



Report
Primary Maternity Project

31 May 2017

Table of Contents

1. Executive Summary	3
2. Primary Maternity Project	7
3. Background	7
4. Findings and Discussion	9
5. Conclusions.....	17

Appendices

Appendix 1: Summary of Evidence in Support of Primary Maternity Services	20
Appendix 2: Pictorial of Southern District Primary Maternity Services	22
Appendix 3: Census Area Units by Locality Catchment	23
Appendix 4: Primary Maternity Project consultation questions.....	25
Appendix 5: Consultation Feedback and Quality/Safety Improvement Recommendations .	26

Project Group

Project Sponsor	Sandra Boardman/Liz Disney, Executive Director Planning and Funding
Project Chair	Jenny Humphries, Midwifery Director
Project Owner	Thelma Brown, Portfolio Manager, Child, Youth and Maternity
Project Manager	Janet Gafford, Funder Support and Intelligence Analyst
Clinical Advisor	Emma Bilous, Community Midwife, Senior Midwifery Lecturer Otago Polytechnic

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1. Executive Summary

Background

International and national evidence shows that healthy women with low risk pregnancies and their babies are more likely to have better health outcomes if they birth at a primary maternity facility compared to those that birth at a secondary/tertiary base hospital.

The Ministry of Health (MoH) estimates that 30% of pregnant women should be eligible for primary birthing and in 2016, the National Maternity Monitoring Group (NMMG) Annual Report stated that “Birthing at primary maternity facilities enables women to have babies where they can receive appropriate maternity care and the support they need, as close to home as possible. Facilities need to be modern and supported by Lead Maternity Carers (LMC) and ensure timely access to obstetric services during labour and birth should these be needed.” The Ministry of Health and NMMG both support strengthening primary maternity services including timely, equitable access to community based primary maternity care particularly for women living in rural areas.

On average there are 3,500 births annually in the Southern District with 85.5% of these occurring in secondary/tertiary facilities at either Dunedin Hospital or Southland Hospital, 11.6% occurring in primary maternity facilities and 2.9% of births at home. This compares favourably to the national rate of primary birthing which is 8%. Well women experiencing a low-risk pregnancy who live in one of the two urban centers have no option for a primary place of birth. Women who birth in a secondary care location, despite receiving care from a LMC midwife, are more likely to experience a birth intervention with no benefit in outcomes for herself or her baby, at much higher cost and often lower satisfaction with her experience (Dawson 2015).

Southern DHB funds seven primary maternity facilities in rural and remote rural locations across the District. These facilities are located in Oamaru, Alexandra, Balclutha, Gore, Winton, Lumsden and Queenstown. The facilities are contracted by Southern DHB at a cost of \$2.8M per annum. If there was to be any increase in funding proposed, this would need to come from a re-prioritisation of existing funding from other services. Southern DHB data indicates the average dollar value for a labour and post-natal care (mother and baby)¹ in a facility in Southern to be \$3,909. In 2014/15, funding provided to primary facilities in Southern DHB equates to an average of \$7,578 per birth which is substantially more than if the national relative value unit model was used to calculate funding.

Approximately 31% of women domiciled in rural catchment areas choose to birth at their local primary birthing facility. In addition, women who travel to the base hospitals for labour and birth, choose to return to their local primary maternity facility for postnatal care. In 2014/15, there were 385 births and 1,005 postnatal stays at primary maternity facilities.

Primary Maternity Project

This project began in 2016 with the following aims:

- Working alongside communities to understand their need for primary maternity services now and into the future
- Designing a district-wide primary maternity service which is both clinically and financially sustainable
- Supporting safe primary birthing as close to home as possible.

¹ Based on national Relative Value Unit model.

The project team summarised the literature supporting primary maternity facilities, collated relevant local data and developed a set of questions for engagement meetings which were held in August and September 2016 in Dunedin, Oamaru, Winton and Cromwell. At each location, separate meetings were held for consumers, midwives and providers/other health care professionals and written submissions were received. The project team developed a set of principles that could be used to guide future decision making about location of primary maternity facilities.

Key Findings

The engagement sessions generated considerable discussion and ideas showing that the planning of primary maternity services and facilities is important. It was clear that the facilities have played an important part in the development and social history of rural communities and there is strong support for their continuation.

Recent population changes and projected changes in the next 25 years mean that the location of some primary maternity facilities may not be sustainable and conversely, that other areas in the Southern district may be underserved.

Current primary maternity facilities have low utilisation numbers with as few as 20-30 births per year. All units report difficulty in financial viability. Despite annual fluctuations in birth numbers, the trend for 2011-2015 is an overall decline of births at primary maternity facilities. Whilst this decline in usage may reflect population changes, it potentially also reflects changing community norms around place of birth including the increasing complexity in the health of childbearing women. These factors are inter-related and based on largely anecdotal evidence needing more research to be clearly understood.

In 2014/15 there were 385 births in primary maternity facilities. This is around 31% of births to women living in an area with a primary maternity facility, actually occurred at the facility (range 19%–60%). The wide variation is indicative of the multiplicity of factors that influence the utilisation of primary maternity facilities; however, the rural average supports the estimated 30% of pregnancies suitable for primary birthing. This may suggest that increasing Southern DHB's rate of primary birthing would require primary maternity facility options located in urban areas; Dunedin and Invercargill have no stand-alone primary birthing option for their populations. The risk of having no such option is higher intervention rates, requiring a higher level of care for subsequent births, and higher cost of care, without a clinical benefit to women and babies.

The primary maternity workforce, consisting of both community and facility based staff is generally highly skilled and committed to providing high quality services. Overall, the number of midwives in Southern is sufficient but may not be located in areas of high need. This is a challenge as Southern DHB has no direct control of the community midwifery workforce. Declining utilisation of primary maternity facilities is likely to adversely impact on recruitment/retention and the sustainability of rural midwifery practice, both for facility based and community midwives.

Increasing births and/or inpatient postnatal care at primary maternity facilities is likely to result in improved outcomes and satisfaction for women and families, and increase the sustainability of rural midwifery, at a lower cost to the health system.

Current funding arrangements for primary maternity facilities are inconsistent and there is variability in the business models. All facilities are experiencing challenges to viability related to low levels of utilisation, compliance requirements, governance arrangements and workforce retention.

Conclusions

The issues impacting primary maternity services in our district are complex and require a population health and whole of system response.

Southern DHB supports the primary maternity system as an essential part of maternity care and recognises the important role that primary maternity facilities play in this service. The participation of a large number of providers and consumers in the consultation meetings is testament to the importance of this work. Care that occurs in primary maternity facilities is generally high-quality, associated with more normal outcomes for women and babies and high levels of consumer satisfaction. Communities, rural maternity providers and families overwhelmingly support the continuation of primary maternity facilities.

The number of women of child-bearing age (15 – 44) is projected to decline over the next 25 years through to 2043 in Southern DHB except in the Central Otago/Queenstown Lakes districts where it is projected to grow by 17%. Currently, utilisation of individual primary maternity facilities is low leading to questionable sustainability. Given there are around 3500 births per year in Southern DHB, there could be around 1050 births in primary maternity settings. 433 of those could be in rural primary maternity units compared to the current 368. This suggests there is some opportunity for increased primary birthing in rural settings, but a larger opportunity in urban settings.

Primary maternity facilities face a number of challenges which threaten their viability. There is a strategic opportunity for the DHB to provide leadership and vision around ensuring this network is both clinically and financially sustainable and configured to meet the needs of the population. This includes consideration to workforce availability, access, support in the event of a maternity emergency, and total costs of service delivery including investment priorities.

The possibility of a primary maternity birthing facility in Dunedin and or Invercargill could be explored as an option. Configuring facilities to meet the needs of currently growing communities is also required.

There are opportunities to improve and strengthen the current arrangements for primary maternity care, which would be best managed by the Maternity Quality Safety Programme and should be undertaken separately from issues related to facilities.

In summary:

1. Primary birthing facilities remain an important part of the primary maternity system. Primary birthing, as an option, is supported
2. The current level of utilisation and therefore the challenges regarding viability must be addressed
3. Primary birthing facility locations should be reconfigured to:
 - a. Meet the changing need of the population
 - b. Ensure appropriate access
 - c. Address the current challenges to workforce recruitment and retention
 - d. Address the current challenges to financial viability including the creation of economies of scale
 - e. Support the concept of a network of providers working closely with local health providers in giving children the best start in life and supporting and strengthening families

Recommendations

This project has identified a range of issues related to primary maternity facilities and drawn the above conclusions. It is therefore recommended that:

1. The MQSP co-ordinator include the quality improvement opportunities identified from this project into their annual work plan. These include a system for urgent transfers, leadership to enhance the primary facility working environment, and a programme aimed at promoting the benefits of choosing to birth in a primary maternity facility. This may require additional resource for the MQSP and consideration to a district wide clinical leadership role.
2. A small team of seven or eight clinicians, managers and consumers is formed. Using the conclusions from this report, this team will engage in a one-off co-design event to develop a series of options for the location of primary maternity facilities. Their work will be used to form a formal options paper for consideration by the Southern DHB Executive Leadership Team and Commissioners.

2. Primary Maternity Project

This project began in August 2016 and aimed to identify improvements in primary maternity services to enhance sustainability, quality of care and access. It follows a report submitted to the Commissioners in November 2015 which reviewed the potential impact of different funding models for primary maternity services including the most appropriate configuration of service.

Project Goals:

- Working alongside communities to understand their need for primary maternity services now and into the future
- Designing a district-wide primary maternity service which is both clinically and financially sustainable
- Supporting safe primary birthing and in patient postnatal care as close to home as possible.

Methods

- The project team summarised evidence in support of primary maternity services (Appendix 1).
- Collated relevant local data including population projections, birthing data, descriptions of facilities. Sources of data include National Minimum Data Set (NMDS), Statistics NZ, MoH Maternity reports 2015, personal communications, and themes from community feedback.
- Community consultation was undertaken in Dunedin, Oamaru, Winton, and Cromwell. The project team developed a set of questions which were used as the basis for semi-structured conversations. Separate meetings with midwives, consumers, and facility managers / other health providers were held in each centre. Detailed notes from each meeting were taken and common themes identified as feedback for this report. Written submissions were received from those unable to attend.
- The project team developed a set of principles to guide future decision making about primary maternity services. These link to the six priorities in the Southern Strategic Health Plan.
- A report developed for the Executive Director of Planning and Funding

3. Background

Maternity Services in New Zealand

Maternity services include prenatal, antenatal labour and birth and postnatal care, including maternity assessment and diagnostic services (such as laboratory testing and ultrasound scanning), maternity support services (such as antenatal education and breastfeeding support), assessment, referral, consultation and transfer to specialist obstetric services where clinically indicated and acute and emergency support and transfer plus the transfer of care to primary care and a Well Child Tamariki Ora provider at the conclusion of the maternity period.

The Lead Maternity Carer (LMC) chosen by the woman is responsible for providing primary maternity care to the woman and baby through the time of booking (usually in the first trimester) through labour and birth and the first six weeks postpartum. LMC care is funded directly by the Ministry of Health through the Section 88 primary maternity services notice. The woman can choose an obstetrician, GP or midwife for her LMC but most women in Southern District have an LMC midwife as do 92% of women nationally.

Most of the maternity care received by a woman and her baby will be delivered in the community, whether at the woman's home or at midwifery clinic rooms. When a woman or baby develops a

condition that requires input from specialist services, the LMC is responsible for referring the woman/baby in to the appropriate service. Extensive guidance on this referral system is provided by the Section 88 Guidelines for Consultation with Obstetric and Related Medical Services. When the woman requires ongoing specialist care she retains her LMC, who is then responsible for collaborating in the delivery of care with the specialist, support, advocacy and coordination of care. The LMC retains clinical responsibility for the woman's care unless there is a clinical transfer of responsibility, for example, during caesarean section. Clinical responsibility usually reverts to the LMC once that episode of care is concluded.

The LMC is required to discuss the woman's options for maternity care with her and develop a plan of care with her, including her place of birth. The woman is entitled to birth at home or at a maternity facility where her LMC has an access agreement, or she may choose to have a different LMC for her birth, if the LMC does not provide labour and birth services at the facility the woman has chosen. Place of birth is discussed with the women's right to make an informed choice at the centre of decision making.

The Primary Maternity Facility Service Specification states women enter the facility during established labour where the facility provides a suitable physical environment, facility midwife/nursing services, inpatient postnatal care for up to 48 hours, or longer where clinically appropriate and emergency transfer to secondary/tertiary when necessary. The average length of a postnatal stay is 24-48 hours following a vaginal birth and two to four days post Caesarean section for well women and babies. The length of stay is influenced by a range of factors including any complications following birth or the type of birth experienced.

The service definition for a Primary Maternity Facility is one that "... provides a physical setting for assessment, labour and birth, and postnatal care. It may be a stand-alone facility or a unit within a Level 1 or 2 general hospital as defined in the New Zealand Role Delineation Model. The Primary Maternity Facility, in conjunction with the LMC or DHB-funded Primary Maternity Services Provider, provides primary maternity inpatient services during labour and birth and the postnatal period until discharge or transfer. Primary maternity facilities have no inpatient Secondary or Tertiary Maternity Services - such as epidural, caesarean section, usage of medications to induce or augment labour - as described in the Tier one service specification."

The Ministry of Health Service Coverage Schedule (SCS) outlines requirements for DHB Funded primary maternity facilities (tier two). Under this schedule, the DHB is required to provide or fund primary maternity facilities for urban or rural communities with a catchment of:

- 200 pregnancies where the facility is 30 minutes from a secondary service,
- 100 pregnancies where the facility is 60 minutes from a secondary service

Southern DHB Primary Maternity Facilities

Southern DHB operates secondary/tertiary maternity facilities in Dunedin and Invercargill where approximately 85% of all births occur. Well women experiencing a low-risk pregnancy who live in one of the two urban centers have no option for a separate primary maternity facility. Primary maternity, labour and birth care is also provided by LMC midwives in Dunedin Hospital and Southland Hospital. Women who birth in a secondary care location, despite receiving care from a LMC midwife, are more likely to experience a birth intervention with no benefit in outcomes for herself or her baby, at much higher cost and often lower satisfaction with her experience. (Dawson 2015).

There are seven primary maternity facilities located in Oamaru, Alexandra, Balclutha, Gore, Winton, Lumsden and Queenstown, which are operated as shown in Table 1. The map (Appendix 2) shows each location and the distance from a base hospital.

Table 1
Characteristics of Primary maternity facilities

Location	Legal name	Ownership	Co-location with other primary health services
Oamaru	Waitaki District Health Services	Rural hospital	✓
Alexandra	Charlotte Jean Maternity Facility	Privately owned	Stand-alone
Queenstown	Lakes District Hospital	DHB owned facility	✓
Balclutha	Clutha Health First Ltd	Rural hospital	✓
Gore	Gore Hospital	Rural hospital	✓
Lumsden	Northern Southland Maternity Services	Rural trust	Stand-alone with rural general practice
Winton	Winton Maternity Services	Rural trust	Stand-alone

Note: Since 29 November 2016, Tuatapere Maternity Hospital ceased providing primary maternity services and is not included in this report.

Most facilities employ ‘core or rostered midwives’ and nurses who work when the facility is open with each facility required to have a midwife available to come in when a nurse is working. In recent times some facilities have not been able to open because they did not have a core or rostered midwife available. The core or rostered midwife works alongside the LMC midwife as support during labour and delivery and also provides postnatal care. The LMC midwife is responsible for the continuity of care to the pregnant woman. There is an interdependent relationship between core staffing and community midwifery with each being adversely affected in times of short staffing.

4. Findings and Discussion

This section presents and discusses information obtained as outlined in the methods section. A detailed summary of questions and themes emerging from consultation feedback and submissions is included in Appendix 4 and 5.

Summary of evidence in support of primary maternity services (Appendix 1)

The International and New Zealand evidence consistently suggests that healthy women with a low risk pregnancy who labour and deliver in a primary maternity facility have better health outcomes for both mother and baby, compared to those that birth at a secondary or tertiary base

hospital. Primary maternity facilities are staffed by midwives and nurses with no access to interventions such as epidural, operative delivery, medications for induction or augmentation of labour occur unless by formal referral for clinical reasons to the obstetric team in a hospital setting.

The Ministry of Health is committed to rural health care services (2011) and care closer to home (2014) and, with the National Maternal Monitoring Group (NMMG), support strengthening primary maternity services including timely, equitable access to community based primary maternity care particularly for women living in rural areas. Based on national birthing statistics approximately 60 percent of all women will have a normal vaginal delivery and no intervention while the other 40 percent will require some form of intervention. In Dunedin Hospital 56% of women have a normal vaginal birth and in Southland Hospital this proportion is 59% (MQSP 2017).

Table 2 shows the number and proportion of births at primary maternity facilities for 2014/15. Many women domiciled in catchment areas with a primary maternity facility either chose or needed to birth at Dunedin or Southland Hospital, or at a primary maternity facility outside of their catchment area. As can be seen the number of women transferred in labour from primary maternity facilities is small.

Table 2

Births at primary maternity facilities, postnatal stays and transfers, Southern District, 2014/15

	Births to women domiciled in catchment	Births at local facility (%)	Postnatal stay	Postnatal stay from another facility	Transfers in labour from primary facility to secondary/tertiary
Oamaru	220	74 (33.6%)	74	78	6 (8.1%)
Alexandra	282	52 (18.4%)	52	115	2 (3.8%)
Gore	212	67 (31.6%)	67	81	8 (11.9%)
Lakes	251	65 (25.9%)	65	95	4 (6.2%)
Lumsden	60	24 (40%)	24	31	2 (8.3%)
Winton	62	37 (60%)	37	145	1 (2.7%)
Balclutha	165	40 (24.2%)	40	75	3 (7.5%)

Source: NMDS

In 2014, 11.6% of births in Southern DHB were in a primary maternity facility compared to 8% nationally, 85.5% of births were in Dunedin or Southland Hospital and 2.9% of births were at home (NMDS).

The literature shows that women decide on location of birth using safety as a significant priority along with the wishes of their partner, proximity to family and other social support and midwife advice. However, perceptions of a base hospital being the safest place for birthing are not born out by evidence and are able to be influenced (Dawson 2015). Most women (68%) want to have their antenatal care locally but are prepared to travel for the birth itself (Lavender and Chapple 2005 cited in Dawson).

Primary maternity facilities which are co-located within a rural hospital setting provide other infrastructure support and may make the facility more sustainable but there is no evidence to suggest this increases safety outcomes. There is anecdotal reporting that co-location ensures more rapid support in the event of a maternity emergency.

Demographic data

As shown in Table 3, the number of birth age women (age 15-44 years) in Central Otago and Queenstown Lakes District areas is projected to increase in between 2018 and 2043. This results in a projected increase in live births of around 17% in each area, over this 25 year period. All other Local Authority areas in Southern District are projected to have a decrease in the number of birth age women and a corresponding decrease in live births ranging between 5% and 27%.

These 25 year population projections, are fundamental for deciding where primary maternity facilities should be located to best serve the needs of the population. Consultation feedback from Oamaru/Queenstown/Wanaka reflected the view that Census projections do not accurately reflect population growth and changes for visitor populations or subpopulations of new migrants such as Pacifica or Phillipino. Census 2013 data is the basis for Ministry of Health funding to Southern DHB and is considered the most reliable source of population data.

Table 3
Projected female population age 15 – 44, projected live births, 2018 and 2043, by Local Authority

Local Authority	2018		2043		% change in births
	pop	births	pop	births	
Waitaki	3105	222	2915	206	- 6%
Central Otago	4645	308	5435	346	+ 17%
QT Lakes	5395	282	6445	334	+ 18%
Clutha	1920	136	1410	108	-20%
Dunedin	29005	1322	27795	1236	-6%
Invercargill	10380	680	9290	600	-12%
Southland	5380	420	5200	400	-5%
Gore	1990	150	1430	110	-27%

Source: Statistics NZ

Planning decisions for primary maternity facilities need to take account of other matters. These include:

- Balancing the health outcomes of birthing in a primary facility compared to a secondary facility and the costs to the system for each
- Quality of care and consumer satisfaction of care in primary facilities
- Maternity service requirements for visitor / transient populations especially in Central Otago/Lakes catchment and influences on midwife workload
- Investment in the health infrastructure of rural communities through co-location which could enhance more than maternity services eg transport.
- Distance and geographical barriers to access base hospitals.

Therefore birth numbers alone do not necessarily reflect the breadth and extent of maternity care provision. Ultimately, planning for primary maternity services needs to be flexible and responsive to the changing needs of communities and fluctuating birth rates.

DHB compliance with MoH Service Coverage schedule for primary maternity facilities

The Ministry of Health Service Coverage Schedule (SCS) outlines that the DHB is required to provide or fund primary maternity facilities for urban or rural communities with a catchment of:

- 200 pregnancies where the facility is 30 minutes from a secondary service,
- 100 pregnancies where the facility is 60 minutes from a secondary service

Catchments are made up of census area units for each Local Authority as shown in Appendix 3.

Table 4 shows how primary maternity facilities comply with the SCS. Facilities in Winton and Lumsden do not fall within the requirements of the SCS as each has a catchment of less than 100 pregnancies per year (average 65 per annum for the five year period 2011 – 2015). For the same period Winton, located 30 minutes from Southland hospital, had an average of 40 births per year and Lumsden an average of 29 per year. Even with maximum utilisation the population projections show that neither community will have a sufficient number of pregnant women in the catchment to meet the SCS.

In contrast the Central Otago and Queenstown Lakes District catchments are experiencing sustained population growth and an increase in birthing numbers. Accurate data are difficult to obtain, but Southern DHB may not be meeting MoH service coverage requirements for women living in the Wanaka and Hawea, catchment areas. Currently, the primary maternity facility options for these women are either Alexandra or Lakes District Hospital or travel to Dunedin or Southland Hospitals. It is unclear whether providing a facility in Alexandra or Queenstown would meet the requirements of the SCS given the need for travel to these centres.

In Wanaka there is an estimated 120 births per year (5 year catchment average). Anecdotal evidence is that around 20% of these are home births with the balance birthing at either Alexandra or Dunedin. The high home birth rate is indicative of women choosing or requiring this option as the distance to any maternity facility is significant. Southern DHB recognises that resources are needed to support the Wanaka community but believes that more detailed analysis is required to inform a decision about the kind of maternity services required for the Wanaka population including understanding any potential impact on the facility in Alexandra.

Table 4 Service coverage schedule by primary maternity facility

Primary Maternity Facility	Meets MoH service coverage schedule requirements	Time to base hospital	Annual average in births catchment 2011 – 2015	Annual average births in facility 2011 - 2015
Oamaru	Y	1.5 hours	239	92
Alexandra and Wanaka	Y	2.25 hours	336	65
Wanaka	No facility	3 hours	120	No facility
Queenstown	Y	2.5 hours	276	59
Clutha	Y	1 hour	197	34
Gore	Y	1 hour	267	81
Lumsden	N	1 hour	66	29
Winton	N	30 mins	64	40

Note: Wanaka/Hawea drive time is 60 minutes both to Alexandra and to Lakes District Hospital (over the Crown Range); Alexandra and Wanaka are combined as a catchment area for Charlotte Jean; Wanaka is also indicated separately.

Facilities located in Queenstown, Gore, Balclutha and Oamaru and Alexandra comply with the SCS because of the number pregnancies within these catchment areas but are underutilised as many women birth in Dunedin or Southland Hospitals and then return to their local primary maternity facility for postnatal care. There were an average 1445 births in the catchments of primary maternity facilities so if 30% were suitable for primary birthing this would be 433 births a year.

Primary maternity facility utilisation

LMCs and pregnant women together make decisions about birthing location. The consultation feedback suggested that women's decisions on place to birth are most influenced by midwives but also influenced by GPs, partners/spouse, family and friends, in contrast to formal literature which shows that women's primary concern is for "safety". The consultation feedback showed that women felt there was insufficient information on the benefits of primary maternity services and entitlements to these services. They requested independent and objective information to support decision making.

Many women base their conversations and subsequent decisions on perceived safety considerations, especially the 'what if' concerns and distance from secondary/tertiary services. Some midwives expressed their safety concerns regarding birthing in primary units, particularly in relation to the confidence/competence of care staff and transfer/transport availability. Amenities such as birthing pools, WiFi, double bed/ensuite for partner to stay overnight may also be important, however, these are not available consistently across all facilities.

Women's first birth experiences are critical to subsequent place of birth decision making.

Table 5 shows that utilisation for birthing in a primary maternity facility for the period 2011-2015 was variable but with an overall decline over the five years. Possible reasons for this include fluctuating numbers of pregnant women, the number of high risk pregnancies and choice as outlined above. Midwifery practice also highly influences the number of births in any location which in turn may impact on the character and stability of the midwifery workforce and thus the viability of the facility. Midwifery practice is considered to have contributed to a decline in the number of births in Alexandra.

Table 5
Number of births by location for years 2011- 2015

Location of birth	2011	2012	2013	2014	2015
Oamaru	118	79	103	75	80
Alexandra	95	59	64	56	52
Lakes	54	54	48	74	64
Clutha	23	29	33	38	45
Gore	90	76	83	76	78
Lumsden	46	29	10	17	41
Winton	43	52	40	30	35
Total	469	378	381	366	395
Home births	138	105	138	95	

Southern DHB sees the use of primary maternity facilities as an important part of the maternity system, but acknowledges the many factors at play in developing a whole-of-district approach to maternity care. The commitment of all parties to finding sustainable solutions through collaborative approaches is essential.

All primary maternity facilities provide services as per the service specifications developed by the Ministry of Health. Postnatal transfers for women from rural areas who have chosen to birth at Dunedin or Southland Hospital are common although may need stronger promotion.

Primary maternity facility funding and operational issues

Funding models for primary maternity facilities are historical, complex and inconsistent across providers. Bulk funding was introduced in 2011/12 in an attempt to increase sustainability.

Irrespective of differences in funding packages, most primary maternity facilities have requested additional funding to meet operational costs indicating that financial sustainability is a critical issue as they cannot provide financially sustainable services within existing funding. There are diseconomies of scale associated with several small standalone primary maternity facilities with most finding it increasingly difficult to manage compliance costs for audits, health and safety requirements, policies and procedures, quality systems, certification and Baby-friendly Hospital Initiatives. There are overheads associated with management and workforce costs, as well as the upgrades to the physical environment such as birthing pools, access to WiFi, double beds which enable partners to stay overnight and en-suite bathrooms. Facilities in Gore, Winton and Lakes do not provide these amenities.

Primary birthing per se is not costly. However, providing an inpatient primary maternity service through a primary maternity facility is inherently costly, associated with high overheads and high costs of staffing to maintain a state of readiness with relatively small throughput volumes. Furthermore, each facility has its own business model with varying degrees of efficiency.

Promoting better utilisation of primary maternity services and facilities may help to increase volumes and improve financial sustainability for those facilities that employ LMC midwives, e.g. Balclutha and Oamaru will be enabled to claim additional funding through Section 88.

Southern DHB receives funding through the Population Based Funding Formula (PBFF) which is a technical tool used to help equitably distribute the bulk of district health board funding according to the needs of each DHB's population. Provision of maternity services and facilities across the district is at the discretion of DHBs in line with accountability documents such as the Operating Policy Framework, Service Coverage Schedule and National Service Specifications.

Southern DHB funds:

- Primary Maternity Facilities across the district, with facilities located in Oamaru, Alexandra, Balclutha, Gore, Winton, Lumsden and Queenstown.
- Secondary and Tertiary Maternity Services and Facilities at Dunedin and Southland Hospitals.

Primary Maternity facilities are bulk funded to the value of \$2.74M across the district. Any increase in funding would need to come from a re-prioritisation of existing funding from other services. In addition to PBFF the MOH allocates \$1.67M to Southern DHB for Primary Maternity in Dunedin, Southland and Lakes Hospitals through the funding envelope. This funding relates to a policy change in July 2007 where DHB provider arms are no longer able to claim from the MoH via a Primary Maternity Services Notice (Section 88) for primary maternity services. Instead this

activity is funded through the DHB funding package. Non DHB owned and operated Primary Maternity Facilities who hold a Primary Maternity Services Notice (Section 88) are still eligible to claim via the notice for primary maternity services.

Lead Maternity Carer Services are funded by the Ministry of Health via the Primary Maternity Services Notice (Section 88). The Section 88 Primary Maternity Services Notice sets out the terms and conditions for payment to Lead Maternity Carers (LMCs) for providing primary maternity services. Lead Maternity Carers also hold a Maternity Facility Access Agreement. The Maternity Facility Access Agreement is a contract, which sets out the obligations of facility providers and lead maternity carers accessing DHB maternity facilities when bringing women into a primary maternity facility or hospital for labour and birth services.

Primary maternity facilities and workforce issues

The primary maternity facility workforce includes facility employed midwives and nurses with most facilities still very dependent on nurses rather than midwives to provide in-patient care. The advantage of employing midwives is recognised at Lakes District Hospital, which employs midwives only for core cover and in Balclutha where midwives are employed when vacancies arise. If a registered nurse is on shift a midwife is required to be available. Primary maternity facilities are only open if being used for birthing or postnatal care. Otherwise employed staff are on a nominal availability allowance which may be insufficient to provide adequate income potentially affecting recruitment and retention. LMC feedback is that there is greater confidence in using primary maternity facilities which are staffed by midwives. Facility employed midwives are required to be competent to practice across the midwifery scope, irrespective of their location.

There are unique inter-related challenges for the maternity facility workforce in the Southern District. This results in a workforce with frequent changes in their availability within communities which may put sustainability of primary maternity facilities in jeopardy. Overall the number of midwives in the Southern District is currently considered sufficient to meet the workload requirements. However distribution can be problematic as the midwifery workforce is dynamic and moves in and out of practice. Furthermore the workforce becomes more limited the further you are from urban centres and fewer midwives are located in rural areas especially in Central/Lakes and in some areas of Southland.

There is general agreement that the current funding model from the MoH does not adequately compensate primary maternity services provided by LMCs and it can be difficult for midwives to maintain a suitable workload/income due to rurality, distribution of midwives and the funding model. There is currently mediation occurring between the MoH and the New Zealand College of Midwives (NZCOM) in relation to payment through Section 88.

Addressing workforce issues is essential for a safe and high quality primary maternity service. Consultation feedback identified some actions to address these workforce issues could be to support regular ongoing maternity forums for the primary maternity workforce and others to enhance collaboration and coordination. Southern DHB's Maternity Quality Safety Programme (MQSP) will continue to serve as a forum to address clinical issues as well as providing an opportunity for increased communication and collaboration between those involved with the provision of primary maternity services.

Linkages and better working relationships with GPs, and secondary care systems

Consultation feedback reflected a need for increased integration between primary maternity services and primary care/secondary care services. The National Maternity Monitoring Group

2016 stated that “Supporting birth at primary maternity facilities requires adequate and appropriate access to secondary and tertiary maternity services when these are needed.”

The project team has identified the need for Southern DHB to work with health professionals, including GPs, to explain the role of primary maternity services and facilities and their importance to the whole health care sector. Relationships with secondary/tertiary care were variable with issues such as communication following antenatal clinic visits and emergency and postpartum transfers being raised.

Other consultation feedback suggested that secondary maternity services should be provided in rural locations with both women and midwives raising the issue of travel to attend antenatal clinic appointments and the lack of opportunity to be seen at a location near their home. As part of service planning, Southern DHB Women’s Health Service will review demand for secondary care from rural areas, aim to utilise telemedicine opportunities where possible and increase capacity for outpatient clinics.

Provision of a full secondary level service outside of the main centres is not considered feasible because of the requirement for supporting services such as anaesthesia, theatre and a 24/7 roster. The population base outside of Dunedin and Invercargill at this time is insufficient to justify the level of funding required to establish and operate secondary maternity services in other centres. Midwives practicing in an area distant from a secondary/tertiary facility, provide some services, which in a city would be provided by secondary/tertiary service.

Requirement for reliable transport/transfer systems

Feedback from consumers, midwives and providers reflected that transport/transfer is a major issue in the Southern District. There is a widely held perception that current systems may not consistently ensure timely transfer. There is variability in mode of transport being authorised or supported by receiving obstetricians, particularly regarding road versus helicopter transport. The complexity of the communication required to arrange a transfer was also identified. Fragmentation of travel results in rural midwives not being transferred back to their home base in a timely manner.

A reliable and safe urgent maternity transfer and transport system ensuring timely access to secondary care services from primary maternity settings is an absolute necessity to support primary maternity services. Transport affects a range of other services within the Southern DHB health system, with a view to establishing a comprehensive and cohesive maternity transport and retrieval system.

In recognition of the importance of this issue, an A3 project team started work in November 2016 to improve urgent maternity transfers from rural primary maternity settings. The team gathered data which showed significant delays from three geographic areas: Queenstown/Lakes/Wanaka, Central Otago, and Oamaru. Underlying causes included communication issues, lack of clarity around process, and scarcity of ambulance and drivers. Consensus guidelines for urgent transfers were developed which clarified the roles and responsibilities for the various stakeholders. The team worked with St John and all stakeholders in the area to develop a clear, simple and consistent algorithm for urgent maternity transfers from primary maternity settings across the District (Appendix 6). This algorithm was implemented 1 May 2017 and the team will track every urgent maternity transfer over the next several months to identify improvements still needed. Primary providers are already noting an improvement in communication between primary and secondary care.

Principles to guide future decision making

The project team developed the following principles which they considered could be used to support decision in regard to the configuration of primary maternity facilities across the district.

The principles are:

- Supportive of women's choice in relation to location to birth
- Compliant with National Service Specifications and Service Coverage Schedule
- Clinically and financially sustainable
- Provide a quality and safe service in accordance with MoH Service Specifications
- Supportive of the primary maternity workforce
- Integrated with GPs, other primary care providers and secondary care systems
- Supported by requisite transfer/transport systems
- Delivered through the optimal model of care

These principles will be tested as part of a co-design process to inform future decision making.

5. Conclusions

Current primary maternity facilities in Southern DHB have been in place for some decades and this project has identified that in recent years there have been increasing challenges to their viability. It is recognised that these facilities have played a significant role in the development of rural areas and local communities continue to strongly support them. However, health service planning is inherently forward looking and must ensure the needs of the population are served and resources are used wisely.

Relevant local data and feedback from a series of community consultation meetings has been reviewed and the following conclusions can be made:

- 1) There are significant changes to the projected population of birthing women for the next 25 years that should be used to inform the location of primary maternity facilities in Southern DHB.

The population of birth age women (15–44) is projected to decline over the next 25 years through to 2043 in Southern DHB except in the Central Otago / Queenstown Lakes districts where it is projected to grow by 17%. This provides an opportunity to plan an appropriate maternity service aimed at meeting the needs of the population of birthing women and their families/wane, which includes care services, workforce, appropriate facilities and sustainable business arrangements.

- 2) There is consistent research evidence that birthing in a primary maternity facility results in better health outcomes for healthy women who have low risk pregnancies.

The clinical safety and quality of maternity services in primary maternity facilities is not in question. Care that occurs in the primary maternity facilities is generally high-quality, associated with more normal outcomes for women and babies and high levels of consumer satisfaction. Communities, rural maternity providers and families overwhelmingly support the continuation of primary maternity facilities.

- 3) All primary maternity facilities operate differently and have inconsistent funding arrangements. They all face a number of challenges which threaten their viability. Better configuration of this group of facilities is required to ensure the needs of the population are being met and resources are being used wisely.

The seven rural primary maternity facilities are underutilised, their funding arrangements are inconsistent and they have different business models. Arguably this is not sustainable especially in light of projected population changes.

The possibility of a primary maternity birthing facility in Dunedin and or Invercargill could also be explored as an option. Many women in Southern DHB do not use their nearest maternity facility if it is a primary one, resulting in long traveling distances.

It is estimated that about 30% of women should be eligible for birthing in a primary maternity setting. Given there are around 3500 births per year in Southern DHB there could be around 1050 births in primary maternity settings including Dunedin and Southland Hospitals. For the seven rural facilities there are an average 1445 births in those catchments each year so 30% of those is 433 births per year.

- 4) There are opportunities to improve and strengthen the current arrangements for primary maternity care which would be best managed by the Maternity Quality Safety Programme and should be undertaken separately from issues related to facilities.

These include:

- a. Supporting a reliable system for urgent transfers of women in labour
- b. Supporting leadership and infrastructure in primary maternity facilities to enhance high-quality clinical environments and improve linkages with secondary care and other maternity providers.
- c. Work with current primary maternity facilities and their communities to improve utilisation as place of birth and/or inpatient postpartum care, including
 - i. Communicating with communities to ensure that pregnant women and families have up to date information about options for maternity services, and entitlements to care
 - ii. Communicating with primary health care providers about maternity services provision
 - iii. Work with LMCs and secondary maternity facilities to promote women transferring to a primary maternity facility for postnatal care when they have birthed in-hospital.

Recommendations

1. The MQSP co-ordinator include the quality improvement opportunities identified from this project into their annual work plan. These include a system for urgent transfers, leadership to enhance the primary facility working environment, and a programme aimed at promoting the benefits of choosing to birth in a primary maternity facility. This may require additional resource for the MQSP and consideration to a district wide clinical leadership role.
2. A small team of seven or eight clinicians, managers and consumers is formed. Using the conclusions from this report, this team will engage in a one-off co-design event to develop a series of options for the location of primary maternity facilities. Their work will be used to form a formal options paper for consideration by the Southern DHB Executive Leadership Team and Commissioners.

References

Ministry of Health Primary maternity facility service specifications

https://www.google.co.nz/?gfe_rd=cr&ei=tBS_WNSHF0bDXpaAijA&gws_rd=ssl#safe=strict&q=primary+maternity+facility:+definition+&spf=68

Ministry of Health Service Coverage Schedule 2015 /16

https://nsfl.health.govt.nz/system/files/documents/publications/final_2015-16_service_coverage_schedule_16june_v1.1-clean.pdf section 4.8

Nationwide service framework; Maternity Specifications

<http://nsfl.health.govt.nz/service-specifications/current-service-specifications/maternity-service-specifications>

The Ministry of Health (2011). Rural health

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Ministry of Health (2014) Care closer to home. Wellington: Ministry of Health

Dawson, P. 2015, "Travel Patterns of Women Giving Birth in the Southern District Health Board". Masters thesis for Graduate School of Nursing Midwifery and Health, Victoria University of Wellington

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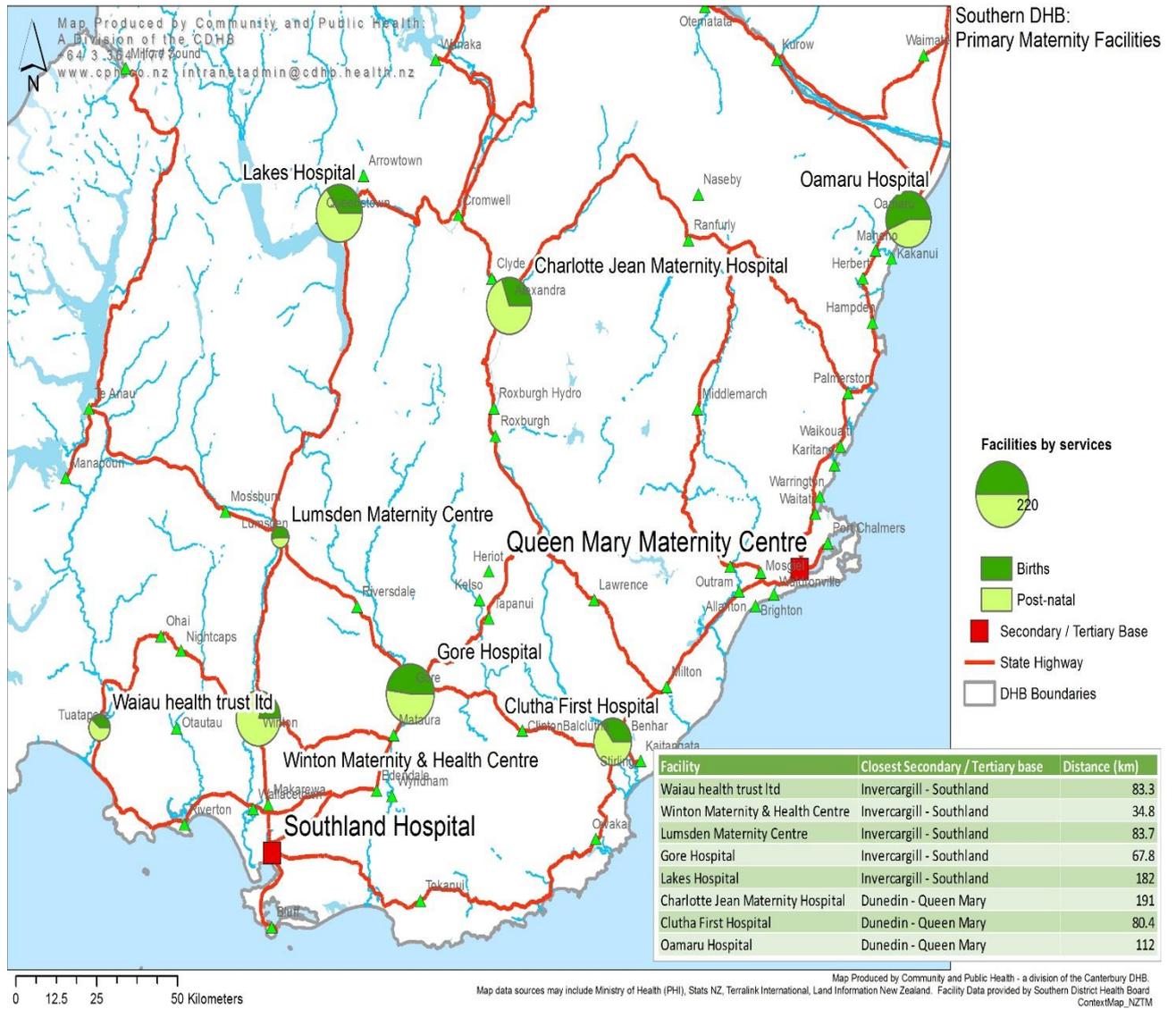
[http://www.thelancet.com/pdfs/journals/lancet/PIIS0140-6736\(16\)31527-6.pdf](http://www.thelancet.com/pdfs/journals/lancet/PIIS0140-6736(16)31527-6.pdf)

Appendix 1: Summary of Evidence in Support of Primary Maternity Services

Studies	Findings
<ul style="list-style-type: none"> • Birthplace in England Collaborative Group. (2011). Perinatal and maternal outcomes by planned place of birth for healthy women with low risk pregnancies: the Birthplace in England national prospective cohort study. <i>BMJ</i>. 343. Doi: http://dx.doi.org/10.1136/bmj.d7400 • National Institute for Health and Care Excellence. (2014). Intrapartum care for healthy women and babies. Retrieved from: https://www.nice.org.uk/guidance/cg190/resources/intrapartum-care-for-healthy-women-and-babies-35109866447557 	<p>This is the key study which supports better outcomes for women and babies from giving birth in a midwife led primary unit. This study led to the development of the NICE guidelines which again echo to safety and satisfaction of primary birthing.</p>
<ul style="list-style-type: none"> • McIntyre, M, J, PhD. (2012). Safety of non-medically led primary maternity care models: A critical review of the international literature. <i>Australian Health Review</i>, 36(2), 140-7. Retrieved from http://search.proquest.com.op.idm.oclc.org/docview/1022629306?accountid=39660 • Murray-Davis, B., McDonald, H., Rietsma, A., Coubrough, M., & Hutton, E. (2014). Deciding on home or hospital birth: Results of the Ontario choice of birthplace survey. <i>Midwifery</i> 30(7), 869-876. Doi: http://dx.doi.org.op.idm.oclc.org/10.1016/j.midw.2014.01.008 	<p>International evidence that supports primary birthing</p>
<ul style="list-style-type: none"> • Davis, D., Baddock, S., Pairman, S., Hunter, M., Benn, C., Wilson, D., Dixon, L. and Herbison, P. (2011). Planned Place of Birth in New Zealand: Does it Affect Mode of Birth and Intervention Rates Among Low-Risk Women?. <i>Birth</i>, 38: 111–119. doi:10.1111/j.1523-536X.2010.00458.x 	<p>Evidence to illustrate that women who birth in a secondary or tertiary unit will have more interventions, despite being well women.</p>
<ul style="list-style-type: none"> • Grigg, C.P., Tracy, S.K., Tracy, M., Schmied, V., Monk, A. (2015a). Transfer from primary maternity unit to tertiary hospital in New Zealand – timing, frequency, reasons, urgency and outcomes: Part of the Evaluating Maternity Units study. <i>Midwifery</i>. 31(9), 879-887. Doi: http://dx.doi.org.op.idm.oclc.org/10.1016/j.midw.2015.04.018 • Grigg, C. P., Tracy, S. K., Schmied, V., Monk, A., & Tracy, M. B. (2015). Womens experiences of transfer from primary maternity unit to tertiary hospital in New Zealand: Part of the prospective cohort evaluating maternity units study. <i>BMC</i> 	<p>Provides evidence around transfer.</p>

<p>Pregnancy and Childbirth, 15 Retrieved from http://search.proquest.com.op.idm.oclc.org/docview/1779566121?accountid=39660</p>	
<ul style="list-style-type: none"> Wernham E, Gurney J, Stanley J, Sarfarti D (2016). A comparison of midwife-led and medical-led models of care and their relationship to adverse foetal and neonatal outcomes: A retrospective cohort study in New Zealand. PLOS Med 2016; 12 (9) 27 September. Online. 	<p>Compares birth outcomes for babies born to mothers registered with medical lead maternity carers, such as obstetricians or GPs, with those who had midwives as lead maternity carers. The study found that “adverse health outcomes were substantially lower in the medical-led births group compared to the midwife-led group.”</p> <p>This outcome has been challenged as data recording the LMC was taken at the point of registration not the time of birth and does not reflect the collaborative system of referral that exists between midwives and doctors during a woman’s care. Although this raises significant question about the validity of the findings, the study has identified there may be aspects of our maternity system where improvements can be made that provide better outcomes for babies.</p>
<ul style="list-style-type: none"> Dawson, P. 2015, "Travel Patterns of Women Giving Birth in the Southern District Health Board". Pauline Dawson is a research midwife with Master's thesis submitted through the Graduate School of Nursing, Midwifery and Health at Victoria University. 	<p>Dawson highlighted that women’s need to be close to full obstetric services outweighs issues of distances to travel.</p>
<ul style="list-style-type: none"> Farry A. (2015), A retrospective cohort study to evaluate the effect of ‘Place Presenting in Labour’ and ‘Model of Midwifery Care’ on maternal and neonatal outcomes for the low risk women birthing in Counties Manukau District Health Board facilities 2011-2012. A thesis submitted to Auckland University of Technology, in partial fulfilment of the requirements of the degree of Master of Health Science (MHSc). School of Midwifery. http://aut.researchgateway.ac.nz/handle/10292/9467 	<p>Study of birthplace and comparison of outcomes across a DHB has shown that “when low risk women present to a tertiary obstetric hospital, their co-morbidities increase as do that of their newborns as opposed to those who present to a primary unit in labour.</p>

Appendix 2: Map of Rural Remote/Primary Maternity Facilities, Southern District, 2013/14



Appendix 3

Southern District Census Area Units by Locality Catchment Areas

Catchment areas are defined below by locality, and are broadly based on local government areas. Where communities typically use health services outside their local government area, however, (for example, Wanaka and Lake Hawea residents frequently use central Otago facilities) this has been taken into account. These catchment areas differ slightly from the standard Territorial Authorities (TAs) as they take into account patient flow to health facilities. Catchment areas for Central Otago and for Rural Southland have been further broken down because of the location of primary maternity facilities.

Catchment Area	Census Area Units
Central Otago	Central Otago (Charlotte Jean) including Wanaka Teviot, Tuapeka, Roxburgh, Ranfurly, Maniototo, Naseby, Dunstan, Clyde, Hawea, Alexandra, Cromwell, Wanaka, Matutuki
	Central Otago without Wanaka Teviot, Tuapeka, Roxburgh, Ranfurly, Maniototo, Naseby, Dunstan, Clyde, Alexandra, Cromwell
	Wanaka Wanaka, Hawea, Matukituki
Waitaki (Oamaru)	Weston, Pukeuri, Ardgowan, Cape Wanbrow, Duntroon, Kurow, Maheno, Omarama, Kakanui, Otematata, Aviemore, Hampden, Oamaru North, Orana Park, Oamaru Central, Oamaru South, Palmerston, Waihemo, Hyde
Rural Southland District	Lumsden Includes Balfour Community, Riversdale Community, Lumsden Community, Te Anau, Mossburn, Manapouri, Mararoa River, Inland Water-Lake Te Anau
	Winton Winton, Fairfax, Nightcaps
	Tuatapere Tuatapere, Wairio, Ohai, Te Waewae
Gore	Charlton, Waikaia, Kaweku, Chatton, Kaiwera, Hokonui, Waianiwa, North Gore, East Gore, Central Gore, West Gore, South Gore, Mataura, Tapanui
Queenstown Lakes	Frankton, Glenorchy, Kingston South, Kelvin Heights, sunshine Bay, Wakatipu, Inland Water-Lake Wakatipu, Lake Hayes, Outer Wakatipu, Wakatipu Basin, Frankton East, Lake Hayes South, Jacks Point, Arrowtown, Queenstown Bay, Queenstown Hill and Arthur's Point
Clutha	Bush Road, Benhar, Stirling, Bruce, Milton, Kaitangata, Clinton, Kaka Point, Owaka, Clutha, Lawrence and Balclutha
Dunedin	Waikouaiti, Aramoana, Waitati, Evansdale, Karitane, Warrington, Nenthorn, Fairfield, Brighton, Waldronville, Outram, Middlemarch, Wyllies Crossing, Wingatui, Kaikorai, Saddle Hill, Taieri, Strath Taieri, Harbourside, Fernhill, High St-Stuart St, Stuart St-Frederick St, Opoho, Forrester Park, North East Valley, Pine Hill, Woodhaugh, North Dunedin, Otago University, Maori Hill, Balmacewen, Glenleith, Helensburgh, Wakari, Halfway Bush, Brockville, Roslyn North, Roslyn South, Mornington, Belleknowes, Kenmure, Caversham, Corstorphine West,

	<p>Corstorphine East, Caledonian, South Dunedin, Forbury, St Clair, Musselburgh, Andersons Bay, Vauxhall, St Leonards-Blanket Bay, Ravensbourne, Inner Peninsula, Company Bay, Macandrew Bay, Broad Bay-Portobello, Taiaroa-Cape Saunders, Sandymount, Sawyers Bay, Port Chalmers, St Kilda West, St Kilda Central, St Kilda East, Green Island, Abbotsford, Concord, Mosgiel East, Mosgiel South, East Taieri, Inlet-Dunedin City Bays</p>
Invercargill	<p>Makarewa North, Makarewa, Bay Road West, Mill Road-Woodend, Bushy Point, Otatara, Oreti Beach, Dacre, Myross Bush, Waituna, Woodlands, Greenhills, Wallacetown, Grasmere, Waikiwi, Rosedale, Gladstone-Avenal, Windsor, Waverley-Glengarry, Hawthorndale, Richmond, Otakaro Park, Crinan, West Invercargill, Georgetown, Newfield-Rockdale, Heidelberg, Strathern, Appleby-Kew, Kingswell-Clifton, Tisbury, Bluff, Stewart Island</p> <p>Invercargill covers Otautau, and Riverton East and West. Lower Maitaura catchment units (Edendale Community, Wyndham, Toetoes) all feed into Invercargill</p>

Statistics New Zealand

Appendix 4: Southern District Primary Maternity Services Consultation Questions

The following represent Southern District Primary Maternity Services consultation questions presented at a series of consultation meetings across the Southern District in August/ September 2016.

Area to discuss	Description	Discussion Areas
1	General questions	<ul style="list-style-type: none"> • What are the issues affecting access to primary maternity services for birthing women in the Southern District? • What risks do we need to plan for and mitigate in the future? • Where should rural maternity units be located to best ensure access)? • How can we increase utilisation of primary maternity services? • What other services are required to support primary maternity services in the Southern District? • What challenges are there in relation to transfer/transport?
2	Questions for midwives	<ul style="list-style-type: none"> • Aside from women's choice, what are the factors that influence your decisions around place of birth? • What are the challenges affecting clinical sustainability of primary maternity services? • What information do you provide to inform decision making around place of birth?
3	Other questions for facilities/providers	<ul style="list-style-type: none"> • What are you doing to encourage women to use primary maternity facilities? • What incentives are offered or what would be effective incentives to encourage use of primary maternity facilities? • How are you working with midwives to promote the use of primary maternity facilities? • What are the challenges affecting clinical sustainability of primary maternity facilities? • What are the challenges affecting financial sustainability of primary maternity facilities?
4	Other questions for consumers	<ul style="list-style-type: none"> • What services could primary maternity facilities provide that would make you want to use them? • What is preventing you/has prevented you from using a primary maternity facility? • What information have you accessed/received to inform decisions re place of birth? • Who are the key people who have influenced your decision re place of birth? How did they influence your decision?

Appendix 5: Consultation Feedback and related Quality and Safety Recommendations

Consultation feedback has been summarised and analysed according to themes. The project team acknowledges the considerable feedback provided by consumers, midwives, and providers/other health professionals at these consultation meetings and through submissions.

Theme: Primary Maternity Services are Supportive of Women's Choice

Women's decisions on place of birth are influenced by numerous parties.

Midwives are the most influential but women are also influenced by GPs, partners/spouse, family and friends, who may be more risk averse than the woman, as well as the local community and the media. Many women base decisions on safety considerations, especially the 'what if' and distance from secondary/tertiary services.

Many women do not have sufficient access to information on the benefits of primary maternity services and access to these services.

There are no primary birthing facilities in Dunedin and Invercargill.

Primary maternity facilities can undertake actions to increase utilisation of primary maternity services.

Women prefer birthing in a homely environment, with birthing pools, ensuites, double beds and ability of partner to stay with them. These are not available in all primary maternity units.

There is a lack of information from facilities on provision of entitlements, especially in relation to eligibility, length of stay and emergency care.

Recommendation: Provide information on primary maternity services

- Southern DHB to provide web based information for women and whanau covering Southern DHB support of primary maternity services, services available at each primary maternity facility, research supporting primary birthing, including information on the safety and risks of both hospital births and births in primary settings, etc. Southern DHB to periodically release good news stories of primary births, including release of information that may be used by local media across the district.
- Facilities to provide web based and other information, including entitlements, positive supports provided through primary maternity services, including newborn care, mental health support, breastfeeding support, positive outcomes and evidence for primary birthing, incentives as relevant, etc.
- Southern DHB to encourage the MoH, midwives, facilities, Pregnancy and Parenting Education Programmes and other providers to provide sufficient information on primary maternity services to encourage/support women to consider this option.

Theme: Primary Maternity Services are Integrated with Primary and Secondary care Systems

Need for greater integration

There is a need for greater integration between maternity services and primary care/secondary care services. A comprehensive back up service is needed, provided from a whole team (funded and with a skilled workforce) to ensure safety of birthing at a distance from a secondary centre.

All health professionals need to deliver consistent messages that primary maternity services result in the best outcomes for appropriate women.

A system is needed to support smooth transition between primary maternity care and secondary care when women in labour are transferred.

LMC midwives in provincial areas report they often provide secondary care for which they are not remunerated as per Section 88, e.g. monitoring high risk women, in order to fill a service gap.

GPs have not been involved in maternity services for some time which has led to a skills deficit.

There is a lack of understanding about the availability of funding for GPs to assist midwife colleagues in maternity care, beyond the first trimester.

Recommendation: Improve integration between maternity and primary and secondary services

- Southern DHB to work with health professionals, including GPs, to reinforce the need to support primary maternity services.
- Southern DHB to encourage all providers to deliver consistent messages that primary maternity services result in the best outcomes for most women who have been assessed as low risk.
- Southern DHB to encourage collaboration between rural practitioners to provide support in emergency maternity situations.
- Southern DHB to develop multidisciplinary education opportunities between GPs, midwives and specialists focusing on rural maternity care.
- Southern DHB to enhance communication channels between primary and secondary staff with the opportunity for regular debriefing of emergency transfers in all areas.
- Southern DHB to work with base hospitals to establish standard handover processes for transferring women from secondary care to primary maternity units for postnatal care.
- Southern DHB to ensure that staff at secondary and tertiary hospitals actively encourage rural women to receive postnatal care at their closest primary facility.
- Southern DHB to establish telehealth systems to facilitate clinic appointments between midwives, women and consultant obstetricians to ensure there is adequate access for rural women to specialists in a timely manner.
- Southern DHB to ensure that systems for referral and timing of subsequent consultations and procedures are respectful of the distance some women have to travel to access these services.
- Southern DHB Women's Health Services to undertake service sizing in relation to obstetrics, to ensure that the number of clinics offered is appropriate to the need in rural locations.
- SOUTHERN DHB Maternity Quality Safety Programme to continue to serve as

Theme: Primary Maternity Services are Supported by Required Transport Systems

Transport/transfer is a major issue in the Southern District. A comprehensive and highly reliable system ensuring timely access to transport is an absolute necessity to support primary maternity services.

There are system issues including availability of ambulances and staff, communication, decision making processes and the manner in which midwives are greeted upon arrival at base hospitals.

Women and midwives do not have confidence that the transfer system will work quickly enough to provide safe care. There are often time delays in transfers, with considerable

time spent waiting for ambulances to arrive, compounded by having to change ambulances several times en route from some locations.

Midwives are often stranded away from their home base after transferring someone via ambulance, with no way home within a reasonable time frame.

The standard of care decreases while the woman is in transit for extended periods of time, often with ambulance staff or a paramedic with little confidence/training in maternity on board. Midwives' experience is that some St John's staff are not sufficiently confident or competent to perform required duties. The availability of advanced paramedics is limited and midwifery practices sometimes feel they need to involve two midwives in stabilisation and transport.

There is a perception that helicopter retrieval can be done very rapidly. The reality is that the time to fly a woman to a base hospital from a rural hospital can be similar to road transport time in some locations. In other locations in the district, both road and air transport present time challenges due to distance in emergency or rapidly altering situations.

Recommendations: Address transfer/transport issues

- Southern DHB to enter into discussion with St John and other relevant providers in relation to transfer/transport issues as a matter of urgency, with a view to establishing a comprehensive and cohesive maternity retrieval system. New process introduced is being evaluated.
- Southern DHB to enter into discussion with base hospitals re staffing/protocols to

Theme: Primary Maternity Services are Supportive of the Primary Maternity Workforce

Southern District midwives have identified a number of workforce issues impacting on their ability to provide primary maternity services.

The number of midwives in the Southern District is currently considered sustainable. However, there is a lack of midwives in some areas, especially in Central/Lakes and in some areas of Southland.

Midwives are a dynamic workforce and may move in and out of the workforce. The workforce becomes more limited the further you are from an urban centre.

Collaborative approaches are required because of the nature of the Southern District with a sparse population across a large geographical area.

Increasingly, clients are presenting with complex issues that require a level of secondary care; this impacts on caseload.

Ongoing updating and training for all practitioners involved is important; this is sometimes an issue in rural areas due to limited access, distance, cost, etc.

The current low numbers of women accessing the smaller primary maternity facilities does not provide enough on-going clinical experience to the staff for them to remain confident and experienced in rural maternity provision.

There is currently mediation between the MoH and the New Zealand College of Midwives in relation to payment through Section 88. Both have agreed that the current funding model does not adequately compensate primary maternity services provided by LMCs. The current model of funding for LMC midwifery care creates many challenges in terms of clinical and financial sustainability. There is a lack of understanding relation to Section 88 claiming for midwives and others.

There are unique challenges to the maternity workforce in the Southern District which require unique solutions to better address the unequal burden, particularly on the remote rural workforce. Some of the primary maternity workforce is not remunerated equally to the urban facility workforce, creating issues around recruitment and retention. Facility midwives are required to be competent to practice across the midwifery scope,

irrespective of their location. However, the same work from within this scope is not equally remunerated and is dependent on location which unfairly disadvantages some primary facility midwives.

Recommendation: Address primary maternity facility workforce issues

- Midwives should be considered the most appropriate providers of maternity care in primary maternity facilities. Ideally, where nurses are employed, facilities replace nurses who resign with midwives.
- Southern DHB to facilitate access to ongoing education and support to maintain competency and confidence.

Recommendation: Address LMC workforce issues

- Southern DHB to support regular, ongoing maternity forums for the District. Forums to include discussion of research, evidence based and best practice guidelines, presentation of ideas, etc. Forum to include providers as well as LMCs, with breakout sessions relevant to each group.
- Southern DHB to establish email/videoconference groups to discuss issues and share training events. Education sessions to be offered with training sessions via videoconferencing.
- Southern DHB to enhance and support LMC involvement with Southern DHB activities and services and gain regular feedback from LMCs.
- Southern DHB to work with local and national NZCOM groups to address LMC workforce issues anticipating future need and current challenges.
- Southern DHB to consider support for midwives practicing rurally at a distance from a maternity facility.

Theme: Primary Maternity Services are Clinically and Financially Sustainable

There are utilisation, workforce and financial issues related to the size of the service

Some primary maternity services are not considered clinically sustainable

Employment models are different in each setting (LMC, Core staff, employed staff).

It is difficult to recruit staff to work in primary maternity facilities and staff retention is an issue due to employment conditions and low rates of remuneration.

Some midwives are concerned that caseloads are unsustainable, due to the increasing complexity of cases.

Midwifery practice highly influences the number of births in any location. This creates variability in utilisation which can fluctuate depending on the character and stability of the midwifery workforce.

There are few incentives for Trust owned facilities to work together more collaboratively.

Some primary maternity services are not financially sustainable

Policies, procedures and quality systems must be in place and audits must be undertaken in each service, regardless of size. Facilities are finding it increasingly difficult to manage compliance costs, especially in relation to audits.

Funding models are historical and complex.

Primary maternity facilities are increasingly providing more secondary level services. This is not recognised through funding.

Bulk funding is finite by definition; this creates disincentives to increase the numbers of women birthing at primary maternity facilities.

It is hard to attract and retain volunteers who are required for Trust governance.

Recommendation: Increase utilisation and sustainability of primary maternity facilities

- Southern DHB to encourage primary maternity units to upgrade facilities to a standard that includes amenities as described above.
- Southern DHB to encourage facilities to undertake activities to increase utilisation of primary maternity services.
- Southern DHB to investigate models of care with primary health clusters or clinics; this may entail establishing maternity support centres enhancing the visibility of maternity services in communities or supporting midwives to conduct antenatal clinics in primary facilities.