking any aspect of electronic fetal monitoring (EFM) and is a strong recommendation for all LMC's to complete. Educational requirements are outlined in the CDHB Maternity guideline Fetal Heart Monitoring.	
12	Improved detection of fetal growth restriction to reduce perinatal morbidity and mortality rates	Current evidence was reviewed by Maternal Fetal Medicine and the Maternity Clinical Guidelines Group. The New Zealand Maternal Fetal Medicine Guideline for the management of suspected small for gestational age singleton pregnancies and infants after 34 weeks gestation (2014) was adopted and published for use.	
13	Seasonal or pandemic influenza vaccination is promoted for all pregnant women regardless of gestation, and for women planning to be pregnant during the influenza season Vaccination is also recommended for maternity care providers to reduce the risk to the women and babies under their care	Work continues as per the Immunisation Service Level Alliance (SLA) workplan, which sits under the auspices of the Canterbury Clinical Network (CNN). The Immunisation SLA was established in 2010 and provides strategic planning, design, prioritisation and implementation oversight of immunisation services across the Canterbury health system. In 2016-17 ISLA had a focus on improving the connection between LMCs and General Practice teams, so that systems were put in place to recall pregnant women for immunisation. Immunisation of Pregnant women and the National Immunisation Register has also been included in the LMC - Well Child education days held in November for the Ara Midwifery students and May for all Midwives. 59% of midwives received the influenza vaccination in 2017.	
14	Utilisation of the CDHB Newborn Observation Chart and Newborn Early Warning Score (NEWS)	A number of regional workshops were held in February and March 2017 by the Neonatal Encephalopathy (NE) Taskforce (MoH, HQSC and ACC), to further develop priorities to action under the banner of the Neonatal Encephalopathy (NE) strategy. A part of this work is in conjunction with the CDHB to evaluate the validity of the locally developed Newborn Observation Chart and Newborn Early Warning Score (NEWS). This is still being progressed and this work has been rolled over to the 17/18 MQSP Priorities and Action Plan.	
15	Promote and support breastfeeding (11 of 2015/16 priorities and action plan)	Breastfeeding friendly workplace initiative (BFWI) award was attained by St. George's and Christchurch Women's Hospital in August 2017. All CDHB Maternity facilities are Baby Friendly Hospital Initiative (BFHI) accredited. Ankyloglossia (tongue-tie) and frenotomy (tongue tie release) services across the hospital and community were reviewed and reconfigured to address a dramatic increase since 2005. This work has been submitted to the DHB Quality Awards as the outcomes have turned the demand around. We await the results at the time of publishing this report.	

	Priority Area	Progress Report	Status
16	Prepare for introduction of National Maternity Clinical Information System (MCIS)	This remains an important project for the CDHB to undertake as the national programme continues to be rolled out. The definite timeframes for the CDHB to implement MCIS is unknown.	
17	Promote Māori, Pacifica and younger women attending pregnancy and parenting support classes	Plunket became the provider of Pregnancy and Parenting Education for the CDHB in March 2016. Currently we require Plunket to report to Planning and Funding on a six monthly basis about the Pregnancy and Parenting Education service that they deliver. The next report (Jan -June 2017) is due in August this year and will be presented to the CDHB/WCDHB Maternity Clinical Governance group.	
18	Implement Guidelines for Consultation with Obstetric and Related Medical Services (Referral Guidelines), 2012.	The Guidelines for Consultation with Obstetric and Related Medical Services (Referral Guidelines), 2012 has been published and circulated for use on the CDHB Maternity Guidelines internet page. A CDHB Maternity Consultation and transfer policy has not be pursued further, instead efforts have been applied to communication workshops for senior DHB clinical midwives and LMCs. There has also been discussion between services (Emergency Department and Maternity) to apply a 'fresh eyes' to our consultation and our transfer of clinical responsibility processes. We are also using the Guidelines to inform a new project which records the flow of women through the maternity service and records who is caring for her and when (Floview).	
19	Evidence based clinical case review and representation of community based clinicians and consumers in the formal and informal clinical review processes to ensure their perspective is considered	Consumers are engaged in governance and operational groups at this stage. There has been discussion with the multidisciplinary team (this includes consumers) and this is supported in principle by the Maternity Operations group (MOG). Incident themes and trends are to be tabled at the quarterly Women's Health Advisory Forum, commencing October 2017.	
20	Define processes to: • Implement changes in clinical practices • Reduce unnecessary variation in clinical practice • Define and strengthen clinical pathways • Influence local service delivery, planning and policy	Changes in clinical practice are reviewed through a multidisciplinary approach at the Maternity Operational Group Meetings which are held monthly. The decision to make such changes are influenced and guided by national guideline and consensus statements, changes in robust evidence, local incident review and national recommendations from mortality review groups. They are then implemented through various channels within the maternity service. The CDHB Maternity Operations group (MOG) and Maternity Clinical Guidelines group (MGG) 'manage' and capture changes in clinical practice and clinical guidelines are regularly reviewed. New guidelines are managed through a robust document control process and Access Holders are also informed about updates through communication with them.	

Our Quality Initiatives

Continued evaluation and improvement of our maternity services is vitally important to Canterbury DHB. It underpins our vision, values and goals for Women's and Children's Health and is encouraged to be a part of everyday business for the team. We are actively involved in the implementation of the wider organisations quality initiatives but also draw improvement projects from many sources, not limited to, but including:

- audit recommendations
- clinical case reviews
- incident investigation
- new evidence for clinical practice changes
- consumer feedback

Our quality activities always strive to ensure the women's experience is optimal by reducing variation and being evidence based.

During 2016/17 our team worked on many quality improvement projects, and for the purposes of our MQSP Annual Report we have chosen a handful to showcase our efforts.

Kiriata Māmā TV

Kiriata Māmā TV programming is screening across CDHB maternity services and is a local quality initiative funded by the national Maternity Quality Safety Programme. Kiriata Māmā provides 24 health-related parent-focused programmes, accessible to approximately 6000 women per annum. This quality initiative was reported in the Maternity Quality and Safety Programme CDHB & WCDHB Annual Report 2015-16.

Following an evaluation using online and paper surveys, the recommendation to review the programming content was agreed by the W&CH Audit Committee and Maternity Operational group. This will ensure the content remains contemporary and relevant to the women of Canterbury.

In October 2106 the project was awarded runner up in the Improved Health and Equity for all Populations category at the 2016 Canterbury DHB Quality Improvement and Innovation Awards.

Canterbury DHB Smoking Cessation for Pregnant Women

Smoking cessation is a priority area for the CDHB and links directly to ongoing MoH Health targets. Smoking cessation for pregnant women continues to be a focus for the MQSP. In all previous MQSP Annual Reports we have included our ongoing work in this area and reported on our results.

The topic remains a priority for the MQSP and has been included in the priorities and action plan for 2017/18.

On May 1 2017, Te Hā – Waitaha / Stop Smoking Canterbury launched a pregnancy incentives programme.

Along with the incentives / rewards, the programme provides free medications (NRT products and Quickmist) and multi-sessional evidence based behavioural support to develop and maintain strategies and coping mechanisms to support a positive outcome. Sessions are provided to inidviduals and in groups. This has been widely adopted by community providers.

Stop Smoking Canterbury - Te Hā - Waitaha

Facebook Stop Smoking Canterbury

This smoking cessation programme is a pilot programme and has shown a good uptake in the first months of operation.

Consumer engagement and improving information for women

Canterbury has a changing population and we are becoming more diverse; ensuring we have active consumer representation to mirror these changes was one of our key MQSP priorities for 2016/17.

One of our quality initiatives to improve information for our community was to use social media. A Facebook page was launched in October 2016 to inform and update on what is happening in the maternity community. It also provides an environment for valuable consumer feedback.

The administrators on this page are part of the MQSP as coordinator and consumer members. This is also endorsed by the CDHB communications team.

Canterbury Maternity Community

Tongue Ties: Back on Track for Mothers and Babies

The number of babies in Canterbury diagnosed with ankyloglossia (tongue-tie) and receiving a frenotomy (tongue-tie release surgery) to improve breastfeeding has increased dramatically. In 2005 fewer than 100 babies received a frenotomy at Christchurch Women's Hospital (CWH). By 2015 this had increased by over 700% to 726 babies. This led to concern that a proportion of babies could be receiving unnecessary surgery and other causes for breastfeeding difficulties were not being identified or addressed.

In response to these concerns the Bristol Tongue Tie Assessment tool (BTAT) [1] was trialled in CWH during 2016. A BTAT score of ≤5 was applied as the threshold for frenotomy surgery. An audit of all mothers and babies who attended the clinic was completed in mid-2016 and showed no statistical difference in longevity of breastfeeding in babies who received or were declined frenotomy.

Clinical forums for hospital and community based clinicians to share evidence, clinical data, current practise and audit findings were held in August and October 2016. The forums endorsed:

- The development of local clinical criteria for surgical assessment in newborns with feeding difficulties and possible ankyloglossia
- The use of the BTAT tool
- A goal frenotomy intervention rate of ≤4%
- Equitable access to surgery when indicated

A new tongue-tie release pathway for newborns was introduced in February 2017. Key features are:

- Standardised assessment with a combination of an expert breastfeeding review, and a BTAT score with a surgical intervention threshold of BTAT score ≤ 4.
- Centralised triage to either a CWH outpatient clinic or to the otorhinolaryngology (ORL) service.
- A follow up audit of feeding and surgical outcomes.

Since introduction of the new pathway every baby with possible ankyloglossia has a comprehensive breastfeeding assessment to consider all causes for feeding difficulty.

The tongue-tie intervention rate is now 3.5%, which means 500 fewer procedures will be undertaken in 2017. CWH lactation consultants and neonatologists, who were previously 'tied up in tongue ties' have more time available to deliver core services. The new pathway has been supported with education sessions, clinical bulletins, and HealthPathways updates. Information for parents has been updated through the Healthinfo website.

Ethnicity data collection project

A collaborative quality project with planning and funding was initiated with the aim of improving the accuracy of ethnicity data for the CDHB.

The project included a complete review of the documentation completed throughout the pregnancy and birth 'journey' where ethnicity was recorded. The revised documentation standardised the ethnicity question that must be asked and mirrors the statements asked in the census survey and other formal administration.

Baby's ethnicity *Please tick the box or boxes that apply*	Which ethnic group(s) does the baby belong to? ☐ NZ European ☐ Māori ☐ Samoan ☐ Cook Island Maori ☐ Tongan ☐ Niuean ☐ Chinese ☐ Indian ☐ Other such as *Dutch, Japanese, Tokelauan* please *state:* .....

Education for all staff was also included in the compulsory core competency day and also presented to LMCs through newsletters and at a bi-annual child health forum.

Screening, diagnosis and management of Gestational Diabetes guideline

In March 2017 the NMMG asked us as a DHB to make comment on the impact of the Screening, Diagnosis and Management of Gestational Diabetes in New Zealand: A clinical practice guideline (2014).

This national maternity guideline is one of three developed to date to provide an evidence based and consistent approach to the management of antenatal, intrapartum and postnatal care, and was adopted by the CDHB in 2016.

A review of our local data since 2013 shows little impact on early inductions performed (these numbers were already small). The data did reveal a shift towards a rise in gestational age at birth, which lends itself to an indication that management of gestational diabetes is more consistent. We will continue to review this guideline and its usage in our service.

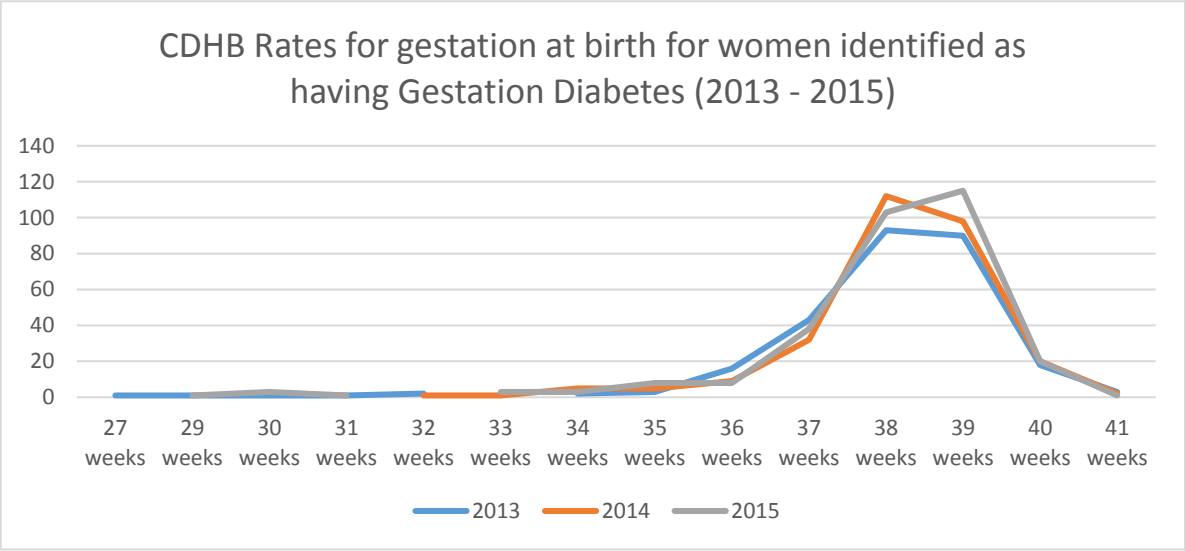


FIGURE 7 CDHB RATES FOR GESTATION AT BIRTH FOR WOMEN IDENTIFIED AS HAVING GESTATIONAL DIABETES 2013 – 2015

Long-acting reversible contraceptives

The NMMG is investigating the equity of access to long term reversible contraceptives (LARC) for women in New Zealand and requested information on what is currently offered in our DHB to be included in our MQSP annual report.

CDHB can provide long-acting reversible contraceptives (LARC) postnatally, if the woman is an inpatient. But these are not available as a stock item and are not funded by PHARMAC (a NZ government agency that decides which pharmaceuticals to publicly fund in New Zealand) unless a woman meets a specific criteria, such as low haemoglobin.

Currently the LARC Jadelle® is available on a prescription ($5.00 fee) which can be a barrier for some women as it means visiting a pharmacy and then returning to the ward area to have the implant fitted. There is also feedback that woman do not like the side effects of irregular bleeding and so have them removed by the GP or family planning service.

As a DHB we have been actively seeking funding for Mirena® (which has less side effects) and have addressed this with PHARMAC directly, with the aim to reduce the cost and equity barriers for women requesting a LARC.

Work with the young teenage women having babies indicates there is a need for a wider choice than Jadelle which is not always acceptable to this age group particularly. This work is continuing as part of this project.

Elective caesarean section and gestational age

In 2012/13 one of the NMMG's programme priorities focussed on planned early term birth (37, 38 and 39 week's gestation). Since this time there has been an overall decrease in elective caesarean sections before 39 weeks.

In March 2017 the NMMG requested we again include our local data on the number of planned births carried out by gestational age.

2015 CDHB data demonstrates that 50% of planned caesarean sections occurred at a gestation of 39 weeks, with a further 6.5% being performed at either 40 or 41 weeks. The Timing of elective caesarean section at term statement (The Royal Zealand College of Obstetricians and Gynaecologists, 2014) advises deferring elective delivery in uncomplicated singleton pregnancies until 39 weeks' gestation or later to improve clinical outcomes.

As a DHB we will continue to monitor the gestation of our elective caesarean section rates and the optimal gestation, and consider further analysis and quality improvement projects if an increased trend in earlier gestations is noted.

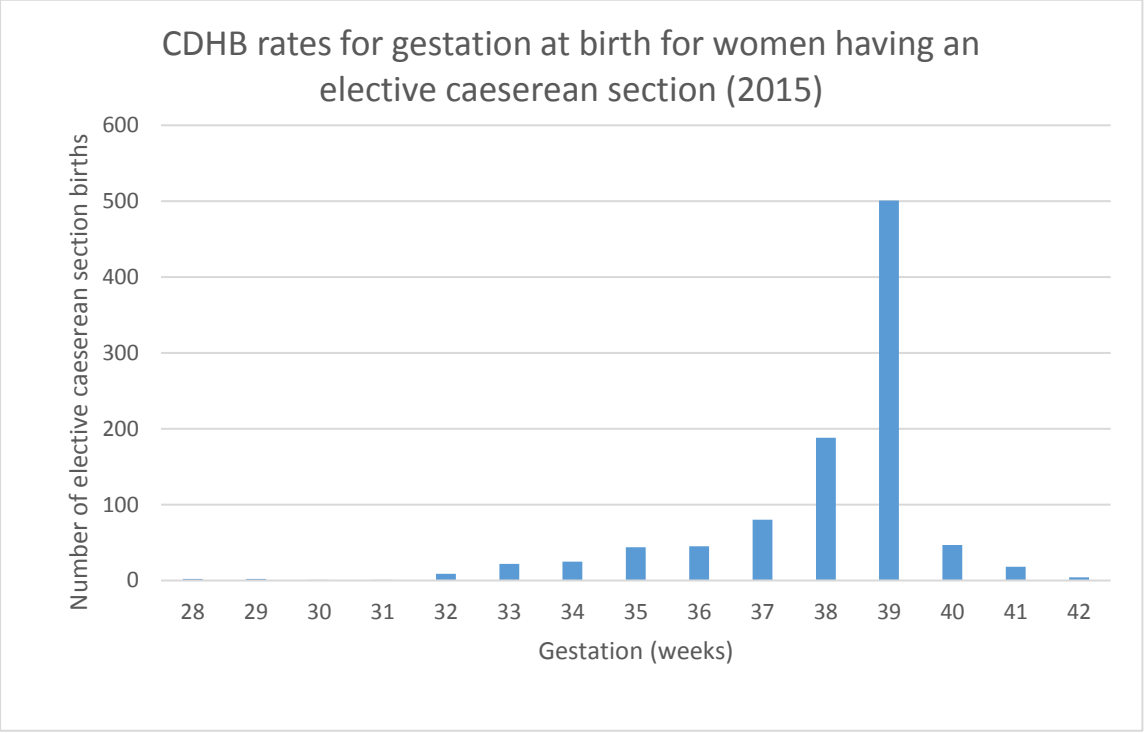


FIGURE 8 CDHB RATES FOR GESTATION AT BIRTH FOR WOMEN HAVING AN ELECTIVE CAESAREAN SECTION IN 2015

Early onset Neonatal Group B Streptococcus infection

In May 2017 the MoH requested any DHB guidelines pertaining to management of early onset Neonatal Group B Streptococcus infection were reviewed and aligned to the most recent consensus guideline, which was published in 2014. The consensus statement has been reviewed by the Maternity Clinical Guidelines Group and updated.

Part of this work was also to follow up on our local processes for monitoring the incidence of Group B Streptococcus. Discussions with the multidisciplinary team has occurred at governance and operational level to find a sustainable and robust method of capturing this data. This will be reported on in our next MQSP Annual report.

Releasing Time to Care Project

Over the last year all of the maternity areas have been involved in the Releasing Time to Care project. The aim of this modular work is to release time from busy ward areas by reducing repetition and standardising the way we work. Improving patient safety, patient experience, efficiency of care and staff experience.

"Over the past year Rangiora Health Hub has worked with the RT2C team on the first three modules of the RT2C house model.

This started in June 2016 with the 'Knowing How We Are Doing' module with staff and patient satisfaction surveys, interviews, staff follows.

We also created a board to reflect:

- *No harm to patients with safety crosses for falls and medication errors*
- *Feedback from patient and staff satisfaction surveys*
- *Increasing direct patient care through staff observing other staff members daily routine, numbers of interruptions and ways we can increase direct patient care time*

'Our Ward Vision' was a way to bring staff together and really think about what our vision for our unit was, making it unique to our community. After several different drafts we now have a large poster at the front entrance and smaller ones around the unit featuring a lovely picture of the Wrybill Plover.

The wording on the poster is "Just like the Wrybill Plover we are family centred, unique and local. Rangiora Health hub Primary Birthing and Maternity Care and General Convalescent care".

We then moved on to 'The Well Organised Ward' module and looked in every room to see if it was cluttered and had unnecessary or old equipment. The aim is to have a designated place for all supplies and equipment so that all staff know where things are and they are in the appropriate place. This means that no time is wasted walking to find or collect items. This module is now nearing completion and has prompted a major rethink of the actual amount of clinical stock required at any time. It means we will stop over ordering for the 'just in case' scenario! We will shortly also be moving to using a barcode scanner which will make ordering supplies much more efficient as currently all supplies are ordered manually.

The last module we have worked on is called 'Patient Status at a Glance'. As a part of this staff are working on developing bedside boards for staff handovers, so mothers/patients and families can all be involved and know who is caring for them and their plan of care. We are also remodelling a recycled Patient Status Communication Board for our workstation which outlines essential information and discharge plans. This will enable better planning for transfers".

Suzanne, Charge Midwife/Nurse Manager

Our Outcomes

Clinical Indicator Analysis

The MoH data New Zealand Maternity Clinical Indicators 2015 (MoH, 2016) was published in December. The publication shows key maternity outcomes for each DHB for 2015 and is the most recent data available for compilation of this Annual Report.

The analysis below shows Canterbury DHB's performance and position in relation to both the indicators and national averages. Percentage figures are from either the DHB of domicile or the facility of birth, as indicated, and are based on standard primiparae only.

The purpose of these indicators is to increase the visibility of quality and safety of maternity services and to highlight areas where quality improvement can potentially be made. There were originally twelve indicators however three were added for the 2012 indicator report.

A further six indicators were added to the 2013 report to review outcomes for babies and women experiencing severe morbidity. The methodology was expanded to count outcomes for women giving birth outside a maternity facility more accurately.

The data largely refers to 'standard primiparae' (SP) who make up approximately 15% of all births nationally. This group who are aged 20 – 34 years with uncomplicated singleton pregnancies birthing at full term with a head presentation represent the least complex situations for which intervention rates can be expected to be low and therefore enable valid comparisons between institutions.

TABLE 7 CANTERBURY DHB CLINICAL INDICATOR ANALYSIS 2015

Indicator	Title	2014 CDHB Rate	2015 CDHB Rate	Change from 2014	Higher or lower than national average	National Average
Indicator 1 - Registration with a Lead Maternity Carer in the first trimester of pregnancy		77.0%	77.0%	Static	↑	70.0%
Comment: Canterbury DHB rates have continued to increase each year and remain above the national average, as shown in Figure 9. We recognise that we are doing well and have had success with our initiatives such as Healthinfo and Canterbury Community HealthPathways. Our progress in this area was also acknowledged by the NMMG. There is now the opportunity to further increase our rates by engaging with our 'hard to reach' groups and we have included this continued work in our priorities and action plan 2017/18.						

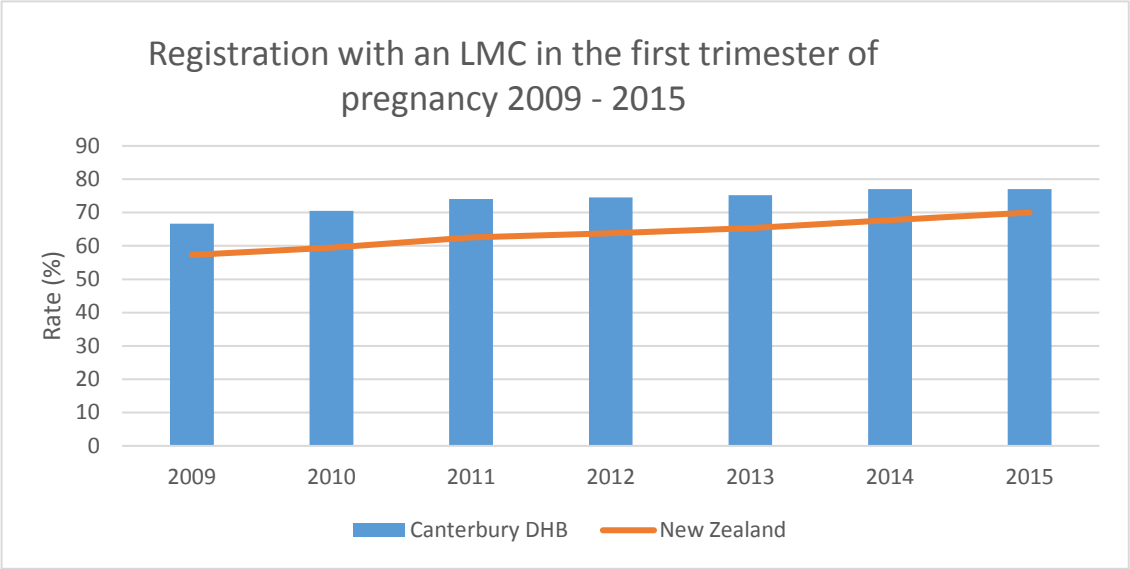


FIGURE 9 CDHB RATES FOR REGISTRATION WITH AN LMC IN THE FIRST TRIMESTER OF PREGNANCY 2009 - 2015

Indicators 2 -5

These indicators are about the type of birth amongst SP. Their stated purpose is to encourage Maternity service providers to review the appropriateness of interventions amongst low risk woman with the long term aim of supporting normal birth and reducing perinatal morbidity.

Indicator	Title	2014 CDHB Rate	2015 CDHB Rate	Change from 2014	Higher or lower than national average	National Average
Indicator 2 - Spontaneous vaginal birth		71.0%	67.2%	-3.8%	↓	68.7%

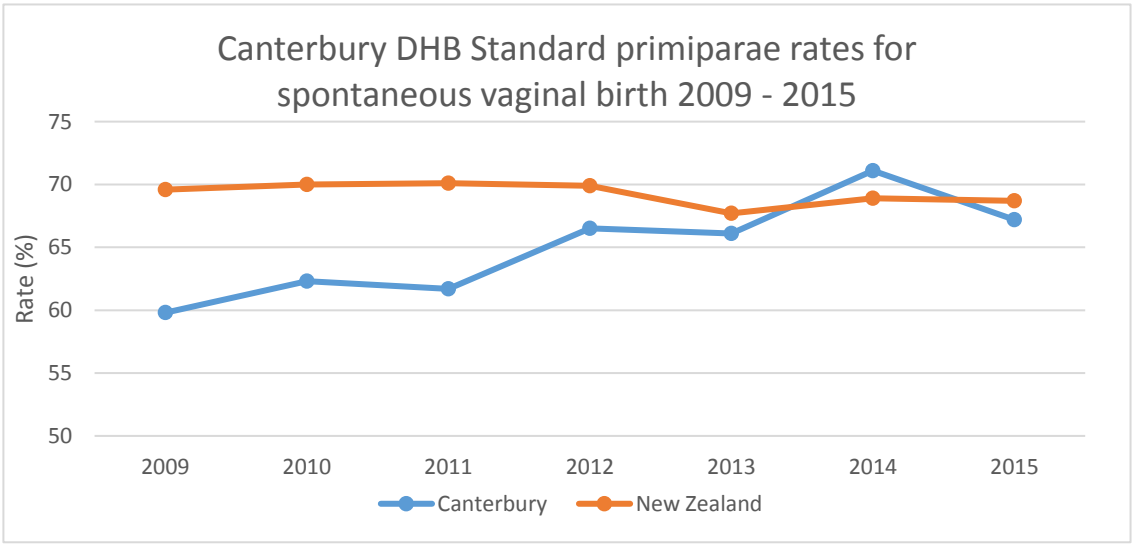


FIGURE 10 CDHB RATES FOR SPONTANEOUS VAGINAL BIRTH 2009 – 2015

Comment:

This indicator shows our rate of spontaneous vaginal birth among our SP group in Canterbury at 67.2%, compared to the national average of 68.7%. Since 2009 we have focused on quality initiatives to improve our normal birth rate. Analysis of our data from 2009 to 2014 showed a consistent and continued improvement, with an 11.3% increase in our spontaneous vaginal birth rate, as shown in Figure 10.

This continues to be a focus for our service and remains a priority for our quality improvement action plan for 2017/18.

Indicator	Title	2014 CDHB Rate	2015 CDHB Rate	Change from 2014	Higher or lower than national average	National Average
Indicator 3 - Instrumental vaginal birth		16.0%	20.3%	+4.3%	↑	16.3%

Comment:

From 2009 to 2014 analysis of our clinical indicators showed a consistent decrease in our rate of instrumental birth. In 2015 our rate was 20.3% a 4.3% again in instrumental births. This has been reviewed by our multidisciplinary team and has been identified as an outlier for further investigation along with the release of the 2016 Maternity Clinical Indicators at the end of 2017. This has been carried over as continued work on our priorities and action plan for 2017/18.

Indicator	Title	2014 CDHB Rate	2015 CDHB Rate	Change from 2014	Higher or lower than national average	National Average
Indicator 4 - Caesarean Section		13.1%	12.5%	-0.6%	↓	14.9%

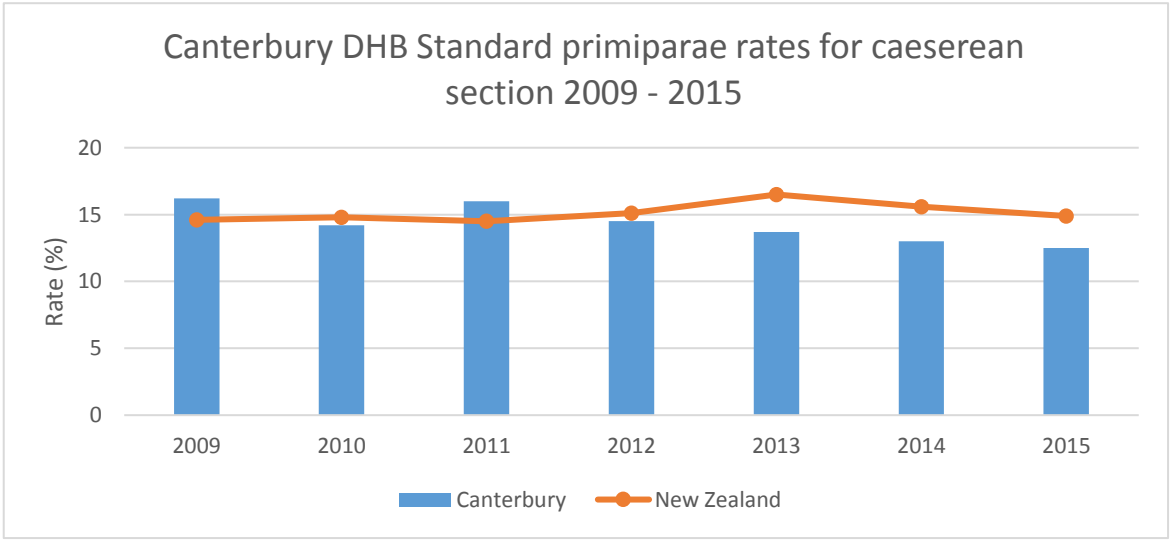


FIGURE 11 CDHB RATES FOR CAESAREAN SECTION 2009 – 2015

Comment:

The CDHB caesarean section rate for 2015 was 12.5% within our SP group; 0.6% lower than the previous year and remains below the national average.

Figure 11 shows that we have remained consistently below the national average since 2012. As a DHB we continue to monitor our intervention rates and have included this again in our priorities and action plan for 2017/18. As a part of this quality work we intend to review and re-ignite our ceasarean section weekly case review and complete and implement our 'delay in labour' guideline.

We also continue with mandatory fetal monitoring training for staff and have reviewed our maternity fetal monitoring guideline, to ensure all maternity facilities (including our primary units) have a robust criteria and process for fetal monitoring.

Indicator	Title	2014 CDHB Rate	2015 CDHB Rate	Change from 2014	Higher or lower than national average	National Average
Indicator 5 - Induction of labour		4.1%	4.3%	+0.2%	↓	5.7%

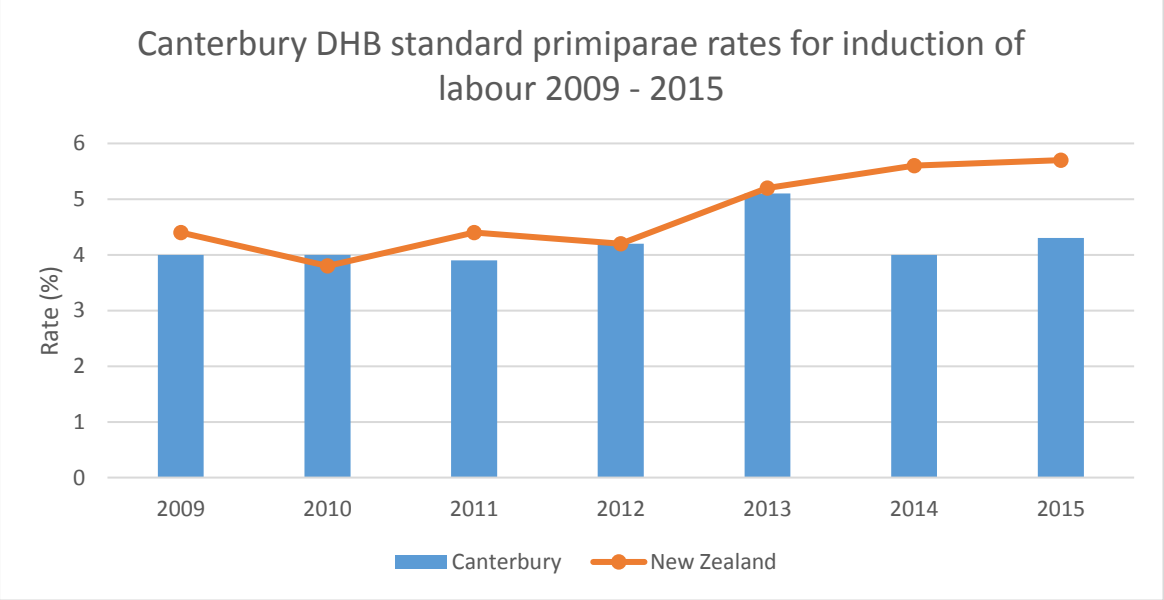


FIGURE 12 CDHB RATES FOR INDUCTION OF LABOUR 2009 - 2015

Comment:

The CDHB rate of induction of labour has remained relatively static and is below the national average of 5.7%. We continue to monitor our rates and have audited our compliance with our induction of labour guideline which was reviewed in 2014. Figure 12 demonstrates our rates since 2009 and shows the reduction of induction of labour rate following the review of the guideline and introduction of CERVADIL® (dinoprostone, 10 mg).

Indicators 6 - 9

Degree of damage to the lower Genital Tract

These indicators which are about the degree of damage to the lower genital tract of the mother demonstrate that this has not increased for the Canterbury population.

Indicator	Title	2014 CDHB Rate	2015 CDHB Rate	Change from 2014	Higher or lower than national average	National Average
Indicator 6 - Intact Lower Genital Tract		30.8%	30.0%	-0.8%	↑	28.3%

Comment:
The rate of intact lower genital tract for the SP group has remained static (2009 = 34.6%, 2010 = 29.7%, 2011 = 33.4%, 2012 = 30.0%, 2013 = 28.8%, 2014 = 31.1%) 2015 data showed that we are 2.5% below the national average. This rate is comparable with other tertiary centres.

Indicator	Title	2014 CDHB Rate	2015 CDHB Rate	Change from 2014	Higher or lower than national average	National Average
Indicator 7 - Episiotomy without third and fourth degree tear		20.1%	22.5%	+2.4%	↑	22.2%

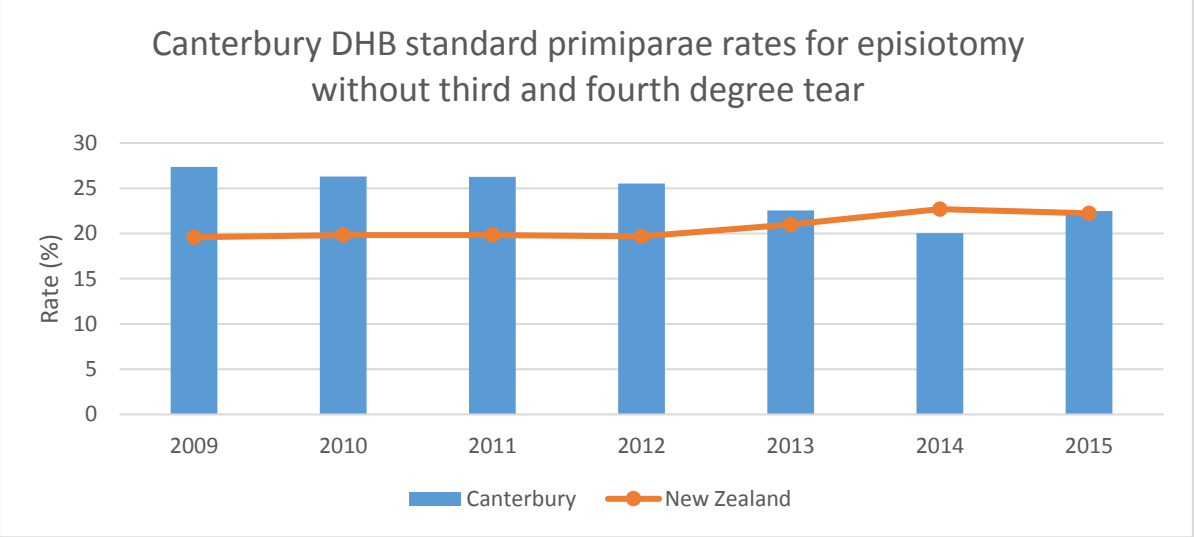


FIGURE 13 CDHB RATES FOR EPISIOTOMY WITHOUT THIRD AND FOURTH DEGREE TEAR

Comment:

2015 data showed a 2.4% increase in episiotomy rates (without third and fourth degree tear) from 2014. The 4.3% increase in instrumental rate is most likely a contributory factor and while we are consistent with the national average, we will continue to monitor our rates, and identify any quality work that could improve our outcomes.

Indicator	Title	2014 CDHB Rate	2015 CDHB Rate	Change from 2014	Higher or lower than national average	National Average
Indicator 8 - Third or Fourth Degree Tear without episiotomy		5.0%	6.1%	+1.1%	↑	4.4%

Comment:

This indicator has shown a steady and consistent increase in third and fourth degree tear rates since 2009.

We are aware that the consistent increase is multifactorial and have reviewed the literature around this topic. It was anticipated in the last report that the development of the CDHB 'Third and fourth degree tear' guideline (2014) would directly contribute to a reduction in third and fourth degree tear rates. On reviewing the 2015 data, we can surmise that revising the guideline has improved identification and classification of perineal trauma; which has meant more third and fourth degree tears are correctly reported, consequently increasing our rates.

As a DHB we are above the national average by 1.7% and as such an outlier. This has been included as continued work in our priorities and action plan for 2017/18, following an extensive audit of 2016 data, as described further on page 54.

Indicator	Title	2014 CDHB Rate	2015 CDHB Rate	Change from 2014	Higher or lower than national average	National Average
Indicator 9 - Episiotomy with third or fourth degree tear		1.3%	1.5%	+0.2%	Static	1.5%

Comment:

This clinical indicator increased slightly to 1.5% in 2015. While this rate is consistent with the national average a review of our local data from 2009 – 2016 (as demonstrated in Figure 16), shows that we have had a consistent and increasing rate of episiotomy with third and fourth degree tears. This indicator has been included under the umbrella of the third and fourth degree tear project work and has been carried through to the priorities and action plan for 2017/18.

Indicator	Title	2014 CDHB Rate	2015 CDHB Rate	Change from 2014	Higher or lower than national average	National Average
Indicator 10 - General Anaesthetic for Caesarean Section		4.9%	7.2%	+2.3%	↓	8.8%

Comment:

Canterbury rates for women having a General Anaesthetic (GA) for caesarean section within the SP group remains lower than the national average, (2009 = 6.1%, 2010 = 5.1%, 2011 = 5.1%, 2012 = 4.7%, 2013 = 4.8%, 2014 = 4.9%).

In 2015 the rate increased by 2.3%. This was further reviewed by one of our senior anaesthetists to consider if there was any significance in the data.

As expected the elective caesarean GA rate was virtually the same for 2014 and 2015 (2.5% and 2.8%). This is likely to reflect 1) the nature of a planned surgery and that 2) the in-hours list is senior anaesthetist-led.

In 2015, 105 women had a GA associated with emergencies although 8 of those were for a return to theatre after the initial surgery. The emergency caesarean GA rate was thus 97/988 = 9.8%. In 2014 the rate was 5.2%, which accounts for the overall increase in GA rate for all caesarean between 2014 and 2015. Although this rate increase looks significant, the GA section rate had fallen from a rate similar to 2015 to a low in 2013/14. A review of the 2016 data will give a better indication of any trends that will need further investigation.

Indicator	Title	2014 CDHB Rate	2015 CDHB Rate	Change from 2014	Higher or lower than national average	National Average
Indicators 11 and 12 - Blood transfusion after Caesarean Section and Vaginal Birth		3.0% (Caesarean) 2.1% (vaginal)	3.5% (Caesarean) 2.3% (vaginal)	+0.5% (Caesarean) +0.2% (vaginal)	↑ ↑	2.9% (Caesarean) 2.0% (vaginal)

Comment:

This clinical indicator uses blood transfusion as a broad measure of excessive blood loss and a measure of severe, life threatening haemorrhage.

In 2015 the rate for women requiring blood transfusion following caesarean section was slightly above the national average but not statistically significant and comparable to rates in previous years.

The rate of blood transfusions following vaginal birth shows a similar trend and an audit of all large post-partum haemorrhages (PPH) (>1500mls) was carried out in 2017.

Recommendations from the audit included developing a pro forma to aid in the documentation of measuring blood loss during and following a PPH. The form was published in July 2017 and is currently being trialled for three months.

Indicator	Title	2014 CDHB (n)	2015 CDHB (n)	Change from 2014	National Average (n)
Indicator 13 - Diagnosis of eclampsia		(n = 3)	(n = 2)	-(n = 1)	(n = 26)

Comment:

Eclampsia was diagnosed 26 times in 2015 nationally, 2 of these were made in Canterbury. It was noted by the NMMG that there had been a sharp increase nationally from previous years (2012 = 12, 2013 = 18, 2014 = 18).

As a DHB our number of cases has decreased and has remained consistent with previous year's data.

Indicator	Title	2014 CDHB (n)	2015 CDHB (n)	Change from 2014	National Average (n)
Indicator 14 - Peripartum Hysterectomy		(n=0)	(n = 4)	+(n=4)	(n = 30)

Comment:

In 2015 4 cases of peripartum hysterectomy were reported in the New Zealand Maternity Clinical Indicators 2015. A review of local data showed that there 5 cases were clinically coded as peripartum hysterectomy. Each case has been reviewed and appropriate management of care was noted for each case.

Indicator	Title	2014 CDHB (n)	2015 CDHB (n)	Change from 2014	National Average (n)
Indicator 15 - Mechanical ventilation		(n=1)	(n = 3)	+(n=2)	(n = 13)

Comment:

This clinical indicator is used to measure the number of women admitted to ICU and requiring over 24 hours of mechanical ventilation, anytime during the pregnancy or postnatal period. In 2015 there were 3 cases recorded and subject to local multidisciplinary review.

In May 2016 the Maternal Morbidity Working Group (MMWG) was established. This is a subgroup of the Perinatal and Maternal Mortality Review Committee (PMMRC) with the objective of reviewing severe maternal morbidity in New Zealand. All Canterbury cases of pregnant or postnatal women requiring ICU admissions are reported to the MMWG for multidisciplinary review at a regional level.

Indicator	Title	2014 CDHB Rate	2015 CDHB Rate	Change from 2014	Higher or lower than national average	National Average
Indicator 16 - Tobacco use during the postnatal period		11.3%	10.4%	-0. 9%	↓	12.0%

Comment:

This indicator monitors maternal tobacco use at two weeks postnatal. Our 2015 rate demonstrates that we are below the national average of 12.0%. The national rate has continued to decrease steadily as has Canterbury's rate.

Smoking cessation continues to be a focus for our DHB and in May 1 2017 Te Hā – Waitaha / Stop Smoking Canterbury launched a pilot pregnancy incentives programme.

Indicator	Title	2014 CDHB Rate	2015 CDHB Rate	Change from 2014	Higher or lower than national average	National Average
Indicator 17 - Maternal Obesity (This clinical indicator is based on women giving birth who had a BMI over 35 at registration for maternity care)		7.3%	7.3%	Static	↓	8.2%

Comment:

Maternal obesity is associated with complications during pregnancy and birth, including gestational diabetes. Implications for the baby also exist with increased risk of obesity and cardiovascular issues.

In 2015 CDHB rates for woman registering for care with a BMI greater than 35 was 7.3%. This remains below the national average and static with previous years (2013 = 7.5, 2014 = 7.3). There is a larger piece of work occurring in this area and maternity is part of these discussions which are focussed on public health and general practice input into this area for our community.

Indicator	Title	2014 CDHB Rate	2015 CDHB Rate	Change from 2014	Higher or lower than national average	National Average
Indicator 18 - Pre-term births (under 37 week's gestation)		7.9%	8.2%	+0.3%	↑	7.3%

Comment:

The rate of pre-term births for the CDHB had remained relatively static since 2009 (2009 = 7.9%, 2010 = 7.6%, 2011 = 8.0%, 2012 = 8.4%, 2013 = 8.0%, 2014 = 7.9%). This is comparable with other tertiary facilities in NZ.

Pre-term births impact on maternity resources in terms of increased care, and also on our neonatal services where additional specialist staff input or admission may be required. There is opportunity to explore this further and review the management of, for example, more complex cases that may necessitate early induction of labour, to ensure planned care is consistent despite other factors such as changes in on call obstetric teams.

Indicators 19 and 20

Small for gestational age at term

These indicators are designed to measure when intervention may have been appropriate and was not carried out. Timely detection of poor fetal growth may reduce the risk of stillbirth by presenting the opportunity for enhance surveillance and iatrogenic early birth.

Indicator	Title	2014 CDHB Rate	2015 CDHB Rate	Change from 2014	Higher or lower than national average	National Average
Indicator 19 - Small babies at term (37 – 42 weeks gestation)		2.6%	2.6%	Static	↓	3.0%

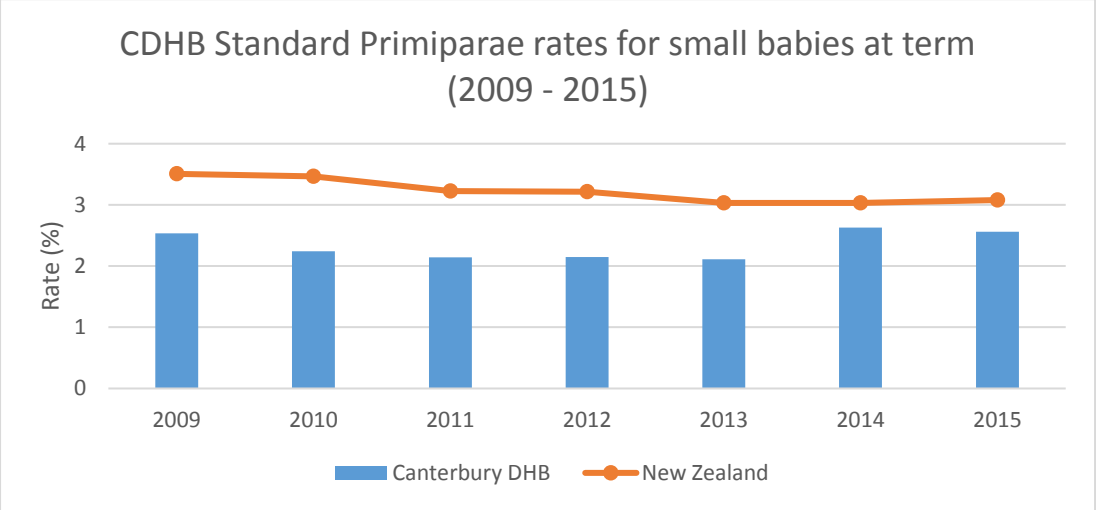


FIGURE 14 CDHB RATES FOR SMALL BABIES AT BIRTH 2009 – 2015

CDHB rate remains below the national average of 3%, and remains consistent with previous data.

Indicator	Title	2014 CDHB Rate	2015 CDHB Rate	Change from 2014	Higher or lower than national average	National Average
Indicator 20 - Small babies at term (Born at 40 – 42 weeks gestation)		40.4%	37.4%	-3.0%	↓	39.4%

Comment:

The rate for small babies at term (40 – 42 weeks) for our DHB remains below the national average of 39.4%. 2015 data shows a decrease of 3.0% from last year's rate of 40.4%.

Indicator	Title	2014 CDHB Rate	2015 CDHB Rate	Change from 2014	Higher or lower than national average	National Average
Indicator 21 - Babies requiring respiratory support born at 37+ weeks gestation		1.8%	1.9%	+0.1%	Static	1.9%

Comment:

Our 2015 rate remains consistent with previous years (2011 = 1.2%, 2012 = 1.7%, 2013 = 1.2%, 2014 = 1.8%), and at or below the national average.

Unexpected neonatal outcomes or management outside of our maternity clinical guidelines are reviewed by the multidisciplinary team.

Conclusion

The indicators show a high level of safety for both mothers and babies in Canterbury and that these continue to be above average for New Zealand. Data for almost all the indicators show continuing improvement compared to the previous 2014 figures.

Review of the maternity clinical indicators and local data by the multidisciplinary team have identified areas for further review, and these are included in the 2017/18 priorities and action plan.

There is a need to carry on our work to reduce the number of instrumental births and to continue with planned projects aimed at increasing our spontaneous vaginal birth rate.

The 2014 and 2015 clinical indicators showed an upward trend of third and fourth degree tears with and without episiotomy. This multidisciplinary project which has already commenced has also been rolled over to our 2017/18 plan.

Data Analysis

The data in this section is from local Canterbury DHB Maternity data sources and shows 2014 and 2015 in comparison, with percentage increase or decrease noted. Data here is counted either in terms of all 'deliveries' which is a count of mothers (as opposed to a count of exclusively standard primiparae) as used by the New Zealand Maternity Clinical Indicators 2015, (MoH, 2016) or in terms of 'births' which is a count of babies.

Key: *2014-2015 increase* ▲ *2014-2015 decrease* ▼ *No change* =

TABLE 8 GESTATION AT BIRTH 2014 AND 2015 CANTERBURY DHB

Gestation at Birth	Number of Births 2014		Number of Births 2015	
Extremely preterm (<28 weeks)	25	0.4%	33	0.6%
Very preterm (28-31 weeks)	45	0.8%	44	0.8%
Moderate preterm (32-33 weeks)	23	0.4%	30	0.5%
Late preterm (34-36 weeks)	389	6.9%	434	7.4%
Term (37-41 weeks)	5122	90.2%	5222	89.1%
Prolonged (>42 weeks)	74	1.3%	97	1.7%
Total	**5678**	**100%**	**5860**	**100%**

= The percentage of births in each gestational category has remained almost unchanged.

TABLE 9 TYPE OF LABOUR 2014 AND 2015 CANTERBURY DHB

Type of labour	Number of deliveries 2014		Number of deliveries 2015	
Spontaneous	3160	56.3%	3222	56.0%
Induced	967	17.2%	1006	17.5%
Artificial rupture of membranes	286	5.1%	290	5.0%
Augmented	365	6.5%	382	6.6%
Did not labour	832	14.9%	854	14.8%
Total	**5610**	**100%**	**5754**	**100%**

= Data remains static for 2015, with no change in spontaneous labour rates.

TABLE 10 INDUCTION OF LABOUR 2014 AND 2015 CANTERBURY DHB

Induction of labour	Number of deliveries 2014		Number of deliveries 2015	
No	4277	76.2%	4543	79.0%
Yes	1333	23.8%	1211	21.0%
Total	**5610**	**100%**	**5754**	**100%**

= The proportion of women who had their labours induced has decreased by 2.8% since 2014. A review of our Induction of Labour maternity guideline occurred in 2014, this included a review of timing/gestation for induction and the introduction of CERVADIL® (dinoprostone 10 mg). An audit of our revised induction of labour guideline was completed in 2016 which showed overall compliance with our criteria for induction of labour.

Table 11 Method of Birth 2014 and 2015 Canterbury DHB

Method of Birth	Number of Births 2014		Number of Births 2015	
Vaginal	3115	54.9%	3096	52.8%
Vaginal Water Birth	272	4.8%	339	5.8%
Vacuum Extraction	270	4.8%	301	5.1%
Forceps	356	6.3%	387	6.6%
Caesarean Section	1665	29.3%	1737	29.6%
Total	**5678**	**100%**	**5860**	**100%**

There was a 2.1% decrease in the rate of vaginal birth, and a 1% increase in vaginal water birth. This decrease is consistent with the NZ Maternity Clinical Indicators 2015 (MoH, 2016) and has been included in our priorities and action plan for 2017/18. Caesarean section rate remains static, but there has been an increase in instrumental births that will also be reviewed further as a part of our quality work.

Table 12 Breech Births 2014 and 2015 Canterbury DHB

Breech Birth	Number of Births 2014		Number of Births 2015	
No	5447	95.9%	5600	95.6%
Yes	231	4.1%	260	4.4%
Total	**5678**	**100%**	**5860**	**100%**

There was very little change in the percentage of breech births between 2014 and 2015. Of the total breech births only 28 (0.48%) were vaginal births and of these only 11 (0.19%) were term gestation (37-41 weeks).

Table 13 Anaesthetic 2014 and 2015 Canterbury DHB

Anaesthetic	Number of deliveries 2014		Number of deliveries 2015	
None	2064	36.8%	2214	38.5%
Local	836	14.9%	774	13.5%
Pudendal Block	59	1.1%	67	1.2%
Epidural	1143	20.4%	1141	19.8%
Spinal/Epidural	130	2.3%	106	1.8%
Spinal	1275	22.7%	1315	22.9%
Sublimaze IV (fentanyl)	1	0.0%	5	0.1%
Caudal			3	0.1%
General	81	1.4%	119	2.1%
Mixed general/Epidural	6	0.1%	5	0.1%
Other	15	0.3%	5	0.1%
Total	**5610**	**100%**	**5754**	**100%**

There was an increase in general anaesthesia, which is consistent with the NZ Maternity Clinical Indicators 2015 (MoH, 2016), this has been reviewed by the senior anaesthetic team and any recommendations will be included in our ongoing quality work. This has been added to our priorities and action plan for 2017/18. Other anaesthetic rates remain relatively unchanged.

TABLE 14 PERINEAL TEARS 2014 AND 2015 CANTERBURY DHB

Perineal Tears	Number of deliveries 2014		Number of deliveries 2015	
Intact	2871	51.2%	2952	51.3%
First Degree Tear	758	13.5%	821	14.3%
Second Degree Tear	1113	19.8%	1070	18.6%
3a Degree Tear	83	1.5%	73	1.3%
3b Degree Tear	43	0.8%	55	1.0%
3c Degree Tear	17	0.3%	20	0.3%
4th Degree Tear	8	0.1%	9	0.2%
Episiotomy	717	12.8%	754	13.1%
Total	**5610**	**100%**	**5754**	**100%**

The data demonstrates a slight increase in third and fourth degree tears since 2014. A review of our outcomes over a longer period shows that this increase is consistent each year and we are an outlier when comparing to national rates, as shown in Figures 15 and 16. A quality project is in progress to review this further, and a large retrospective audit of 2016 third and fourth degree tears has been completed. This has been included as continued work in our priorities and action plan for 2017/18. Other data sets remain static.

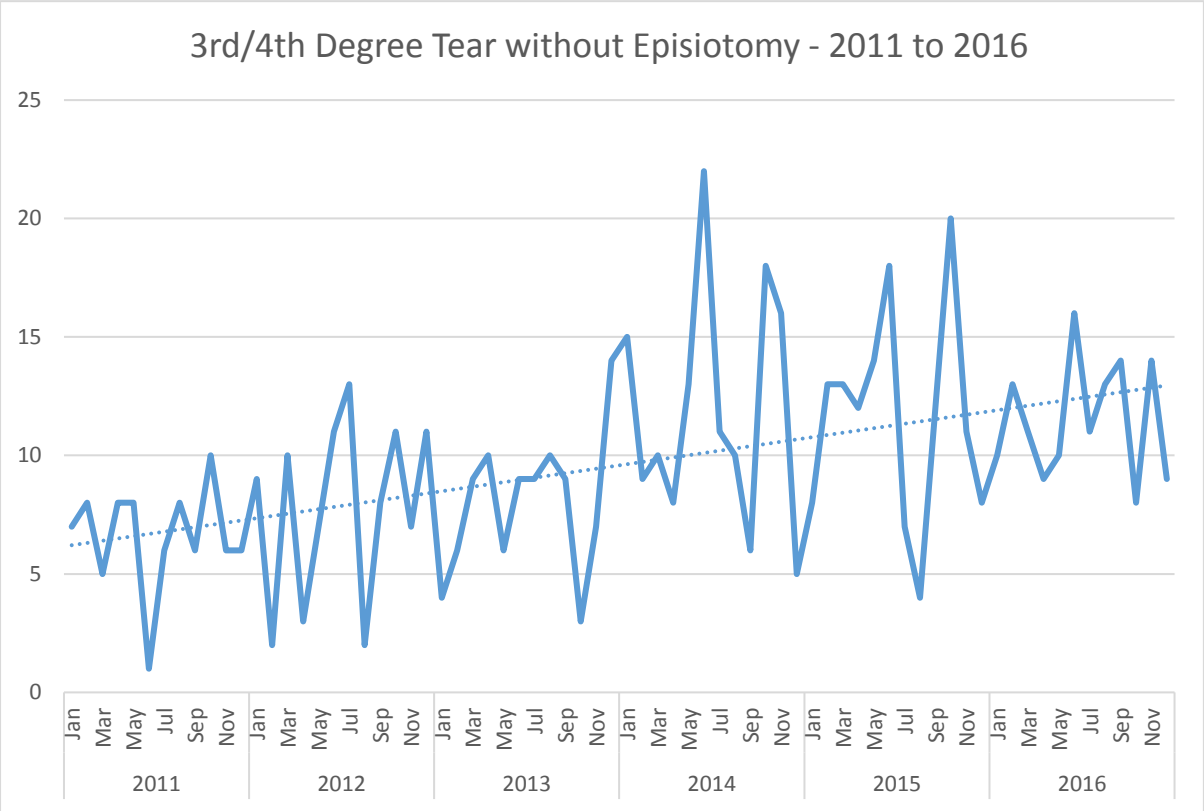


FIGURE 15 CDHB RATES FOR THIRD AND FOURTH DEGREE TEARS WITHOUT EPISIOTOMY 2011-2016

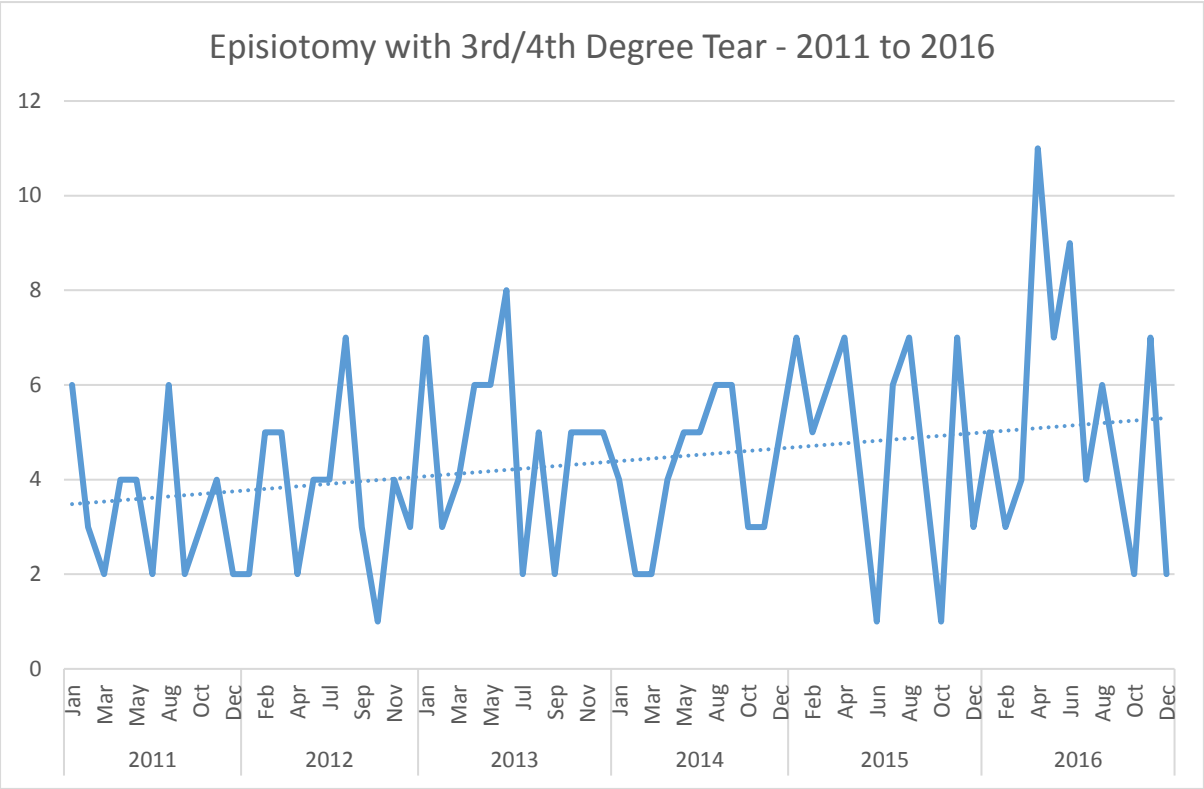


FIGURE 16 CDHB RATES FOR THIRD AND FOURTH DEGREE TEARS WITH EPISIOTOMY 2011-2016

TABLE 15 BLOOD LOSS AT DELIVERY 2014 AND 2015 CANTERBURY DHB

Blood Loss at Delivery	Number of deliveries 2014		Number of deliveries 2015	
<1000mL	5196	92.6%	5323	92.5%
1000ml - 1500mL	301	5.4%	319	5.5%
>1500mL	113	2.0%	112	1.9%
Total	**5610**	**100%**	**5754**	**100%**

Overall there was no significant change in blood loss at delivery compared to 2014.

TABLE 16 BLOOD TRANSFUSION REQUIRED 2014 AND 2015 CANTERBURY DHB

Blood Transfusion Required	Number of deliveries 2014		Number of deliveries 2015	
No	5462	97.4%	5612	97.5%
Yes	148	2.6%	142	2.5%
Total	**5610**	**100%**	**5754**	**100%**

The rates were static between the two years in regard to the percentage of women receiving blood transfusion.

Table 17 Admission to Neonatal Intensive Care 2014 and 2015 Canterbury DHB

Admission to Neonatal Intensive Care	Number of Babies 2014		Number of Babies 2015	
No	4827	85.0%	5075	86.6%
Yes	851	15.0%	785	13.4%
Total	**5678**	**100%**	**5860**	**100%**

There was a 1.6% reduction in the number of babies admitted to Neonatal Intensive Care in 2015. This is consistent with previous years. There was a 1.9% decrease in 2014.

Table 18 Neonatal Outcomes 2014 and 2015 Canterbury DHB

Neonatal Outcomes	Number of Babies 2014		Number of Babies 2015	
Well Neonates	5668	99.8%	5853	99.9%
Neonatal Death	10	0.2%	7	0.1%
Total	**5678**	**100%**	**5860**	**100%**

There was a reduction in the number of neonatal deaths in 2015 compared to 2014. Comparing this to 2013 data overall there is no significant change to neonatal outcomes.

Table 19 Small for Gestation Age 2014 and 2015 Canterbury DHB

Small for Gestational Age	Number of Babies 2014		Number of Babies 2015	
No	5003	88.1%	5171	88.2%
Yes	675	11.9%	689	11.8%
Total	**5678**	**100%**	**5860**	**100%**

Data for both 2014 and 2015 showed little change in babies born small for gestational age.

Table 20 Feeding Method 2014 and 2015 Canterbury DHB

Feeding Method	Number of Babies 2014		Number of Babies 2015	
Artificial	165	2.9%	144	2.5%
Exclusive	4258	75.0%	4251	72.5%
Fully	48	0.8%	31	0.5%
Nil	16	0.3%	11	0.2%
Partial	727	12.8%	904	15.4%
Not documented	464	8.2%	519	8.9%
Total	**5678**	100%	**5860**	**100%**

In 2014 there was a 2.3% reduction in the number of babies fully breastfed and a 2.2% increase in the number of babies partially breastfed as reflected in Figure 17. Over a period of five years this decrease has been slight but consistent. Artificial feeding rates have remained static.

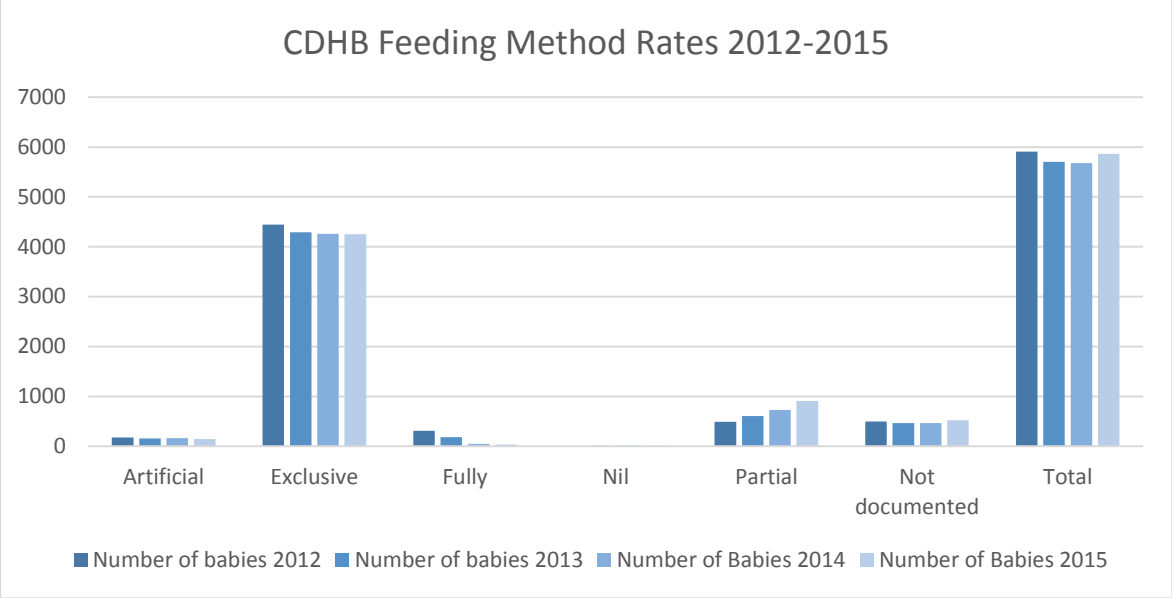
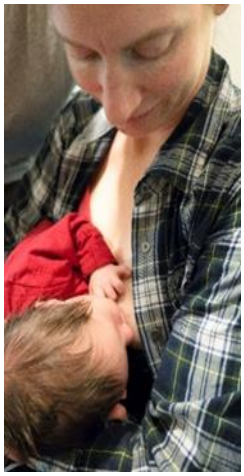


FIGURE 17 CDHB FEEDING METHOD RATES FOR 2012-2015



MQSP Priorities and Action Plan 2017/18

As a DHB we have identified MQSP priorities for 2017/2018. We have taken into consideration the National Maternity Monitoring Group (NMMG) priorities for monitoring and investigation, in lieu of a final work plan from the group, as per the National Maternity Monitoring Group Annual Report (NMMG, 2016). We have also reviewed and included any priorities and recommendations from the Perinatal and Maternal Mortality Review Committee (PMMRC) and Ministry of Health (MoH).

In addition we have considered and included ongoing work following a complete stocktake of current maternity projects and also included new work that is planned to commence over the next year.

These priorities were endorsed by the Canterbury DHB & West Coast DHB Maternity Clinical Governance Committee and any 2016/17 priorities still underway were also carried over to the 2017/18 plan.

	Initiative/Priority	Action	Expected Outcome	Measure
1.	Maternity consumers are engaged and actively involved in the work of the DHB MQSP (1 of 2016/17 priorities and action plan) NMMG Work plan (2 of 2016/17 priorities and action plan) NMMG Work plan	• Continue to develop working relationships with consumer organisations that align with maternity services • Ensure Tangata Whenua are involved in the maternity service quality improvement processes • Consider development of focus groups/roadshows to capture consumer feedback/experiences and identify quality improvement • Review feedback from women about their care and how to improve quality service provision as a result. This includes the review of concerns and complaints as well as any positive feedback • Review information for women, local web-based and written information for content, availability, languages appropriate for the community demographics	• Regular forums with community groups and maternity consumers • Maternity Consumer Council contribute in tangible ways to improvements in the service • Quality initiatives and improvement projects are identified from consumer feedback to improve the consumer experience • Consumer involvement is representative of our community • All information provided to women is reviewed by its due date and readily available • Priority consumer groups, i.e. Maori, young mothers and women with mental health issues or disabilities are engaged in quality activities at all levels	• At least 4 meetings per annum with community groups and maternity consumers • Women report satisfaction about the service and increased visibility both within the service and in the community about maternity services

	Initiative/Priority	Action	Expected Outcome	Measure
2.	Engage in the 'Choosing Wisely' campaign to review evidence for tests and procedures e.g. primary ultrasound, laboratory tests, induction of labour timing etc. NMMG Work plan	• Develop a working group to create agreed clinical pathways and information for women about primary ultrasound timing • Review equity of access for primary obstetric ultrasounds • Work with consumers to develop resources for women around best practice	• Engagement with community providers and pathway developed to align with best evidence • Consumers are aware of resources available	Documents are up to date and easily accessible by consumers and health professionals
3.	Support the ratification of national maternity clinical guidelines and implementation of existing guidelines (4 of 2016/17 priorities and action plan) NMMG Work plan	• Review published national maternity clinical guidelines and implement these • Review accessibility of documents to staff	Guidelines are implemented	Documents are up to date and easily accessible to staff
4.	Continue to review the NZ Clinical Indicator data and monitor DHBs' responses to variation (5 of 2016/17 priorities and action plan) NMMG Work plan	• Note where CDHB is an outlier in the clinical indicator data and in a multidisciplinary forum determine the priority areas to focus on for 2017/18 • Evaluate whether clinical audits provide information to assist with quality improvement data • Formulate action plans to address areas for improvement, particularly with outlier clinical indicators, specifically, Spontaneous vaginal birth rate/ Instrumental birth rate/Episiotomy/3rd and 4th degree tear rate/Blood transfusion rate	• Data is used to evaluate the effectiveness of previous actions and plan future actions • Capture quality improvement activity resulting from comparing DHB outcomes to national trends	There is evidence of a direct correlation between clinical indicator data and relevant quality improvement initiatives and/or changes in practice

	Initiative/Priority	Action	Expected Outcome	Measure
5.	Continue to increase use of primary birthing units (8 of 2016/17 priorities and action plan) NMMG Work plan	• Review the content of promotional resources for primary birthing units and the likely effectiveness of the methods being used e.g. web based virtual tours • Review the timeliness of women receiving information about birth location options • Promote/incentivise LMC's using primary birthing units • Offer orientation etc. to LMC midwives currently reluctant to use primary birthing units • Explore current reasons given for not using primary birthing units and address the 'myths'	Increase in number of women choosing to birth or have postnatal care in DHB primary birthing facilities	Bed occupation and birth location indicates increasing usage of primary birthing units
6.	Continue to improve the screening and referral rates of women for family violence (10 of 2016/17 priorities and action plan)	• Regular training is available and mandatory for CDHB employed staff working in maternity services • Funded regular training is available for self-employed health professionals through the CDHB and New Zealand College of Midwives	• Health professionals working in the maternity setting have all received training and are confident to screen for family violence • Health professionals are familiar with the appropriate referrals process and can access the correct pathways	Evidence of audits shows: • All staff have received training within the last year • 70% of pregnant women accessing DHB maternity services are asked questions about family violence

	Initiative/Priority	Action	Expected Outcome	Measure
7.	Embedding of the CDHB Newborn Observation Chart and Newborn Early Warning Score (NEWS) (14 of 2016/17 priorities and action plan)	Continued evaluation, validation and refinement of the CDHB Newborn Observation Chart and Newborn Early Warning Score (NEWS) as per the quality PDCA cycle. Noting any unforeseen impacts of the NEWS on care of babies and whether this is aiding decision making.	• The Newborn Observation Chart is used for all neonates (outside NICU) and the NEWS score becomes part of the way of communicating the health status • Appropriate transfer of neonates to NICU for further assessment and management	• An audit of the CDHB NEWS demonstrates accuracy of scoring in 95% of documented observations • An audit of babies who have scored 3 on assessment and completion of the CDHB NEWS demonstrates they have been appropriately referred to the Neonatal team for immediate review/transfer to the Neonatal Unit
8.	Provide specialist clinics for pregnant women in locations other than Christchurch Women's Hospital	Move regular education and specialist antenatal and postnatal clinics to other locations, e.g. Burwood Hospital	• Improve service satisfaction with reduced pressure with car parking, travel to and from the city cent • Reduce perception of Christchurch Women's Hospital as the only place to birth	Women report satisfaction about the service
9.	By 2021, 90% of pregnant women are registered with a Lead Maternity Carer in the first trimester, with an interim target of 80% by 2019, with equitable rates for all population groups Better Public Services: A Good Start to Life, 2017 Maternity Clinical Indicators (2015), 2016	Engage with Maternity Consumer Forum to identify opportunities to promote early registration with 'hard to reach' groups	Increased percentage of women are registering with a Lead Maternity Carer	Regular reporting demonstrates that there is an increase in percentage of women registering with a Lead Maternity Carer in the first trimester

	Initiative/Priority	Action	Expected Outcome	Measure
10.	The criteria for admission to the Acute Observation Unit on Birthing Suite are agreed and implemented Maternal Morbidity Working Group, 2016	• Develop a comprehensive and consistent criteria for admission to the Acute Observation Unit • Work collaboratively with other tertiary units to develop a common criteria	• Notifications are accurately made to the Maternal Morbidity Working group • There is a consistent approach for the place of care for an unwell or deteriorating antenatal or postnatal woman	Accurate notifications are made to the Maternity Morbidity Working Group for reporting, review and analysis
11.	Improve the communication in the inpatient maternity areas, between women and staff and also between all staff over all shifts. Improving communication between staff and Lead Maternity Carer to reflect the woman's intended plan and any changes. Releasing Time 2 Care project	• Develop and implement bedside boards • Introduce bedside handover • Develop and implement handover tools • Review of current multidisciplinary care pathways	• Consistent and efficient handover of care between clinicians • Realigning women centred care as a part of the communication between shifts • Improved information and communication for women admitted to the Maternity ward with babies on the Neonatal Unit	• Reduction in complaints through verbal and written feedback from women • Reduced incidents around poor communication and delay or omission in cares
12.	90% of pregnant women who identify as smokers upon registration with a DHB employed midwife or Lead Maternity Carer are offered brief advice and support to quit smoking MoH Health Targets, 2016	Te Hā – Waitaha / Stop Smoking Canterbury pregnancy incentives pilot programme evaluated.	Increased percentage of pregnant women who identify as smokers upon registration with a DHB-employed midwife or Lead Maternity Carer are offered brief advice and support to quit smoking	Regular reporting demonstrates that there is an increase in the percentage of pregnant women who identify as smokers upon registration with a DHB employed midwife or Lead Maternity Carer are offered brief advice and support to quit smoking

	Initiative/Priority	Action	Expected Outcome	Measure
13.	Promotion and coordination of safe sleep education and resources	• Complete safe sleep pathway that extends across the health systems for all health care providers • Continue to develop safe sleep spaces for inpatient maternity areas • Liaise with South Island Alliance safe sleep coordinator to develop processes for easy referral and access to safe sleep spaces for vulnerable families	• Identification of vulnerable families are followed through with education on safe sleep and a safe sleep space • Resources are up to date and readily available for health professionals to provide to women	Evaluation via survey feedback demonstrates that health professionals are able to navigate the safe sleep pathway and provide health advice and referral as appropriate

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