West Coast District Health Board
Te Poari Hauora a Rohe o Tai Poutini

Maternity Quality & Safety Programme

Annual Report 2017 -18

Cover Photo: Jarad & Rachel Roberts with baby Ridge born 23rd August 2018

Photo Courtesy: Roberts Family and Lydia Nimmo Photography

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

Anita Hyde – Maternity Services Consumer representative

Gloriavale Christian Community

Karyn Bousfield - Director of Nursing, West Coast DHB; Chair, CDHB & WCDHB Maternity Clinical Governance Committee

Norma Campbell – Director of Midwifery, Canterbury & West Coast DHBs

Catarina Morais – Clinical Midwife Manager, West Coast DHB

Meike Siebelink – LMC, Buller Birthing Practice

Linda Monk - Midwifery Educator, WCDHB

Ravi Vemulapalli - HoD, Obstetrics & Gynaecology, WCDHB

Jenni Stephenson - Project Manager, Planning and Funding, WCDHB

Silvie Saskova - PA to Director of Nursing & Midwifery, WCDHB

Desma Reedy – Social Worker, Maternity Services

Vicki Piner - Maternity Quality and Safety Programme Coordinator, WCDHB

West Coast DHB Maternity Operations Group members

West Coast DHB Maternity Quality and Safety Group members

Canterbury DHB & West Coast DHB Maternity Clinical Governance Committee members
Planning and Funding staff, West Coast DHB

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

Disclaimer

Foreword

The West Coast District Health Board is pleased to present the Maternity Quality and Safety Programme Annual Report for 2017/18.

The West Coast has had a busy year again this year building on the work of the past years. The report last year has been shared widely and has prompted more discussion about how we can continue to improve the maternity system for our mothers and their babies. These discussions have sat alongside the wider discussions within our DHB about the challenges of a rural / remote rural DHB the length of the South Island and how we provide health services equitably. In this case we have been discussing how we provide maternity services and how we have to develop this work capacity among other colleagues particularly in our remotest parts of the DHB such as Haast as an example.

We also continue to work closely with our colleagues in Canterbury DHB and have relooked at our clinical governance and operational governance model this year so we truly oversee our own business on the West Coast. Where we have combined has been the sharing of the Guidelines work this year with the West Coast team now being on the Guidelines Committee in Canterbury and therefore aware of and contributing to all new trans alpine guidelines and what the difference in the application of them might be for the West Coast. This is also occurring more frequently for education updates as well as support for the managers, educator and others involved in maternity. We are also looking at how to engage with more locum cover for our O&G service from Canterbury colleagues, but this is still being discussed. The Canterbury and West Coast Maternity Quality and Safety Programmes have also separated this year to ensure that the unique nature of both DHBs and how their services are provided and we are confident this will be reflected in how our respective reports now also look.

The Maternity Quality and Safety Programme continues to add significant value to our maternity system on the West Coast. Considerable work has commenced in reviewing the clinical outcome data and lessons that can be learned to support the clinicians making the decisions in this remote DHB. These reviews of outcomes are now happening regularly and generating debate about how things might have been done differently by any or all of the parties involved. This is a sophisticated discussion that can occur on the West Coast because it is a small workforce who are building their trust across the professions assisted by strong clinical leadership locally. This report starts to discuss some of these projects and also the completion of projects we commenced in the previous year.

We are looking forward to the work programme of 2018/19 as we take on some ambitious projects- such as developing a functioning consumer council across the whole of the West Coast to recognise the regional variations. We are also undertaking a review of the West Coast mental health pathway now it is operationalised and how we can actively engage more effectively with Tangata Whenua. These projects in the coming year would not have been able to be progressed without the hard work of the team involved in the Maternity Quality and Safety programme and the strong support of the wider workforce for their work.

Thank you very much to our MQSP Coordinator Vicki Piner, our new Midwife Manager Catarina Morais and O&G lead Ravi Vermulapalli who enthusiastically keep us all motivated and focused on improving our maternity services on system the West Coast. I hope you enjoy reading our report.

Norma Campbell
Director of Midwifery, Canterbury and West Coast DHB

Canterbury and West Coast
MATERNITY CARE

Table of Contents

Photos

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	Number of pregnancies a woman has had.
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.
Nulliparous	Medical term for a woman who has never given birth; also applies to women who have given birth to a stillborn baby or a baby that did not survive outside the womb.
Parity	Number of previous births a woman has had.
Primiparous	A woman who has given birth once; 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.

PHOTO 1 HANNAH FITZGIBBON & BABY ZOOEY JEAN FITZGIBBON

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
LMC	Lead Maternity Carer
MCGG	Maternity Clinical Governance Group
MIRG	Maternity Incident Review Group
MOG	Maternity Operations Group
MOH	Ministry of Health
MQSG	Maternity Quality & Safety Group
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
SGA	Small for Gestational Age
SUDI	Sudden Unexpected Death in Infancy
SMO	Senior Medical Officer
UNHSEIP	Universal Newborn Hearing Screening Early Intervention Programme
VBAC	Vaginal birth after caesarean
WCDHB	West Coast District Health Board
W&CH	Women's and Children's Health

Overview

Background

This is the sixth West Coast 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

The West Coast DHB is committed to improving the quality and safety of maternity services for consumers.

The Canterbury DHB and West Coast 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.

Purpose

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

- Improvements in relation to the overall aims and objectives
- Achievements against the quality improvement goals set for 2017/18
- 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 2016 ;
- Response to consumer feedback and ongoing consumer involvement
- Quality initiative goals for 2018/19

Canterbury and West Coast MATERNITY CARE

Anita - Maternity Services Consumer

Hi, I'm a busy working mum of two pre-schoolers, who loves getting involved in this fantastic community we choose to live in. Alongside my role of Maternity Consumer Representative, I am also on the Greymouth Parents Centre Committee, a trained Mum4Mum, and Secretary for the Greymouth Motorcycle Street Race. When I get a spare moment, crafting is my sanity saver!

PHOTO 2 CONSUMER REP ANITA HYDE, CAITLIN (L) AND ELLA

Both of my children were born at Grey Hospital; however with my second being a little unwell we were under the care of Fetal Medicine at CDHB, and NICU once she was born. Having three years between them I have experienced both the previous model of care, and the current model with LMC's working off-site, and was pleased to see the improvements.

In the past year I have settled into the role of Consumer Representative and have found it really rewarding as I can watch the suggestions I am making being taken on board and put into practice. I still find it amazing to see how passionate the entire maternity team are about offering the best service possible for our community, how mindful they are of all of our families during decision making – taking care to include the full region, different ethnicities and socioeconomic backgrounds when looking at the service provided, and how keen they are to get thorough feedback so they can continually make improvements.

In April I attended my first UNHSEIP Advisory Group meeting and was really interested to learn about this fantastic programme and the difference it makes to children and their families who are able to get support as early as possible.

Another highlight was the SUDI workshop, from which I learned a lot and was really pleased to be included.

Talking to clinical staff about the realities of day-to-day parenting and how education is sometimes not enough if the support is not there for parents to be able to apply it, was an interesting discussion.

Earlier in the year I also had the pleasure of meeting the new Midwifery Manager and am really pleased with the direction that she is leading the team.

I'm looking forward to the changes coming over the next wee while, with plans to increase the consumer network to make it more truly coast wide, a focus on Maternal Mental Health and Breastfeeding amongst other things, and of course the eventual move to the new hospital which looks to have a well-appointed maternity area.

I'd like to thank the maternity team for involving me in their discussions, explaining the lingo and taking my suggestions openly.

I'd also like to really thank the parents in our community who have shared with me their stories, giving me the confidence to speak up and represent them and put forward their concerns, ideas and praise.

Maternity Management & Administration Team 17/18

			
Norma Campbell Director of Midwifery, CDHB & WCHDHB	Karyn Bousfield Director of Nursing / Chair Maternity Governance Group	Catarina Morais Clinical Midwife Manager	Meike Seibelink Kawatiri Maternity Unit Manager
			
Dr Ravi Vemulapalli Obstetrician & Gynaecologist HoD, Obstetrics	Dr Sherif Mehrez Obstetrician & Gynaecologist	Dr Vicki Robertson Obstetrician & Gynaecologist	Dr Sam Henalla Obstetrician & Gynaecologist
			
Linda Monk Midwifery Educator	Vicki Piner MQSP Co-ordinator	Silvie Saskova PA to Director of Nursing WCDHB	Kerri de Klerk Maternity Services Administrator
			
Clarissa Seibelink (previous) Kawatiri Administration Manager	Marianne Seibelink Kawatiri Administration Manager (current)	Sharyn Newcombe NIR/MVS Administrator / Data Collator	

1. Our Maternity Services

1.1 Vision and Values

The West Coast DHB's Maternity Vision and Values in the delivery of maternity service:

Vision:

"Providing safe, high quality maternity care in partnership with West Coast women and their whānau."

Values:

- *Respect*
- *Protection / Care*
- *Education / Learning*
- *Efficient / Resourceful*
- *Accountable / Accountability*

1.2 Maternity Facilities

There are two facilities available to women living on the West Coast and most births are at the larger Grey Base Hospital. Kawatiri Maternity Unit is at Buller Hospital in Westport and is a primary unit. Christchurch Women's Hospital is the only tertiary facility for the West Coast and is located in Canterbury. They accept referrals from the West Coast and we work closely with their team when women and/or their babies are more complex and require that level of support at any point in their maternity journey.

WCDHB	
Primary	**Kawatiri Unit at Buller Hospital Westport**
Secondary	**McBrearty Ward at Grey Base Hospital**
Tertiary	**Christchurch Women's Hospital**

TABLE 3 WEST COAST DHB MATERNITY FACILITIES

The number of total deliveries at the West Coast DHB for the 2017 year was 262 (Source: MOH data). The ethnicity of our mothers for 2017 is as follows:

- Māori 24%
- European 70%
- Indian 2%
- Asian 3%
- Pacific 1%

Compared with New Zealand as a whole, the West Coast DHB has a lower median personal income (2006 Census data $26,900 per compared with $28,500 nationally) and a higher proportion of our population are receiving unemployment or invalid benefits, have no educational qualifications and lack access to a mobile phone or motor vehicle.

During 2017 the average number of births across the West Coast, including home births was approximately 25 babies per month.

Maternity Facility	Number of Deliveries 2017	
McBrearty Ward, Grey Base Hospital	243	84%
Kawatiri, at Buller Hospital in Westport	19	7%
Home Births	26	9%
Total	**290**	**100%**

TABLE 4 WCDHB BIRTH NUMBERS 2017

2. Maternity Governance

The WCDHB governance and reporting lines are illustrated below:

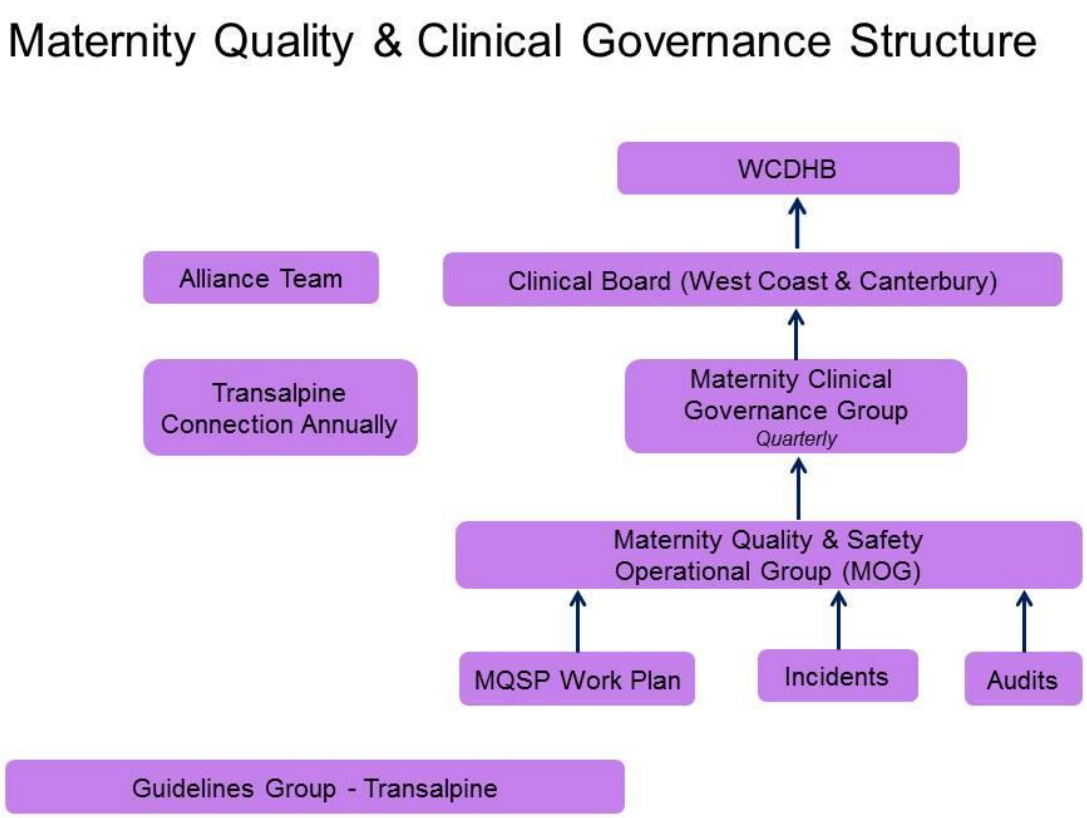


FIGURE 1 WCDHB MATERNITY GOVERNANCE STRUCTURE

2.1 MQSP Programme

In 2015 the MoH asked each DHB to self-audit and identify themselves within one of the three tiers:

- Emerging
- Established
- Excelling

Meeting the requirements of each tier was based on the New Zealand Maternity Standards (2011) and the service specification for each tier as prescribed by the MoH.

During 2016 the West Coast DHB, moved from an "Emerging" tier and we now identify ourselves as meeting the "Established" tier. As part of our continued momentum we have developed a Work Plan for the 2018/20189 year and this is included as an Appendix to this report.

During 2017 we further embedded the MQSP into our maternity services and linked our plan into the overall strategic goals of the West Coast DHB. We strengthened the alignment of MQSP with the quality activities throughout the West Coast DHB.

When we originally set up MQSP we were very closely linked with Canterbury DHB and shared a MQSP Co-ordinator. A West Coast MQSP Co-ordinator was recruited during 2016 and that has allowed us, as a DHB to focus on the areas of the MQSP programme that have relevance to our environment and our women.

"During the past two years as we have moved through the phases of the programme, from Emerging to our current Established phase, and working towards Excelling, we have looked more closely at how we meet the needs of our women and the MQSP Programme has taken on more of a "West Coast Flavour" as we become more mature as a system".

Vicki Piner, MQSP Co-ordinator

PHOTO 3 SOUTH ISLAND MQSP CO-ORDINATORS

(L-R) Samantha Bourke, Canterbury; Vicki Piner, West Coast; Heather LaDell, Southern; Lois Taggart, Nelson Marlborough

2.2 West Coast / Canterbury 'Transalpine' Relationship

Like many small DHBs, population numbers on the West Coast cannot support provision of a full range of specialist services. In some instances we must refer patients to larger centres with more specialised capacity. Since 2010, the West Coast DHB has shared executive and clinical services with the Canterbury DHB. This includes a joint Chief Executive and clinical directors, as well as shared public health and corporate service teams.

While the West Coast has always had informal clinical arrangements with the Canterbury DHB, the Transalpine model has allowed these to be formalised through clinically-led transalpine service pathways. This formal arrangement enables the West Coast DHB to develop the workforce and infrastructure needed to ensure we can meet the needs of our population.

The Transalpine approach is reflected in our shared governance model and relationship, whilst acknowledging the DHB's differences. West Coast and Canterbury DHBs share a Director of Midwifery. The shared service and clinical partnership arrangements that have been developed are embedded in the West Coast Maternity Quality Safety Programme. Canterbury and West Coast share opportunities for education, policy and procedure review and case review. West Coast and Canterbury, through the Guidelines Group, regularly review and develop policy and procedure to ensure consistency, particularly in an environment where clinicians work between both environments.

This Transalpine approach to service provision has allowed better planning for the assistance and services Canterbury DHB provides to the West Coast DHB, so our women can access services as close as possible to where they live and provides us with the backup and support of a tertiary level service, who know and understand our environment, when required.

A cohort of CDHB clinicians regularly visit the West Coast providing cover when their West Coast peers are on leave and our clinicians have opportunities for working in Christchurch with their peers. This approach has brought down barriers, strengthening relationships and has given our Canterbury based clinicians a real understanding of the challenges we face in a rural environment; by working in our environment they full understand it. We have so much to teach each other.

PHOTO 4 PATRICK LAWRENCE WELLS 030218

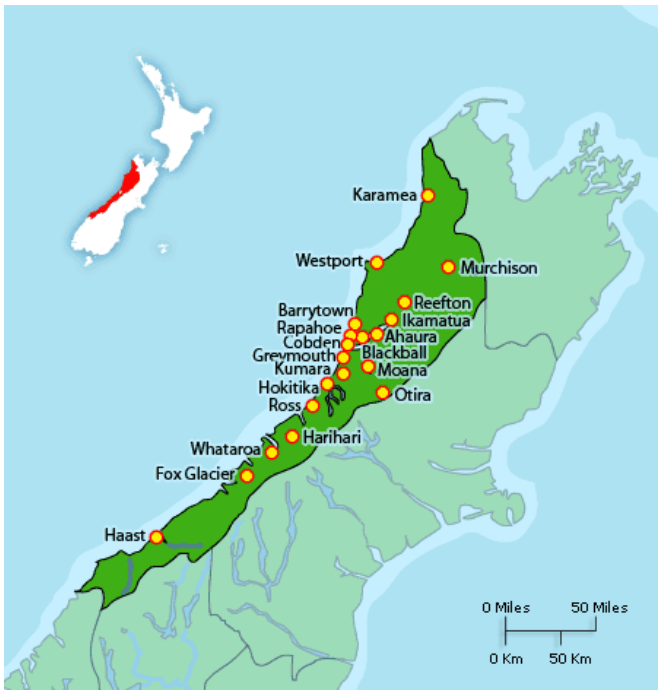
The content in this report demonstrates the collaboration between professional disciplines, managers and consumers and it should therefore serve as a useful resource for a range of stakeholders including the NMMG, local clinicians, planners and funders as well as consumers.

3. The West Coast DHB

The West Coast District Health Board (DHB) is one of twenty DHBs charged with improving, promoting and protecting the health and independence of our resident population.
We have the smallest population of any DHB in New Zealand with responsibility for 32,600 people; only 0.7% of the total New Zealand population.

Although we are the smallest DHB by population we have the third largest geographical area, making the West Coast DHB the most sparsely populated DHB in the country with only 1.4 people per square kilometre.

Our District extends from Karamea in the north to Jackson Bay in the south, and Otira in the East. It comprises three Territorial Local Authorities: Buller, Grey and Westland districts. Grey district has the largest population, with an estimated resident population of 13,550 people.

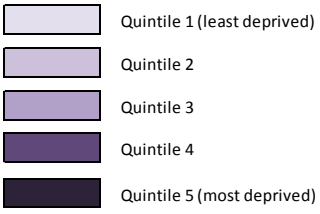


3.1 Our overall population

The West Coast DHB population has an older age structure compared with New Zealand as a whole, with a higher proportion of people aged over 65 (18%), compared with the national average (15%).

Deprivation is an indicator of the need for health services and the West Coast has a lower mean personal annual income ($20,400) compared to the rest of New Zealand ($24,400). Higher proportions of our population are receiving unemployment or invalid benefits, have no educational qualifications and lack access to a motor vehicle or telephone.

3.2 Our Maternity profile

Category	WCDHB – 2016 Birth Data from MoH Data	
	**Birth Rate**	**315 deliveries in 2016**
	163 babies born every day in New Zealand	**26 babies per month are born to WCDHB mothers**
	**Maternal age**	Highest percentage of WCDHB mothers are in 25-29 years bracket (33%)
	**Maternal ethnicity**	18% Māori 77% European / Other descent 17% Asian 2% Indian 1% Pacific
	**Deprivation**	Quintile 5 – 5% Quintile 4 – 45% Quintile 3 – 24% Quintile 2 – 19% Quintile 1 – 7%
	**Birth by Facility Type**	72% WCDHB at Grey Base Hospital 6% Primary Facility (Kawatiri) 9% Christchurch (Tertiary) 4% Nelson 5% Home birth
	**Parity**	33% Nulliparous 66% Multiparous
	**Body Mass Index**	45% of WCDHB women were a healthy weight
	**Smoking at first LMC Registration**	22% of women were smoking at time of registering with an LMC
	**Smoking 2 weeks postnatal**	83% of those women smoking at registration were smoking 2 weeks postnatal

WEST COAST DISTRICT HEALTH BOARD

3.3 Where our Mums live and where they birthed in 2017

4. Achievements against Priorities 2017/18

This table summarises the quality improvement work undertaken in Maternity Services across **the West Coast DHB** in the 2017/18 year.

- Indicates that the work has been completed and / or in business as usual (BAU) phase
- Indicates that the work is in progress / underway and nearing completion
- Indicates that the work is in progress: about two thirds completed before embedding as BAU
- Indicates that there is still significant work required to achieve completion

	Priority Area	Progress Report	Status
1	Monitor the involvement of maternity consumer members in DHBs' MQSPs	Although our consumer is a valuable member of our maternity services programme, we have not met our objective to have consumer representation in at least 6 meetings per annum. We are confident this will be achieved in the next annual period as it is our intention to establish consumer groups across the Coast and meet with them via VC at least quarterly. We intend to form a Māori consumer group to better identify and address the issues facing our Māori mums.	
2	Continue to review the NZ Clinical indicators data and monitor DHB's variation	We continue to monitor, audit and report through to Maternity Operations Group (MOG) on c/section rate, IOLs and PPHs. Audit and clinical review of c/sections for 2017 identified only one decision to c/section where it could be queried; all others clinically appropriate.	
3	Review key maternity sector publications including the MoH's Report on Maternity 2015	Maternity Operations Group provides multi-disciplinary review of DHB performance against national trends. WCDHB involvement in Canterbury/West Coast Guidelines Group setting policy and procedure.	
4	Increase use of primary birthing facilities – Kawatiri Maternity Unit	21 women birthed at Kawatiri Maternity Unit (2016 – 26); slightly down on 2016, but reflective of decrease across the Coast in between 2016 and 2017 (276 – 271). A further 11 women chose to have their postnatal care provided by Kawatiri (32 women) which is pleasing.	
5	Promote access to maternal mental health services and use of the maternal mental health pathway	Work commenced in 2017/18 with the establishment of a project team representative of primary and secondary care clinicians to audit the current Maternal Mental Health (MMH) Pathway. Data is being collated on referrals and a stocktake of MMH service provision in the community is underway. Although progress is being made, there is significant work to do so this initiative has been carried over as Priority No. 2 for the 2018/19 MQSP Work Plan.	
6	Identify women with modifiable high risk factors for perinatal related death and work individually and collectively to address these	Making good progress with early identification and referral to tertiary provider. This is seen as a continuing priority moving forward and is Priority No. 4 in the 2018/19 MQSP Work Plan. Still more work to be done on promotional and educational information.	

Priority Area		Progress Report	Status
7	Offer education to all 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 abuse	During 2017: 75% of women were screened antenatally and 83% postnatally for family violence (target 70%). We made one report of concern. Qtr 4 result: 100% of all women (Māori and non-Māori) were offered advice and support to quit smoking. Qtr 4: 25% of our Māori women smoke during pregnancy (rate for all women: 12.5%); 100% of our Māori women accepted cessation support (50% for all women) Numbers of referrals to the smoking cessation incentivise programme increased from 55 (2016) to 60 (2017) We know we have more work to do in this area, particularly for our Māori women, but it is pleasing to see progress being made.	
8	Increase the number of women who are referred to the Smokefree Pregnancy Incentives Programme to set a quit date	12 of the 21 women (57%) signing up to the programme (6 Māori, 5 NZ European and 1 other) set quit dates during the year; up from 45.5% in 2016. We continue to focus on improving this rate and have increased the period of the Pregnancy Smokefree Incentivise Programme to 4 months post birth for the 2018/19 year. 100% of the women's partners signing up to the programme set quit dates.	
9	Multi-disciplinary fetal surveillance training be mandatory for all clinicians involved in intrapartum care	20 Participants attended FSEP training held April; 18 midwives, 2 consultants and 5 midwives from another DHB. 64% of our core midwives attended. Making this training mandatory is unrealistic due to the course being 2 full days; however we continue to make it available annually. Those unable to attend can attend training in Christchurch.	
10	Improved detection of fetal growth restriction to reduce perinatal morbidity and mortality rates	All pregnant women registering for birth at the WCDHB facility have a customised growth chart provided; this estimates the expected growth in fundal height for their individual pregnancy. Fundal height measurements should be recorded from 24 weeks onwards. Women at high risk of SGA (e.g. previous SGA baby <10th percentile, chronic hypertension etc.) will have growth scans at regular intervals. The frequency of scanning will be individualised according to the previous gestation at delivery and severity of SGA or the nature of the underlying medical condition. This increases midwives' and clinicians' awareness of foetal growth restriction and reduces the risk of growth restricted babies at birth. Mothers with SGA can be referred for early delivery to our tertiary facility if necessary. An audit of SGA babies born at the WCDHB is planned for December 2018. We will audit all referrals to check that individual care and management were appropriate.	
11	Continue to promote seasonal or pandemic influenza vaccinations for all pregnant women regardless of gestation, and for women planning to be pregnant during the influenza season. Vaccination recommended and provided to maternity care providers to reduce the risk to women and babies under their care	During the past flu season, staff uptake of influenza and Boostrix (pertussis, diphtheria, tetanus) vaccinations were as follows: • Influenza vaccinations: 57% staff • Boostrix: 33% staff *(Please note that Boostrix is recommended every 4-5 years, so numbers will fluctuate).* This establishes a baseline moving into the next year. Seasonal pandemic influenza vaccinations were promoted via LMCs / regular updates on our Facebook Page linking to MoH material and resources.	

Priority Area		Progress Report	Status
12	Promote and support breastfeeding	Results: **Women exclusively or fully breastfeeding at discharge Target 90%** 100% Māori and 93% All women (All women 78% Sept 16) **Babies born on the Coast breastfed to 3 months post birth Target 60%** 63% Māori and 54% for all Women (Sept 16 = 57% All Women) **Babies breastfed to 6 months post birth Target – increase numbers** 38% Māori and 22% for All Women	
13	Promote Māori, Pacific and younger women attending pregnancy and parenting education classes	The aim to increase attendance of Māori, Pacific and younger women attending PPE was achieved, but not significantly. 2016 Māori 5.8% Pacific 2.3% <24 yrs 21% 2017/18 Māori 6% Pacific 3% <24 yrs 28% Our focus for 18/19 is on establishing PPE that meets the needs of our Māori and Pacific Island women - Priority No. 6 in our 18/19 Work Plan.	
14	Early detection of women with high BMI at time of booking with their LMC	CDHB & WCDHB jointly developed a Transalpine policy for the criteria for transfer of women with BMI higher than 35 and other medical criteria. Women with a BMI of 35-40 are recommended to have 2 growth scans in the third trimester at around 30-32 weeks and at 34-36 weeks, unless there is a problem with fundal height before. Due to Anaesthetic risks women with a high BMI are referred to Christchurch Women's Hospital: • BMI >45 at booking • BMI 40-45 with co-morbidities identified after anaesthetic and obstetric review.	
15	Develop a wider understanding of the transportation challenges faced on the West Coast for our mothers and babies / pēpi	We touched on this area in 2017/18, but there is more work required locally and nationally. Transportation issues, due to our rurality, impact on everything we do so we need to look at how we can do things differently for our women and our workforce. This is set as Priority No. 11 on our 18/19 Work Plan.	

PHOTO 5 DR SHERIF MEHREZ - PRESENTATION ON MATERNAL SEPSIS

4.1 Addressing NMMG Priorities

The National Maternity Monitoring Group (NMMG) oversees the New Zealand maternity system and provides strategic advice to the Ministry of Health for improvement. We report against their national areas of focus for our West Coast population during the 2017 /18 periods below.

Primary Maternity Facilities for Women

There is only one primary birthing facility for West Coast women – Kawatiri Maternity Unit located at Buller Hospital. Numbers of births at the unit, although low relative to the rest of New Zealand, are showing an increasing trend. Increasingly women who have birthed in the secondary unit are returning to Buller to have their post natal care provided at Kawatiri. The focus for 2018/19 is to increase the number of homebirths and births in our primary facility for low risk women.

Timely access to Community-level non-acute mental health services

During 2017/18 we commenced an audit of our current Maternal Mental Health pathway. A project team was established and an aim statement defined so we have a measure for achievement:

"95% of the women referred via the West Coast Maternal Mental Health pathway are accessing appropriate services by June 2019."

We have commenced a stocktake of mental health providers in the community as our current pathway starts with entry at the acute presentation. We want to shift the focus to earlier recognition and referral to services for women presenting with maternal mental health. We have started collecting data on the screening during pregnancy and identified change ideas for further investigation. This area of work continues through as a high priority project for 2018/19.

Long-acting reversible contraceptives

We are currently offering our women LARC which includes IUCDs, implants and Deprovera injections. Up to early 2017 women could access LARC via Family Planning in a clinic located within Grey Base Hospital. With Family Planning withdrawing the clinic from the West Coast this has meant women have had to go back to their GP and not all GP practices offer this service. To address this lack of suitably trained staff to provide LARC insertion we are rolled out training across the West Coast within our primary facilities.

From 1st July 2017, the West Coast PHO increased their free contraception consultations from the age of 22 to the age of 25 which means more women can now access this free contraception. Women who quality for a community services card over the age of 25 can access funding via WINZ. We do not currently have any provision within our Gynae services to offer LARC free to any women not meeting these criteria.

PHOTO 6 KAWATIRI PRIMARY BIRTHING UNIT MAIN ENTRANCE

5. Quality Improvement

5.1 Smokefree Pregnancies Incentive Programme

Smoking during pregnancy can have a harmful effect on baby, both before, during, and after the birth. Maternal smoking increases the risks of miscarriage, pre-term births, low birth-weight babies, difficulties during childbirth, sudden infant death syndrome, and childhood asthma and glue ear. And smoking at any time is harmful for mothers too.

Established in 2014, the Smokefree Pregnancies Incentive Programme is collaboration between the West Coast PHO, DHB Smoking Cessation Service and Oranga Hā - Tai Poutini.

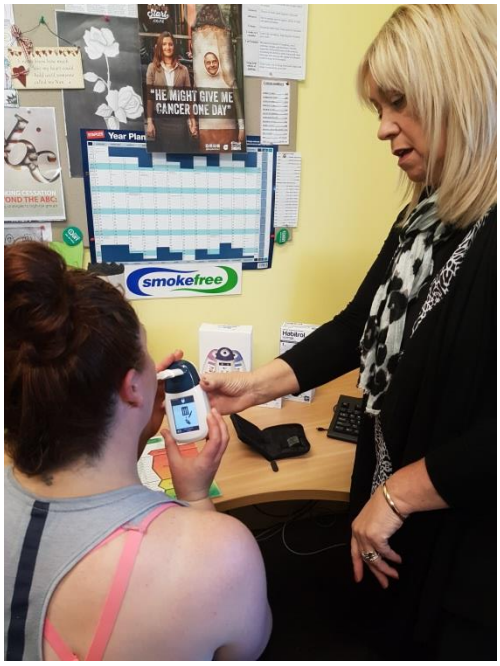


PHOTO 7 SMOKING CESSATION PRACTITIONER ANN MCDONALD TAKES A CO READING

This 12-week programme provides pregnant women with ongoing support to quit and NRT (if needed) plus grocery vouchers for every week smokefree. Smokefree rewards of up to $300 can be gained while on this programme. As a bonus mothers will receive a $50 grocery voucher if they are still smokefree two weeks after baby's arrival. Smoking/smokefree status is confirmed by a simple breath test that checks for carbon monoxide in the breath (called CO monitoring). The cut-off level for showing that mothers are smoke-free is under 6 ppm.

A quit smoking counsellor is provided and mothers are rewarded for being smokefree aimed at keeping them on track for a smokefree pregnancy and beyond pregnancy. Once baby is born, counsellors follow up with the mother and family to assist them in maintaining their smokefree status.

Partners are also assisted by the programme if they want to quit at the same time and if they join the 12–week programme they are eligible to receive incentives up to a total value of $150.

To be eligible for the incentives programme mothers must be no more than 28 weeks pregnant, and agree to keep weekly contact for the first 8 weeks with fortnightly contact for the next 4 weeks.

Quick Stats: During 2017

- 60 women were referred to the programme.
- 29 women (11 Māori, 16 NZ European, Māori and 2 Other ethnicity) and 6 partners (4 Māori and 2 NZ European) were involved with the programme.
- 8 women and 2 partners carried over from 2016.
- 3 women carried over to 2018.
- 9 women signed-up to the programme, but did not set a quit date.

Quit dates set during the year

- 12 women (6 Māori, 5 NZ European and 1 Other) and 4 partners (2 Māori, 2 NZ European) set quit dates during the year.
- 9 of 11 women (82%) were abstinent at 4 weeks; one woman had not reached 4 weeks by the end of the year.
- 8 women completed 12 weeks smokefree.
- 2 finished the programme early.
- 2 were still to complete at year's end (i.e. completing in 2018). Weeks of achievable abstinence* = 85%.
- 4/4 partners (100%) who set quit dates during the year were abstinent at 4 weeks and 4/4 partners completed 12 weeks (100% achievable abstinence); a fantastic outcome.

12-week quit dates during the year

- 13 women (7 Māori, 4 NZ European, 2 Other) and 6 partners (4 Māori, 2 NZ European) had 12 week quit dates during the year.
- 12 out of 13 (92%) were abstinent at 4 weeks; 1 finished early.
- 11 out of 13 women completed 12 weeks during the year; 2 finished early.
- The achievable abstinence rate was 90%.
- 12 post birth vouchers were given out (6 from

women starting in 2016) and 1 was still awaiting at year end.
- 6/6 partners were abstinent at 4 weeks (100%) and 4/6 completed the 12 weeks. The achievable abstinence rate was 83%.

* *'Achievable abstinence rate' is the number of weeks abstinent as a proportion of the total of weeks available in which abstinence could be achieved.*

Focus for 2018/19

- Increase the referrals and the rate of engagement with the programme as once people start on the programme they do really well. A $25 voucher is available for women who attend an initial appointment, whether or not they sign up for the programme.
- Make sure the programme is accessible to young Māori women, who have a higher rate of smoking than their non-Māori counterparts.
- Extend the programme to cover the vulnerable first four months after the baby's born. We know that some mothers return to smoking within a short time after the baby is born and it is our aim to support these mothers and families to stay smokefree and to give their baby/family the best start.
- Although the main risk is the mother smoking in pregnancy, we are extending the period of smokefree support to 4 months and have identified it as an action in our SUDI programme.

5.2 Maternity Incident Review Group

Safety1st is the database used by all South Island DHBs for reporting incidents occurring within their DHBs and provides a comprehensive system for recording of incidents and the investigation and subsequent follow up of these incidents.

During 2016 the WCDHB Maternity Operations Group developed and introduced a Trigger Tool for recording maternity events within Safety1st. The purpose of the trigger tool list is to:

- Identify and review the severe complications of pregnancy and the puerperium;
- Help learn lessons to improve future care and not finding the fault.

All clinicians working within maternity services, including community based LMCs access Safety1st via their DHB login and submit incidents which are then investigated by the Clinical Midwife Manager. A Severity Assessment Code (SAC) is applied to the degree of harm suffered as a result of healthcare, in line with the Health Quality Safety Commission's consequence matrix.

Events recorded as serious and adverse (SAC1 and SAC2) are reported to the HQSC and a full investigation is carried out using the Root Cause Analysis methodology of review. SAC3 and SAC4 events are reviewed at Incident Review Group (multidisciplinary group reviewing all incidents occurring at the West Coast DHB) and are also reported through to the Maternity Operations Group for information and follow up.

Earlier this year the Maternity Incident Review Group (MIRG) was established to systematically review reported incidents in the maternity setting to identify areas of quality improvement and to record and co-ordinate the outcomes of incident review. Membership currently includes O&G consultants, Midwifery manager, MQSP Co-ordinator. Membership will be extended to include an LMC representative, Kawatiri Manager and consumer rep in the future.
MIRG meet regularly (usually fortnightly) to review incidents, recommend actions and to determine which maternity related incidents have wider education and learning opportunities and should be taken to the full WCHDB Incident Review Group for multi-disciplinary team discussion. MIRG reports incident trends to the Maternity Operations Group and highlights any major issues to the Governance Group.

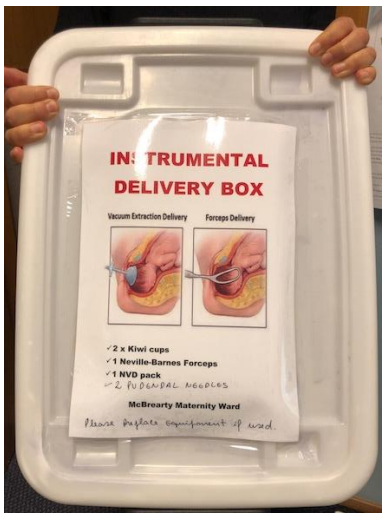
5.3 Quality Improvements occurring from Incident Review

Normal Vaginal Delivery (NVD) and Instrumental Delivery Box

Review of our incidents indicated that when transferring woman for a C/section to theatre, if the decision change for a trial vaginal birth, the equipment needed to facilitate this was not in theatre and this could delay the process for the mother.

In June this year Maternity Operations Group approved the inclusion of an NVD and Instrumental Delivery Box in the obstetric theatre to ensure that if there was an unexpected forceps delivery all of the materials required would already be in place for staff.

The initiative was first raised at a Theatre Committee Meeting and is now standard kit in the obstetric theatre making the process more efficient.



PPH Audit

Post-Partum Haemorrhages are on our trigger list and reviewed case by case. Difficulty with "estimated blood loss" for PPH has led to midwives now measuring the blood loss to ensure accurate data reporting. Initially it seemed we had a high rate of PPHs, so it was decided to measure blood loss to ensure accurate data recording. One of the core midwives undertook an audit of PPH statistics for 2017. The results of this audit are being fed back to the midwives. All PPHs are audited on an ongoing basis.

Staff Name Badges

A suggested follow up from one of the incidents reviewed was to provide all staff with name badges, at eye level so all clinicians, would know the names of the people in the room to assist with communication.

These name badges don't get tangled in clothing / get in the way of working as can occur with lanyards and are easier to read at eye level.

Women and their families/whānau now know the names of the staff that are working / communicating with them. All staff have been provided with these name badges.

PHOTO 8 CORE MIDWIFE BRIDGET MODELS THE BADGE

5.4 Tongue Tie Release Pathway

In the past, tongue tie release was provided in the community by an independent dentist. However, when the dentist left the West Coast we had to reassess how this service was provided and how we could improve support to our Mums and babies/pēpi. The Tongue Tie Release Pathway was reviewed. Extra training for lactation consultants was provided so that they confidently assess and refer on babies requiring tongue tie release. DHB General Surgeon, Dr Jonathan Pace is working with DHB Lactation consultants to carry out the release tongue tie procedure at Grey Base Hospital at no cost to the families. This means that our West Coast Mums and babies won't have to travel for this service as we are able to deliver here in our community.

5.5 Maternity Data Group

The Maternity Data Group was established to improve and refine the data being collected for West Coast births. The group reviewed the data that was being recorded in the birth forms against the data being collected in the database. Slight changes were made to the form. This has improved data collection to match the MOH clinical indicators and has improved local data integrity.

Raw data is captured on a spreadsheet that can be filtered easily with multiple conditions to answer queries and results can be drilled down and interrogated further to identify specific themes particularly by ethnicity so we can track how our Māori Mums are faring compared to our other ethnic groups. Previously some of this data was being held in several spreadsheets; this group has brought it all together in one place improving not only data collection, but our ability to easily identify and monitor specific indicators e.g. inductions of labour, c/section rates.

Group members include Clinical Midwife Manager, MQSP Co-ordinator and our National Immunisation Register Co-ordinator enters the data.

Reports generated from this data have been designed to monitor our data, particularly by ethnicity to highlight any areas of discrepancy and equity of access, particularly for our Māori women.

Already the data has given us quality improvement in that it seemed our PPH rate was high. When we reviewed it though we found it was based on the estimated blood loss (EBM). Estimating blood loss is difficult so we have moved to measuring blood loss to ensure we are recording true PPHs.

PHOTO 9 STAFF AT PROMPT TRAINING

5.6 MQSP Facebook Page

Set up in June 2016, the MQSP Co-ordinator Facebook page was established as a way of providing information to West Coast Mums and as a forum for them to raise their issues via feedback. Social media is an important communication tool if we want to provide equity of access of information to our women, particularly our younger women who might not have a land line or computer, but they will have a smart phone and a Facebook account.

PHOTO 10 BABY ARLIA RAYNE HODSON DOB: 140818

As time has gone on and the "friends" list has expanded the page is being used more frequently to raise topics, provide health information and other useful information. Community and Public Health sends regular "Healthy Bites" healthy recipes for busy mums that are put up on the page. This is well received. We also regularly link to events for Mums and Babies, PPE and the West Coast Find Your Midwife site.

Mums are telling us what information they would like to see. For example, they told us they wanted to know about breast milk donation, so we were able to provide them with our information brochure and link them to the breast milk donation programme at the West Coast DHB.

The page also allows us to "test" ideas – get fast feedback. Via the messaging function Mums can also ask a question privately. To date this has been useful in getting targeted feedback.

We know we have a low rate of women continuing on to breastfeed their babies and have been able to ask them what they want to know / what they would have like to have known. We have had some great responses and all feedback is being collected to determine what we can do to address this low BF rate.

The FB page also gives us with opportunities to raise awareness across a range of health issues affecting our women and their babies.

Almost all of the beautiful photos or Mums and babies contained in this Annual Report were provided by Mums themselves who responded to our request for photos of West Coast babies. The request, consent and response process was all possible via this social media platform. Anecdotal feedback indicates that women are appreciating the information being provided.

5.7 Access to DHB Maternity Policies / Procedures / Guidelines for GP Practices

An incident where a community based General Practitioner incorrectly assumed a neonate had high sugar levels highlighted to the maternity services team the fact that General Practitioners do not have access to the same level of information / policies / procedures for maternity services.

The West Coast Maternity Services team met with Health Pathways (source of pathways for GPs) to discuss how best to address this issue so that all information available to the GP in the community is up to date and linked to the DHB maternity service guidelines. The outcome is that there is now a link for maternity based Health Pathways directly to the West Coast DHB's policies / procedures and guidelines.

5.8 Consistent Policies / Procedures – Transalpine

West Coast DHB maternity services are part of the CDHB Guidelines Group developing, updating and implementing policies and procedures for both Canterbury DHB and the West Coast DHB. Policies and procedures are developed jointly to ensure consistency with best practice, but also to ensure that clinicians working in either DHB have access to and are aware of the same policies and procedures. As policies and procedures are updated, they are bearing both logos to show that they are transalpine documents. Where there may be differences, for example in the contact details / department – this is reflected on the document so it is clear that a clinician working in either DHB knows where to go.

West Coast DHB has reviewed all policies and procedures and updated them on the staff intranet (LMCs also have access to the Intranet) so they are all current. Where appropriate, the WCDHB policy will link directly to the Canterbury one; this ensures consistency

5.9 Consumer Engagement

"We Care about Your Care"

We Care About Your Care - Maternity services feedback from was launched in July 2015. The form was developed via collaboration by West Coast and Canterbury DHBs AND is used across transalpine maternity services. West Coast birthing mothers are provided with a copy of the feedback form which they can complete prior to leaving birthing facilities, or they can take it home, complete it later and return it via freepost. During 2017 we revisited the form and a project group across Transalpine maternity services streamlined the form. Early 2018 the form was updated to focus on key areas of importance for the women and in to get more qualitative data. Specifically we can now identify what was important to Mums and their family / whānau during their care and to gain their suggestions of what could be done to improve consumer experiences.

Results from the surveys are collated and reported monthly to the Maternity Operations Group, maternity facilities and West Coast based LMCs. Feedback has assisted in informing where systems improvement can be made and allows us to identify trends. The form is attached as Appendix 2.

"What was important to me about my birth care was being able to birth at home with the support of family and midwives.
I had wonderful midwives and great support."

Feedback from Mother having home birth

Gloriavale Christian Community Visit

Gloriavale Christian Community is situated adjacent to the shores of Lake Haupiri. The community has approximately 560 residents; with around 35 births per annum. Gloriavale women are supported in their faith and their birthing choices by their two resident LMCs Sheryl Joy and Harmony.

WCDHB maternity staff value Sheryl Joy and Harmony's advice and experience as the majority of Gloriavale women have homebirths (approximately 84%), normal vaginal births (97%) and have large families. Sheryl Joy represents the community on the WCDHB Maternity Governance Group and both she and Harmony attend regular education sessions and the monthly LMC meetings held at Grey Base Hospital.

WCDHB maternity services staff visited the women of the community in December 2017 to talk to them about their experiences of our services. We also wanted to gain a better understanding of how we can provide care in a way that not only maintains their privacy and dignity, but is mindful of the urgency of the situation when they are transferred to our services. We met with a large group of women and their husbands. Their feedback was valuable and we came away with key learnings, a better understanding of the women's views and how we can make their journey to secondary services less stressful.

PHOTO 11 HARMONY'S DAUGHTERS AT THE 2017 "LATCH ON"

6. Kawatiri Birthing Unit – 2017/18

Kawatiri Birthing Unit, based in Westport is managed by the Buller Birthing Practice. Kawatiri was the preferred choice of birthplace for many Buller women during the 2017/18 period. However, some women had to change their birth plans due to either pregnancy issues or moving out of the area.

During the period 1st July 2017 – 30th June 2018 1 woman was transferred in labour to Greymouth and 1 sick newborn was transferred to the neonatal unit based at Christchurch. In addition to women choosing Kawatiri as their place of birth, we had several clients come back from Greymouth to have their postnatal care at the Unit and families were very impressed with the level of care at Kawatiri; 9 women who birthed at Grey Base Hospital and one woman birthing in Christchurch returned to Kawatiri for their postnatal care

Feedback to the staff at the unit is that Kawatiri is accommodating for the mothers and babies, but also allows for amazing extended family / whānau support.

A birthing pool was purchased by the Kawatiri Unit Manager around a year ago and it has proven to be very popular for the women; with around 50% of the women labouring in the birthing pool and 20% birthing in the pool. The warm water assists women in labour. The pool is lined with a single use plastic sheet / bag to keep the environment hygienic. The liners are provided by the West Coast DHB and appreciated by the Buller team.

During the year Clarissa (Administrator) moved to Nelson. The role has been taken up by Marianne Siebelink, a very experienced mother (seven children). Marianne is enjoying the role and her experience and assistance is appreciated by the families we care for.

The Year in review

- From August 2017 to August 2018, Kawatiri Birthing Unit facilitated 25 normal vaginal births with no issues.
- Buller Birthing Practice receives very positive feedback from the women it serves, including positive feedback on the locum services provided. When midwives take a break locum midwives take over the care of the women.
- Staffing issues continue but we are able to deliver good continuity of care as both Helen and Mieke (LMCs) embrace the continuity of care philosophy for the Buller area. However, at times they have had to request the assistance of Greymouth based LMC midwives to facilitate some of the Greymouth births. With one midwife member down, assistance has been provided, during a very busy period, by Greymouth staff and particularly Gloriavale midwife Harmony Helpful. Harmony has an excellent collegial relationship with Kawatiri and continues to support the service when required.
- Advertising is underway for a full time self-employed LMC midwife, starting approximately January.
- The model of post natal care for Kawatiri continues to work well and collaboration between Kawatiri staff, Buller GPs and Foote Ward (Buller Hospital) staff has been excellent. How this translates into practice is that when women return to Kawatiri after birthing in Greymouth or have birthed in Kawatiri, their postnatal care is provided by the midwives. When the midwives leave in the evening, Foote Ward staff take over post natal care. Foote Ward staff contact LMCs in emergency situations.
- Buller GPs (providing hospital cover) and nursing staff are being provided with additional training in neonatal care by the Midwifery Educator. The focus of this training is on neo natal resuscitation and maternity emergency care.
- Pertussis and flu vaccines have been offered to all women from 28 – 34 weeks via a text message. Many women are choosing to have the vaccine administered at their routine antenatal visits; around 40% of the women are taking up the offer of the free vaccine.

PHOTO 12 KAWATIRI POSTNATAL ROOM

- Marie Ryan (Buller Physiotherapist) offers Physio classes at Kawatiri Birthing Unit for all women from 20 weeks gestation onwards once a month. Topics covered include discussing posture in pregnancy, aches and pains and also splints for Carpel Tunnel syndrome and pregnancy belts can be provided. Kawatiri staff are now sending a txt to pregnant women before the physio date to improve attendance rates.

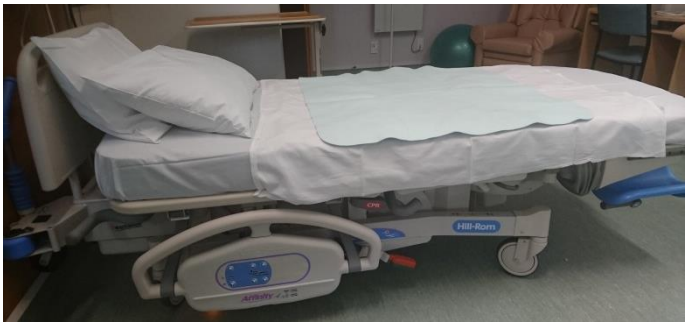
- Having up to date cervical screening data may prevent issues when women are in labour. Kawatiri is able to access cervical screening results directly resulting in timely referrals to Obstetric services. Any issues identified are dealt with in collaboration with the Cervical Screening Nurse.

- For high risk women meetings with social services are being held. This is to ensure a multi-disciplinary approach to better support the women.

- As part of the Certification Programme for the West Coast DHB, an audit of the Kawatiri Birthing Unit took place and results were very positive. Auditors were impressed with the Unit and no recommendations or corrective actions were made.

- Kawatiri staff work in collaboration with the rural nurse specialists based in Karamea to share care of the women based in Karamea. The nurses use the maternity notes to document their consultations.

- The provision of O&G clinics based in the Kawatiri Unit is set to restart in the near future. The environment at Kawatiri is better suited to the needs of Buller women and assists in strengthening of collegial support. Holding these clinics in Kawatiri also means that Buller women will not have to travel to Greymouth for clinics.



- The new birthing bed is serving its purpose and resolved the back issues and raised client comfort levels. Thanks to the Countdown Initiative for providing funds for the purchase of this bed, around $30,000. The bed is fully electronic.

Focus for 2018/19

Continue improving service and care for pregnant and birthing women.

7. Our People / Our Team

7.1 Catarina Morais - Clinical Midwifery Manager

Midwifery is a passion that became a way of life. I learnt two foreign languages and moved to six countries because I wanted to work in a country where midwives are autonomous practitioners that work in partnership with women, and where women's choices and decisions are supported and respected. I've found that in New Zealand.

I did my nursing training in Portugal, where I am from originally. While I was observing a woman birthing her baby I decided to become a midwife.

"It was the most magical and beautiful experience of my life"

Catarina Morais

On why observing a birth made her want to become a midwife

Even after 10 years delivering babies I cannot avoid getting emotional when watching an empowered woman birthing her baby and holding her baby for the first time. The moment that a mother looks at her baby for the first time reminds me how lucky I am to be a midwife.

The decision to apply for a clinical management position was driven by the wish to promote and support the midwifery team to continue to provide excellent care to our women and whānau.

Since 2009 I have lived and worked in a few countries. But, for the first time I feel that I have found a place to call home on our stunning West Coast.

The midwifery system on the Coast is unique and enables women to have continuity of care. It makes me very proud to be part of a multidisciplinary team that is always aiming to improve the quality of care provided to our women and their whānau.

Catarina Morais
Clinical Midwifery Manager

PHOTO 13 SOME OF THE MATERNITY SERVICES TEAM

7.2 Linda Monk - Midwifery Educator

PHOTO 14 LINDA MONK

Established in June 2015, the role of Midwifery Educator facilitates education primarily for staff working in maternity services. In this role Linda Monk facilitates training for all WCDHB staff and clinicians working in the maternity setting. She also facilitates training on the West Coast to ensure midwives here can meet the requirements of their annual recertification programme without having to leave the Coast.

During 2017 with the resignation of the previous Midwifery Manager Linda stepped up into the role of Midwifery Manager until a new manager was successfully recruited. So, for a period she held dual roles as both Educator and Clinical Midwifery Manager.

Linda applied to the Midwifery Council and was successful in the West Coast DHB continuing to be provider of continuing midwifery education so midwives' recertification education could be delivered at the WCDHB. She attended the annual Neonatal Educators conference in Christchurch in February held at Christchurch Women's Hospital.

Training during 2017 included:

- **Newborn Life Support Courses**
  Held monthly throughout the year, these courses commenced in February. The course covers resuscitation skills by practicing airway management, how to use the bag mask and neopuff and familiarisation of the resuscitaire. Participants are broken in groups to practice newborn resuscitation scenarios using all of the equipment. Fifty five participants attended this training including new Resident Medical Officers (RMOs), theatre staff, registered nurses working with neonates and St John's officers.

- **Emergency Skills Days for Midwives**
  Three skills days ran throughout the year with 20 midwives attending. Midwives appreciated being able to attend this mandatory education on the West Coast to attain recertification. Learning themes for these sessions included:
  - Better understanding of emergency scenarios
  - Practicing Breech remembering to keep in mind "kissing the spine" and "tum to bum."
  - Understanding use of transexamic acid as part of the new PPH protocol.
  - Simulation of maternal collapse using AED.
  - Theme for 2017 was teamwork and how we help each other working as a team.

- **Helicopter Familiarisation Refresher**
  Annual helicopter training had 6 midwives in total attending the full familiarisation component. However, the helicopter was called out on a job, so the refresher course for existing staff was not able to be provided.

- **STABLE Course**
  Held in Greymouth this course was well attended; 11 midwives, 6 RMOs and 1 registered nurse.
  Christchurch based Neonatologists Maggie Meeks and Bronwyn Dixon gave of their time to travel here

to teach post-resuscitation care and pre transport stabilisation care of sick infants. The skills and knowledge learned make the journey for the sick neonate to Christchurch Women's NICU as smooth as possible.

- **PROMPT (Professional Obstetric Multi-Professional Training)**
  Sharon Bolitho, Obstetrician and Gynaecologist (Christchurch Women's Hospital) and Rhonda Robertson, Midwifery Educator (Christchurch) assisted to facilitate the training with lectures and debriefing skills. A total of 12 attendees participated in discussions around the logistics of emergency management in remote rural areas. Scenarios practiced included maternal collapse, post-partum haemorrhage and Eclampsia. Feedback from participants confirms the great learning experience this full day of learning and scenarios provides.

PHOTO 15 PROMPT SCENARIO TRAINING

- **Cervidil in Induction of Labour**
  The Cervidil representative provided staff with an update on the use of Cervidil in the induction of labour process.

- **Healthy Conversations Skills Workshops**
  Liz Nash from the Healthy Start Workforce Project ran a series of three workshops, funded by the Ministry, aimed at providing participants with the tools to support clients to make changes for long term health. Healthy conversation skills philosophy is based on clients coming up with their own solutions to change their behaviour. These workshops were enjoyed by the 37 attendees who came from a variety of work places.

- **Breastfeeding Workshop**
  A total of 24 participants including 15 midwives attended a Breastfeeding workshop held by WCDHB Lactation Consultants Anna McInroe and Bev Sinnott in November. Topics included:
  - Care of Small for gestational age babies
  - Obesity and Breastfeeding
  - Review of BFHI policies and guidelines related to nipple shields, tongue ties, donor milk and expressing antenatally

PHOTO 16 ZOOEY JEAN FITZGIBBON

- **College of Midwives Workshops**
  The College held two workshops; the first focussed on rural midwifery and was attended by core and community based LMCs. The second workshop was funded by the Ministry and covered navigating screening in maternity care. We appreciate the College coming to the Coast to provide a variety of workshops to enable the midwives to fulfil their continuing education for recertification.

- **Newborn Life Support**
  This three hour update or refresher was held monthly throughout the year. Attendees include new RMOs, theatre staff, registered nurses working with neonates and St Johns Officers. Resuscitation skills are covered by practicing airway management.

- **Midwifery Forum**
  Core staff and community based LMCs came together in March. Guest Speaker Linda Hill from Plunket talked about Pregnancy & Parenting Education (PPE). Plunket are the providers of PPE on the West Coast. We are working closely with them in trying to increase the number of mums taking up this education. John Caygill and Ann McDonald from Smoking Cessation services also presented at the forum. They provided an overview of rates of women smoking in pregnancy and the number of women who sign up for the QUIT programme which is incentivised by grocery vouchers. Our focus for the coming year is on increasing the number of women and their partners enrolling in and completing this programme.

- **Maternity Skills Workshops**
  A total of twenty participants attended the three maternity skills workshops held in Westport (2) and Franz Josef (1). This training is for rural nurses, ambulance staff and registered nurses that may attend births in their day to day work, or be called on to assist e.g. as in Kawatiri maternity unit. The workshop covers:
  - Newborn life support
  - Normal labour and birth
  - Premature labour
  - Obstetric emergencies

- **Tongue Tie Assessment and Release Pathway**
  The team from Christchurch Women's visited the West Coast in February to present the tongue tie assessment and referral pathway for Canterbury. The West Coast pathway is now similar, however our babies are referred to our general surgeon following assessment by our Lactation Consultants. We are pleased to be able to offer this support on the West Coast so our women and their families/whānau don't have to travel to the tertiary centre.

- **Journal Club meetings**
  Three journal club sessions were held throughout the year. At these meetings midwives discuss journal articles related to midwifery which often provides evidence to base practice.

  Maternity case review meetings to discuss interesting and complicated clinical cases continued to be held on McBrearty Ward and were well attended by core staff, community based LMCs and O&Gs as part of a learning and review process.

- **On site education from resident Obstetricians**
  Dr Ravi Vemulapalli and Dr Sherif Mehrez, WCDHB resident O&G specialists provided educational talks throughout the year:
  - Early pregnancy bleeding
  - Maternal SEPSIS
  - Post-Partum Haemorrhage

- **Updates for Midwives**
  Updates for midwives included:
  - Epidural Certification
  - Use of oral dextrose for neonatal hypoglycaemia
  - The use of Cervidil for induction of labour
  - Foetal fibronectin detection in Preterm labour
  - ISBAR
  - The new Neonatal NEWS (Newborn Early Warning Score) chart

PHOTO 17 NOVA ROSE OWERS

7.2 Dr Brendan Marshall – Advanced Dip Obstetrics

PHOTO 18 DR BRENDAN MARSHALL

Travelling to larger centres for maternity care can be a challenge for new mums who live rurally – along with transport to arrange, time off work and childcare to organise, there is also the issue of continuity of care.

Greymouth-based GP and rural hospital generalist Dr Brendan Marshall is helping sustain rural maternity services on the West Coast by becoming the first person to complete an Advanced Diploma of Obstetrics through a New Zealand accredited provider.

Dr Marshall, who originally completed his medical training in Australia, recently finished his Advanced Diploma at Christchurch Women's Hospital – paving the way for other GPs to follow the same path. Dr Marshall moved to the West Coast with his family in 2013, to a role involving general practice, ED, anaesthetics and supporting paediatrics and orthopaedics after hours.

Dr Marshall began training prior to moving to the Coast, and last year he continued his training through the Royal Australian and New Zealand College of Obstetricians and Gynaecologists to meet Australasian standards and further support the sustainability of West Coast maternity services.

His diploma was based at Christchurch Women's Hospital; jointly funded by West Coast DHB and Health Workforce New Zealand and supported by the South Island Workforce Development Hub (part of the South Island Alliance of DHBs).

"This qualification is used extensively in Australia, and no other centre in New Zealand has been accredited to deliver the diploma before. It means GPs are again involved in the care of expectant mothers living rurally on the Coast and helping the obstetricians based in Greymouth to ensure families don't have to travel to Christchurch for certain services. As a team we provide essential obstetric services such as caesarean sections, assisted deliveries, and more advanced ultrasound skills on weekends. This model is all about collaboration with permanent obstetricians and midwives to support a more sustainable way of thinking, so that ultimately, obstetricians, midwives, rural nurses and rural doctors can work better together."

Further benefits include continuity beyond the pregnancy, he says. "GPs are more likely to be involved in the whole spectrum of care, so this way we can link the care people get long before and long after their pregnancy." Brendan also achieved the highest score for the 'Advanced Oral Examination' part of the assessment. He will officially receive an award to acknowledge this in Adelaide in September.

"While an exam result is only one aspect of the training, it makes all the hard work to get the training over the line worth it, as it proves Christchurch Women's Hospital can offer excellent training for Advanced Diploma candidates like myself. To have achieved this is a real feather in New Zealand's cap, especially in terms of GP training that's been offered for the first time – the results trumped Australia's results, who have been providing it for many years. "I would like to thank everyone involved, including my wife, who was at home with our three young children while I was away from home for the training." Because of the small population and low birth rate on the West Coast, Dr Marshall is required to regularly work at

> ***"It was a chance to evolve my skills and be part of a workforce in a rural location that can provide a safe, sustainable model of health care."***
>
> **Dr Brendan Marshall**

Christchurch Women's Hospital to maintain his competence.

Providing this pathway for Rural Generalists to undertake within New Zealand offers an important workforce model, which rural DHBs in particular could introduce. It can assist with the recruitment and retention of the medical workforce, and helps support sustainable future workforce models for rural communities, says Philip Wheble, General Manager of West Coast DHB. "It backs the view that in order to support rural maternity services, specialists delivering those services can be supported by medical practitioners who also have clinical expertise, academic abilities and professional qualities, to enable a safe and quality service in locations which are remote and without a tertiary hospital. We hope this will be one step closer towards the sustainable provision of safe maternity care for the rural population of New Zealand, and we are happy to hear from other GPs across the country who may also be interested in pursuing this pathway."

7.3 A Day in the Life of a West Coast Rural LMC

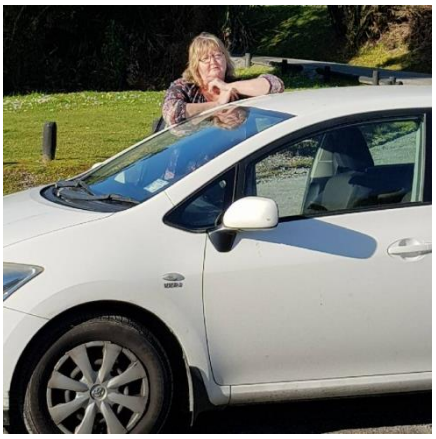


PHOTO 19 DAWN ABOUT TO HEAD OFF

On her "South Westland Day" West Coast Rural LMC Dawn Kremers is on the road by 7 am. The night before she's packed her car with everything she will need for the day, including:

- Gumboots
- Wet weather gear
- Overnight bag
- Emergency Midwifery equipment
- Baby Scales
- Files / Stationary
- Day to day midwifery equipment bag

PHOTO 20 WEATHER

PHOTO 21 DISTANCE SIGNS

Once on the road she stops to get a very large latte. It might be a while before she gets another one. It's important that she checks the weather update as it's easy to get caught out half way there and not be able to get through due to flooding or slips.

Dawn usually plans her day around visits; often stopping off to do home visits on the way through Hari Hari.

Then she's off again making her way to Whataroa, again stopping to see another antenatal mum at home. At times she has to navigate long windy driveways and paddocks. However, the scenery can be very breath taking so she sees this as having to take the good with the bad.

Doing this run so often, Dawn has got used to knowing where the public toilets are on the way down…due to coffee intake.

Once she reaches Franz Josef Dawn heads to the Medical Centre to start her clinic. Dawn's South Westland clients are very appreciative of the care

they receive and having a LMC visit them rurally. Clients have made Dawn lunches and snacks are brought in most times, which in turn Dawn very much appreciates.

She tries to see as many women as are needed at the clinic, before hopping back in the car and heading south to Fox Glacier; another 20-30 minutes down the road.

The time it takes to reach Fox Glacier is dependent on the weather as the road is prone to slips from heavy, often sudden rainfall making the journey take a lot longer. Dawn completes her postnatal visits and then heads back through to Franz Josef to see more Mums and babies postnatally.

Throughout all of this, Dawn is answering texts and calls from her clients in Grey and Hokitika. She usually aims to get back on the road before dark, but finds this impossible at times when providing care to her clients. She recently spent a couple of hours with a distraught couple who had lost their baby due to miscarriage; time where her support was what they needed.

At the end of her Franz clinic, Dawn then makes the 2 ½ hours journey back home. By the end of the day, travel time alone can be as much 6 hours. From Dawn's home just outside of Greymouth south to Fox Glacier and back is approximately 404 kms without adding in extra kms required to do home visits, often up long driveways in very remote locations.

Dawn praises the support she receives from the Rural Nurses as invaluable, especially for those first days home for the Mum and new baby/pēpi or when she's unable to get to South Westland due to her work commitments in Greymouth and Hokitika.

"I feel just because women live rurally, they and their families still deserve the same level of midwifery care."

Dawn Kremers, Rural LMC

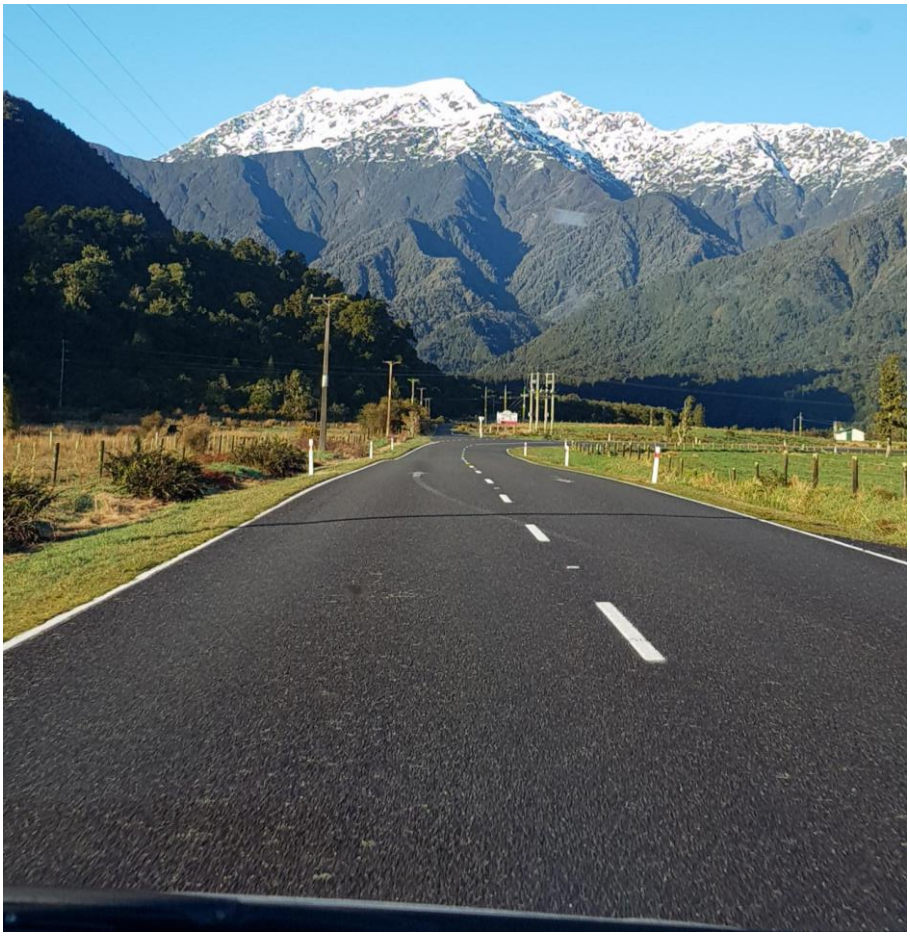


PHOTO 22 VIEW FROM DAWN'S "OFFICE"

8. Highlights of our Year

8.1 Midwifery Graduate

One of our new midwifery graduates commenced her MFYP (Midwifery First Year of Practice). She had completed the Midwives' orientation package and attended available educational opportunities throughout the year. Graduates have a mentor, usually another midwife who has completed the NZCOM mentor programme and they meet on a regular basis. In the first six months of practice, graduates are paired with a senior midwife for the first six months of practice for the majority of their shifts.

8.2 Countdown Kids Appeal

We purchased a new CTG machine to monitor the fetal heart rate (in utero) continuously in high risk pregnancies. This machine is based in the Maternity unit and can be moved to theatre with the mother if required.

The purchase of this new machine meant we were able to provide Kawatiri with an updated CTG machine; assisting the women in rural areas.

PHOTO 23 NEW NEONATAL MONITOR

We also bought a neonatal monitor machine; when we have a neonatal emergency – the heart rate, temperature, blood pressure and respiration of the baby can be monitored giving us a better clinical picture of how the baby is doing once it is born.

Over $30,000 was gifted to the DHB from the Countdown Kids Appeal. This donation enabled the purchase of equipment for the Maternity and Children's wards. It also enabled the purchase of a new birthing bed for Kawatiri maternity unit meaning that all birthing beds are now of the same type.

We are very grateful to Countdown for their ongoing support of West Coast services.

8.3 Newborn Metabolic Screening

Our return rates for New Born Screening improved by 8% giving the West Coast DHB the second best return rate in New Zealand; testament to the commitment from the LMCs and core staff, particularly given rurality factors present on the West Coast. This result has been noted in the National Screening Unit's annual report.

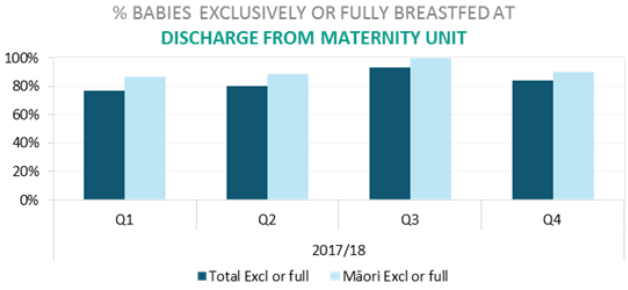
8.4 Universal Newborn Hearing Screening Early Intervention Programme

PHOTO 24 BABY BEING SCREENED

The MoH conducted a desktop audit of this programme to ensure we met set criteria for hearing and vision screening of our newborns. We successfully passed this audit and our Screeners both achieved 100% on their evaluations.

8.5 Improved Breastfeeding rates on Discharge

During the period, the rate of West Coast women breastfeeding baby / pēpi on discharge has improved to 93% for all women. Our Māori Mums are showing the way with a rate of 100% (Q3); an excellent result.



This increased rate can be attributed to the increase in breastfeeding education and the excellent advice and support women are received from their LMC and lactation support staff.

8.6 Safe Sleep Policy

PHOTO 25 SAFE SLEEP DAY – STAFF RAISING AWARENESS

When introducing the Safe Sleep Policy the West Coast DHB appointed a local champion to talk to Mums and their families/whānau about safe sleep practices.

An information brochure "Keep Your Baby Safe during Sleep" is provided and infants are audited in the maternity and paediatric units.

Cards about safe sleep practices are placed on the side of each baby's cot. Staff discuss smoking cessation, provide breastfeeding support, and discuss safe beds and pēpi pods. We have a stock of pēpi pods that we are able to provide to our mums. We continue to the first DHB in the South Island to complete the first three month audit of the policy's implementation.

8.7 Maternity Services Loss & Grief Forum

For some women, their partners and family /whānau pregnancy can be a time of loss and grief. For the people working with these women and their families, it can be a sensitive time and traumatic for them also.

In holding a Loss & Grief Forum earlier this year, our aim was to bring together various speakers that specialise in this field to help us all to do our best when working with bereaved families.

We invited keynote speaker Vicki Culling from Wellington who is a Loss & Grief Consultant to speak. She gave a wonderful talk about loss and grief; some of which was through her own personal journey. Di Leishman, PMMRC rep from Canterbury DHB gave a practical talk about the processes that need to be followed.

Our local SANDS (Stillborn and Neonatal Death Support) representative Melanie Tarrant talked about her role in supporting families through this unexpected journey. SANDs provided us with resources to give out to the participants.

"Reminder that loss and grief being a very individual experience. Value, kindness, respect".

Feedback from Attendee at Loss & Grief Forum

Our GM Māori Health, Gary Coghlan provided a cultural overview for the group when working with whānau around loss and grief and the tangi process.

Overall it was a very informative workshop and well received by all who attended.

PHOTO 26 TABLE DISPLAY AND DECORATION - LOSS & GRIEF FORUM

PHOTO 27 KEYNOTE SPEAKER VICKI CULLING

PHOTO 28 GM MĀORI HEALTH, GARY COGHLAN LEADS WAIATA

8.8 Community Support

The West Coast community is supportive of maternity services and throughout the year we were overwhelmed with the generosity of local people. We received gifts of knitting from the Inangahua Trust and Reefton Knitting Group, new baby clothes from Parents Centre and woven baskets from SANDS.

PHOTO 30 MELANIE FROM SANDS GIFTS WOVEN BASKETS

PHOTO 29 BEAUTIFUL WOOLLEN KNITTING

PHOTO 31 PARENTS CENTRE GIFTS BABY CLOTHES TO MCBREARTY WARD

9. My Birth Experiences

All too often we seem to hear or read about horrible birth stories, so I wanted to break the mould and share my two really positive experiences.

PHOTO 32 TRACEY AND CORA

My name is Tracey Feary and I'm a mum of two. Both of my babies were born at Greymouth Hospital, and both times I had the wonderful Mary as my LMC.

My first baby, William, was born in June 2016, exactly on his due date. I arrived at McBrearty at four in the morning, a little worried I'd come in too early in my labour. I needn't have worried because my little one was well on the way - I was already 8cm dilated, and two and a half hours later my healthy wee boy popped out; naturally with no drugs, gas, or complications - just a couple of external stitches.

My partner Matt and I were stunned at the speed of it all, and absolutely thrilled to meet our little boy.

My placenta then decided it didn't want out, so an hour later we opted for active management, which worked immediately.

My second baby, Cora, was born in April of this year. Again, labour started at home in the middle of the night, but I was a little confused as to whether I should call Mary or not. My contractions, although close together, were only very mildly painful and very short in duration.

PHOTO 33 BABY CORA AND BIG BROTHER MATT

I woke up Matt and we rang Mary. Around 1am, she came up to our house to examine me and see what was going on. I was 5cm dilated and Mary said to head to the ward.

Almost exactly like her brother, Cora arrived 2 hours and 20 minutes later - naturally, no drugs. She weighed almost the same as him too - he was 7lb 7oz and she was 7lb 8! She arrived a little earlier than her due date though, by about a week.

I was more nervous about my second birth than my first - I thought Will had set the standard pretty high first time around, but Mary reassured me that often second births were the most efficient. She was right - slightly faster and no stitches second time around!

Now I know I've been lucky with my births - maybe it was from being physically fit, or maybe it was just pure luck and genetics. I'll say this though - the level of care I received from Mary and the staff at McBrearty was amazing. I find it awfully sad to think how maternity services on the Coast get a bad rap at times. You cannot tell me that in a bigger centre or city, a midwife would come to your house to check whether you're in labour, that you'd be allowed to stay as long as you wanted in the maternity ward, or that you'd have staff wait on you hand and foot (I felt spoiled and lazy being offered cups of tea all the time!).

These are the very real benefits of living and having babies here.

10. Clinical Indicators Analysis

The Ministry of Health's data New Zealand Maternity Clinical Indicators (2015) was published in December 2016. The publication shows key maternity outcomes for each DHB for 2015.

The analyses below, shows the DHBs' performance and position in relation to both the Indicators and national averages. Percentage figures are from either the 'DHB of Domicile' set or the 'facility of birth' as indicated and are based on standard primiparae only (rather than all women giving birth / all deliveries).

10.1 Introduction

The purpose of these indicators is to increase the visibility of the quality and safety of maternity services, and to highlight areas where quality improvements could be made. The data largely refer to 'standard primiparae' (SP) who make up 11.4% of all births in the WCDHB. This group (aged 20-34 years, uncomplicated singleton pregnancy, full term, cephalic i.e. head presentation) represent the least complex situations in which intervention rates would be expected to be low, and can be compared between institutions.

10.2 Analysis of Individual Indicators for Whole West Coast 2016

Indicator	Title	2015 WCDHB Rate (n)	2016 WCDHB Rate (n)	Change from 2015	Higher or lower than national average	National Average 2016
Indicator 1	Registration with a Lead Maternity Care	53.8% (185)	79.4 % (251)	▲ +25.6%	▲	71.9 %
Active promotion of early registration via posters in GP practices, links to Find Your Midwife on the WCDHB maternity pages and consistent messages via social media are assisting in increasing this rate.						
Indicator 2	Standard primiparae who have a spontaneous vaginal birth (%)	58.6% (35)	76.7% (33)	▲ +18.1%	▲	67.0%
The WCDHB sits above the national average for this indicator. A stable workforce, good working relationships with midwives and group discussions ensuring full participation in decision making process has impacted positively on this rate.						
Indicator 3	Standard primiparae who undergo an instrumental vaginal birth (%)	11.9% (7)	7% (3)	▼ -4.9%	▼	15.9%
This indicator links to the increased rates of spontaneous vaginal births and is impacted by that indicator.						
Indicator 4	Standard primiparae who undergo a caesarean section (%)	28.8% (17/59)	16.3% (7/43)	▼ -12.5%	▲	15.9%
Due to more accurate data collection we are able to identify the standard primip more accurately. That relfects on the reduction of the section rate.						
Indicator 5	Standard primiparae who undergo an induction of labour (%)	6.8% (4)	7% (3)	▲ +0.2%	▲	6.3%
Within the national average. WCDHB regularly review IOL indications. Review of all IOLs during 2016 and 2017 did not identify any uneccessary IOLs; all were medically indicated.						

Indicator	Title	2015 WCDHB Rate (n)	2016 WCDHB Rate (n)	Change from 2015	Higher or lower than national average	National Average 2016
Indicator 6	Standard primiparae with an intact lower genital tract (no 1st – 4th degree tear or episiotomy) (%)	28.6% (12)	47.2% (17)	▲ +18.6%	▲	28.6%
WCDHB rate is slighter higher than the national average. LMCs' skills are contributing positively on this measure.						
Indicator 7	Standard primiparae undergoing episiotomy with no 3rd – 4th degree perineal tear (%)	19.0% (8)	8.3% (3)	▼ -10.7%	▼	22.7%
Episiotomy given mainly for instrumental deliveries and this indicator relates directly to indicator 3.						
Indicator 8	Standard primiparae sustaining a 3rd – 4th degree perineal tear with no episiotomy (%)	4.8% (2)	2.8% (1)	▼ -2.0%	▼	4.2%
Improved midwifery skills in supporting the perineum is reflected in this improved rate.						
Indicator 9	Standard primiparae undergoing episiotomy and sustaining a 3rd or 4th degree perineal tear (%)	2.4% (1)	0 0	▼ -2.4%	▼	1.8%
Due to small numbers there may be fluctuation, however there are none this year.						
Indicator 10	Women having a general anaesthetic for caesarean section (%)	11.2% (11)	6.3% (6)	▼ -4.9%	▼	8.5%
General anaesthetics are used only when birth needs to be iminent; the baby is distressed and there is no time for epidural or spinal pain relief or there are other reasons that we need to move to GA. The unit policy is for regional anaesthetic for a section unless it is clinically contraindicated or the clinical situation dictates for general anaesthetic.						
Indicator 11	Women requiring a blood transfusion during birth admission for caesarean section delivery (%)	5.1% (5)	3.2% (3)	▼ -1.9%	▼	2.9%
Within the national average. Numbers are still small with slight fluctuation from year to year.						
Indicator 12	Women requiring a blood transfusion during birth admission for vaginal birth (%)	0.8% (2)	1.8% (4)	▲ =1.0%	▼	1.9%
Within the national average. Monitored and reviewed on an ongoing basis.						
Indicator 13	Women with eclampsia at birth admission (numerator)[2]	N=0	N=0			
Indicator 14	Women having a peripartum hysterectomy (numerator)[2]	N=0	N=0			
Indicator 15	Women admitted to ICU and requiring ventilation during the pregnancy or postnatal period (numerator)[2]	N=0	N=0			
We have no women meeting the criteria for Indicators 13, 14 and 15.						

Indicator 16	Maternal tobacco use during postnatal period (%)	19.9% (67)	18.1% (56)	-1.8%	▲	11.7%
There has been an improvement, however there is still work to do to meet the national average. Reflected in our workplan for 18/19 as an area of priority, particularly in the SUDI plan.						
Indicator 17	Preterm birth (%)	8.1% (29)	5.2% (16)	-2.9%	▼	7.5%
Only one baby delivered at Grey Base Hospital; the others were transferred safely to the Tertiary unit to birth.						
Indicator 18	Small babies at term (37-42 weeks' gestation) (%)	2.8% (9)	1.4% (4)	-1.4%	▼	2.9%
Less than the national average.						

Indicator 19	Small babies at term born at 40-42 weeks' gestation (%)	33.3% (3)	0 (0)	-33.3%	▼	35.8%
We are able to identify babies that are small for term before 40 weeks and have managed to intervene before going beyond their due date. Low numbers impact on numbers.						
Indicator 20	Babies born at 37+ weeks' gestation requiring respiratory support	1.3% (4)	0 (0)	-1.3%	▼	2.0%
No babies met this criteria during this period.						

11. West Coast DHB Maternity Data

The data in this section is from local WCDHB Maternity data sources and shows 2015 and 2016 in comparison, with increase or decrease noted. Data here is counted in terms of all 'deliveries' in a DHB facility (as opposed to a count of exclusively standard primiparae as used by the New Zealand Maternity Clinical Indicators.

Gestation at Delivery	2015		2016		Trend
	Number	%	Number	%	
Extremely preterm (<28 weeks)	1	0.4	0	0	▼
Very preterm (28-31 weeks)30	1	0.4	0	0	▼
Moderately preterm (32-33 weeks)	0	0	0	0	
Later preterm (34-36 weeks)	3	1.2	2	0.9%	▼
Term (37-41 weeks)	245	90.5	211	97.2%	▲
Prolonged (>42 weeks)	4	1.6	4	1.8%	▲

Type of Labour	2015		2016		Trend
	Number	%	Number	%	
Spontaneous	116	45.7	115	53	▲
Induction	29	11.4	38	17.5	▲
Artificial Rupture of Membranes	50	19.7	13	6	▼
Augmented	35	13.8	26	12	▼
Did not labour	24	6.8	25	11.5	▲

Method of Delivery	2015		2016		Trend
	Number	%	Number	%	
Elective Caesarean	24	6.8	26	12	
Vaginal	143	56.3	112	51.6	
Vaginal Water Birth	14	5.5	15	6.9	
Kiwi Cup	6	2.4	5	2.3	
Ventouse	0	0	0	0	
Forceps	16	6.3	8	3.7	
Emergency Caesarean	51	20.1	46	21.2	
VBAC	0		3	1.4	

Breech	2015		2016		Trend
	Number	%	Number	%	
No	248	97.6	214	98.6	
Yes	6	2.4	3	1.4	

Anaesthetic	2015		2016		Trend
	Number	%	Number	%	
None	138	54.3	110	50.7	
Local	13	5.1	7	3.2	
Epidural	26	10.2	26	12	
Spinal/Epidural	69	27.2	69	31.8	
General	7	2.8	4	1.8	

Perineum	2015		2016		Trend
	Number	%	Number	%	
Intact	63	24.8	63	29	
1st Degree tear	50	19.7	36	16.6	
2nd Degree tear	40	15.7	27	12.4	
3rd or 4th Degree tear	7	2.8	3	1.4	
Episiotomy	25	9.8	16	7.4	
N/A	69	27.2	72	33.2	

Post-Partum Haemorrhage	2015		2016		Trend
	Number	%	Number	%	
No	226	89.0	188	86.6	
Yes	28	11.0	29	13.4	

Blood Loss Amount	2015		2016		Trend
	Number	%	Number	%	
>1500mL	5	2.0	4	1.8	
<1000mL	235	92.5	198	91.2	
≥1000mL ≤1500mL	13	5.1	15	6.9	

Admitted to Neonatal Intensive Care	2015		2016		Trend
	Number	%	Number	%	
No	254	100	217	100	
Yes	0	0	0	0	

Neonatal Outcomes	2015		2016		Trend
	Number	%	Number	%	
Well Neonates	253	100	216	99.5%	
Neonatal Deaths	0	0	2	0.9	

Stillbirth	2015		2016		Trend
	Number	%	Number	%	
No	253	99.6	215	99.1	
Yes	1	0.4			

Small for gestational age	2015		2016		Trend
	Number	%	Number	%	
No	251	98.8	212	97.7	
Yes	3	1.2	5	2.3	

Feeding Method	2015		2016		Trend
	Number	%	Number	%	
Bottle	2	0.8	7	3.2	
Breast	251	98.8	200	92.2	
N/A	1	0.4	1	0.5	–

12. Maternity Services focus 2018/19

The WCDHB has identified the following areas as our priorities / focus for the coming 2017/18 year:

12.1 Actively seek Consumer Feedback / Engagement – particularly Māori

The WCDHB has a continual challenge to deliver equitable maternity services despite small population spread across a large geographical area. In order to ensure we continue to address the needs of our women it is important to talk to our women so we can learn about their experiences. We plan to continue regular consumer forums where we go to our women, in their rural setting, to gather their feedback. We have also set up a Facebook page to post information and links back to our maternity website. As noted earlier in this report, the feedback form is currently under review and is being updated for ease of response from our women.

12.2 Young Māori Women and access to services

Around 19% of our mothers are Māori, yet they are under-represented in the feedback we receive about our services. We will work with Poutini Waiora (our local Māori health services provider) and our WCDHB Māori Health team to address the needs of our young Māori women and to ensure that our services are culturally appropriate. Our aim is to raise the voice of young Māori women in maternity services. Our Māori women are not engaging in PPE and this is also an area of focus.

12.3 Plan for the move to the new maternity facility

The West Coast DHB received funding from the Government for the building of a new hospital and integrated family health centre on the Grey Base Hospital site. Construction is currently underway with a projected completion date of mid-2018. The maternity leadership team contributed to the design process to ensure the maternity suite is a modern and fit for purpose clinical area for mums, their babies/pēpi and families/whānau. The unit has two birthing rooms and six individual rooms with en suites, with a shared lounge. Planning has also occurred to ensure the move to the new facility minimises disruption to service and enables a continued high standard of care and clinical safety.

PHOTO 34 ARTIST'S IMPRESSION OF COMPLETED NEW HOSPITAL

12.4 West Coast Breastfeeding Interest Group

PHOTO 35 RACHELLE FOSTER AND TWINS

We know that upon discharge our rates of breastfeeding mothers are good, however this declines four weeks post birth, and even further 3 months post birth.

The Breastfeeding Interest Group (BIG): DHB maternity services (well child nurse, public health nurse, midwives, hospital advisory committee), Poutini Waiora (iwi well child provider), Plunket, West Coast PHO (breastfeeding advocates),Community and Public Health (nutrition health promoter), consumers, Mum4Mums (breastfeeding peer counsellors)and GPs and have joined together to work on a project aimed at protecting, promoting and supporting breastfeeding. The group is exploring the establishment of a Breastfeeding Drop In clinic to provide support in the community for mums to get advice and support.

12. Appendices

Appendix 1: Maternity Services Work Plan 2018/19

Initiative / Priority		Action	Expected Outcome	Measure
1	Encourage and monitor involvement of consumer members in WCDHB's MQSP	Develop good communication systems for consumer representatives to provide input into the MQSP programme and maternity service delivery	• Regular meetings with the maternity consumer representative/s • Establish a Maternity Consumer Committee with members representing West Coast regions • Establishment of Māori Consumer Group to capture the voice of our Māori Mums • Consumer representation on Maternity Operations Group	• Maternity Consumer Committee established by February 2019 • Māori Consumer Group established by February 2019 • Quarterly meetings held from March 2019 with both consumer groups facilitated from a different West Coast venue within the community supported by Video Conference (4 meetings per year held regionally) • Consumer attendance and participation at Maternity Operations Group meetings
2	Maternal Mental Health Pathway evaluation	Audit and evaluate the use and effectiveness of the maternal mental health pathway	• Continuation of quality improvement project for review and audit of MMH pathway • Stocktake of community based MMH services provides database of services and referral criteria • Audit of the MMH Pathway identifies what is working and areas for improvement • MMH Pathway updated to reflect the findings of the Project Group and input from key stakeholders including consumers	• Stocktake of community based MMH service providers completed by January 2019 as part of Qtr 2 reporting to MoH • Health Professionals working within maternity services understand and use the MMH Pathway so that 95% of the women referred via the pathway are accessing appropriate services by June 2019 • MMH Pathway referrals demonstrate equity of access to MMH services across the West Coast
3	Workforce Development and Education	Provide education to all clinicians working in the maternity setting so they are proficient at screening women and are aware of local services and pathways for: • Family Violence • Smoking • Alcohol and other substance abuse • Maternal Mental Health Pathway Cultural Competency education provided to Workforce	• Health professionals in the maternity setting are able to screen for family violence, smoking, alcohol and other substance abuse effectively. • Health professionals are familiar with appropriate referral process and can access correct pathways • Māori Health Team to raise the profile of Takarangi Cultural Competency Framework at LMC meetings and within maternity services Fetal surveillance training includes:	Audit provides evidence: • That at least 70% pregnant women accessing maternity services are asked questions about family violence • Audit identifies appropriate referral for women indicating exposure to FV • 90% of pregnant women identifying as smokers upon registration are offered brief advice and support to quit smoking • Referral numbers to Smokefree Pregnancy and Newborn Incentive Programme indicates increase in

Initiative / Priority		Action	Expected Outcome	Measure
		Multi-disciplinary FSEP provided by the DHB for all clinical staff working within maternity services and facilitated for all community based access holders	• Risk assessment for mothers and babies throughout pregnancy as well as intrapartum • Support and promote professional judgment, interdisciplinary conversations and reflective practice	referral (60 referrals in 2017) numbers At least 3 LMCs commence or complete Takarangi Competency Framework training by June 2019 Education is available each year either face to face, or online with a target of 100% core midwifery staff meeting the requirements of FSEP and all community based LMC midwives offered training
4	Identify women with modifiable high risk factors for perinatal related death and work individually and collectively to address these	Review and update educational and promotional material including online resources to promote: • Uptake of peri-conceptual folate • Pre-pregnancy care for known medical diseases such as diabetes • Healthy BMI pre and during pregnancy • Access to antenatal care • Accurate height and weight measurement in pregnancy • Antenatal recognition of fetal growth restriction	• Women and Health professionals have access to and are accessing online resources • Information is up to date and accessible in appropriate formats (paper / electronic) • Appropriate referrals to tertiary provider for women identified as at high risk • Communication between DHBs provides for seamless follow up of WC women referred to tertiary provider	Review of referrals to tertiary sector indicate that they are timely and appropriate and that referrals are early in the pregnancy • Hits on Website / Facebook and feedback from consumer groups indicates women are accessing information
5	Early detection of women with high BMI at time of booking with their LMC	Early referral to clinics for women identified as high BMI Continued monitoring of BMI throughout pregnancy	• Women identified as having high BMI during pregnancy referred to appropriate services and are monitored • Information around risks associated with high BMI during pregnancy is communicated to women	• Audit referrals to show that women with BMI higher than 40 are referred appropriately for monitoring and management
6	Link West Coast SUDI Prevention Plan to the MQSP	Embed activities outlined in the West Coast SUDI prevention plan in the Maternity Quality Safety Programme	• Contribute to the development of Kaupapa Māori Pregnancy & Parenting Education programme • Provision of Safe Sleep devices • Actively promote increased stop-smoking support (from 2 weeks post birth up to 16 weeks post birth) for women during the antenatal and postnatal periods actively promoted	• PPE with Te Ao Māori and Tikanga aspects woven through developed and at least one course held by June 2019 • Increased provision of Pēpi-pods to ensure available stock of 15 to 30 per annum • Safe sleep actively encouraged in maternity facilities Figures show decrease in the numbers of women returning to smoking two weeks post birth (< 21% for

Initiative / Priority		Action	Expected Outcome	Measure
			• Monitor number of babies living in a smokefree home • Support and encourage Workforce Education – engagement of Subject Matter Expert (SME) to provide education to maternity service providers	total population and <32% for Māori) • % babies living in smokefree home increases (65.2% (44.0% for Māori) in 17/18) • Provide at least one SUDI education session facilitated by SME to workforce per calendar year
7	Establish Māori by Māori for Māori PPE to meet the needs of our Māori and Pacific women	Canvas Māori and Pacifica women to determine: • The education they want • Where they want it delivered • How it is to be delivered	• Forums with consumers to identify their PPE requirements • Māori providers are consulted to assist in PPE development • Māori and Pacifica consumers provide advice and feedback into PPE programme development	• PPE programme meeting the needs of Māori and Pacific women is developed for delivery to West Coast women by June 2019 • Reported increased attendance and positive feedback from Māori and Pacifica women attending PPE (2017/18 - Māori 6%, Pacific 3%)
8	Promote and support women breastfeeding	Continued implementation of the Breastfeeding priority plan Retention of BFHI status Continue to promote annual Breastfeeding education to staff working in the maternity setting	• Mothers are supported to continue to breastfeed to 12 months post birth in line with MOH recommendations • Referral to lactation consultants for mothers as required • Information provided on FB / Website for mothers requiring further support • Assess feasibility of setting up Breastfeeding Drop in Clinic in the community to support breastfeeding mothers • Continue to train Mum4Mum peer supporters across the Coast • Education programme for BFHI Accreditation made available to all staff	• 90% of babies on the West Coast are exclusively or fully breastfed on discharge from their LMC Care (Qtr 3 Total result = 90%; Māori: 80%) • 70% of babies on the West Coast are breastfed to 3 months post birth (Qtr 3 Total result = 69%; Māori: 61%) • 100% Core Midwives meeting education requirements for BFHI Accreditation • Train at least three additional Mum4Mum peer supporters increasing the numbers of peer supporters, particularly outside Greymouth / Westport by March 2019
9	Continue to review NZ Clinical indicators. Monitor and respond to DHB's variation	Ongoing interrogation of birth data identifies trends that provide for targeted education and action, by ethnicity	• Data is used to evaluate the effectiveness of previous actions and future plan actions • Monthly meetings to review data • Monthly review of unusual outcomes • Data analysis identifies trends / patterns for NZ Māori women and birth outcomes for NZ Māori babies • Identify birth outcomes for NZ Māori babies • Set up VBAC clinic so women with previous C/s are seen by the O&G and Senior Midwife to ensure informed consent for second C/s or trial VBAC	• Evidence of direct correlation between clinical indicator and relevant quality improvement initiatives and/or changes in practice i.e. improvement can be monitored • Quality initiatives address identified trends for NZ Māori women and NZ Māori babies • Quarterly report on birth outcomes by ethnicity for all West Coast births • VBAC rates increase following implementation of VBAC clinic post January 2019 • Monitor and report, regularly to MOG: ○ C/section rate

Initiative / Priority		Action	Expected Outcome	Measure
				○ IOL ○ PPH ○ Trends
10	Support and increase use of primary birthing facilities and home birth for low risk women	Promotional material / information reviewed and distributed Primary facility and home birth promoted via Facebook and good news stories	• Increase in number of women choosing to birth or have post natal care in DHB primary birthing facility in Buller • Increase in number of women choosing to home birth on the West Coast	• Bed occupation and birth location indicates increasing usage of primary birthing unit (2017: 18 births in West Coast primary facility) • Increase in number of home births (2017: 33 home births; 8 home, 31 Gloriavale)
11	Develop a wider understanding of the transportation challenges faced on the West Coast for our mothers and Pēpi	Talk to women and consumer groups to identify transportation issues from their perspective and identify barriers to transportation	• Improved information around realistic transportation timeframes • Identify strategies to mitigate some of the transportation issues e.g. co-booking of related appointments to alleviate unnecessary travel, holding outreach clinics to eliminate travel, VC meetings instead of travel • Identify support in the community for women and their families/whānau who do require travel and make this information available • Identify sources of financial support for Mums and their whānau when requiring travel outside of the West Coast	• Patient information brochure for Mums and families / whānau • Updated travel information online and in printed format for women and their families / whānau • Provide care close to home when needed • Recognise the pressures on LMC workforce to achieve this in a rural DHB and need to adapt how care is provided specifically using telehealth

Appendix 2: What Matters to You - Maternity Feedback form

Canterbury and West Coast MATERNITY CARE

Canterbury District Health Board Te Poari Hauora ō Waitaha | St George's Hospital A TRADITION OF EXCELLENCE | West Coast District Health Board

WHAT MATTERS TO YOU?

During your stay with us we have aimed to provide a consistent level of quality care that meets your needs and those of your partner and family/whānau.

To help us improve our service in the future we would really like to know 'what matters to you' in regard to any aspect of care, e.g. standard, information provided, breastfeeding support and information, visiting hours, environment, respect of your cultural/spiritual needs/privacy/birthing choices, etc.

**To comment on an individual midwife, please provide feedback on the NZ College of Midwives website: https://www.midwife.org.nz/consumer-feedback.*

Labour and birth care

Where and when was labour and birth care provided?

Please tick the ONE area you are providing feedback on

Canterbury: ☐ Ashburton ☐ Christchurch Women's ☐ Darfield ☐ Kaikoura
☐ Lincoln ☐ Rangiora ☐ St George's

West Coast: ☐ Greymouth ☐ Kawatiri

Date(s)/Month: .....

Were staff respectful of your cultural and spiritual needs (eg. Tikanga Māori)?

☐ Yes ☐ No Comments: .....

Were you involved in your plan of care and was it followed by all staff?

☐ Yes ☐ No Comments: .....

What was important to you, your partner or family/whānau about your birth care?

What was best about your birth care?

How could we have improved the birth care we provided?

Postnatal care

Where was postnatal care provided?

Please tick the area you are providing feedback on

Canterbury: ☐ Ashburton ☐ Christchurch Women's ☐ Darfield ☐ Kaikoura ☐ Lincoln ☐ Rangiora ☐ St George's

West Coast: ☐ Greymouth ☐ Kawatiri

Were staff respectful of your cultural and spiritual needs (eg. Tikanga Māori)?

☐ Yes ☐ No Comments: .....

Did the visiting hours meet your family/whānau's needs?

☐ Yes ☐ No Comments: .....

Did staff respect and maintain your privacy?

☐ Yes ☐ No Comments: .....

What was important to you, your partner or family/whānau about your postnatal care?

What was best about your postnatal care?

How could we have improved the postnatal care we provided?

About you

How old are you?

☐ 15-19 years ☐ 20-29 years ☐ 30-39 years ☐ 40+ years

Is this your first baby/pēpi?

☐ Yes ☐ No

What is your ethnicity?

Tick as many boxes as you want

☐ NZ European ☐ Māori ☐ Samoan ☐ Cook Island Māori ☐ Tongan
☐ Niuean ☐ Chinese ☐ Indian ☐ Other: .....

THANK YOU FOR COMPLETING THIS FORM

**Please place in the collection box on the ward,
hand it to a staff member or fold and return by post**

If you would like to be contacted to discuss anything further, please provide your details below.

Name: .....

Email: ..... Phone: .....