

ACT Health

Options for the Northside Birth Centre

Feasibility study report

16 October 2024

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Table of Abbreviations

ABS	Australian Bureau of Statistics
ACCHO	Aboriginal Community Controlled Health Organisation
ACT	Australian Capital Territory
ACTAS	ACT Ambulance Service
APC	Admitted Patient Classification
ASO	Administrative Service Officers
CALD	Cultural and linguistically diverse
CHWC	Centenary Hospital for Women and Children
CMTEDD	Chief Minister, Treasury and Economic Development Directorate
CPI	Consumer price index
DRG	Diagnosis related group
FTE	Full-Time Equivalent
GP	General Practitioners
MET	Medical emergency teams
NAP	Non-admitted Patient
NCH	North Canberra Hospital
NSW	New South Wales
RANZCOG	Royal Australian and New Zealand College of Obstetricians and Gynaecologists
RM	Registered Midwives
RMR	Repairs, maintenance and renewals
WPI	Wage Price Index

Executive Summary

This report presents the findings of the feasibility study on the birth centre options for the northside of the Australian Capital Territory (ACT). The study addresses two primary objectives:

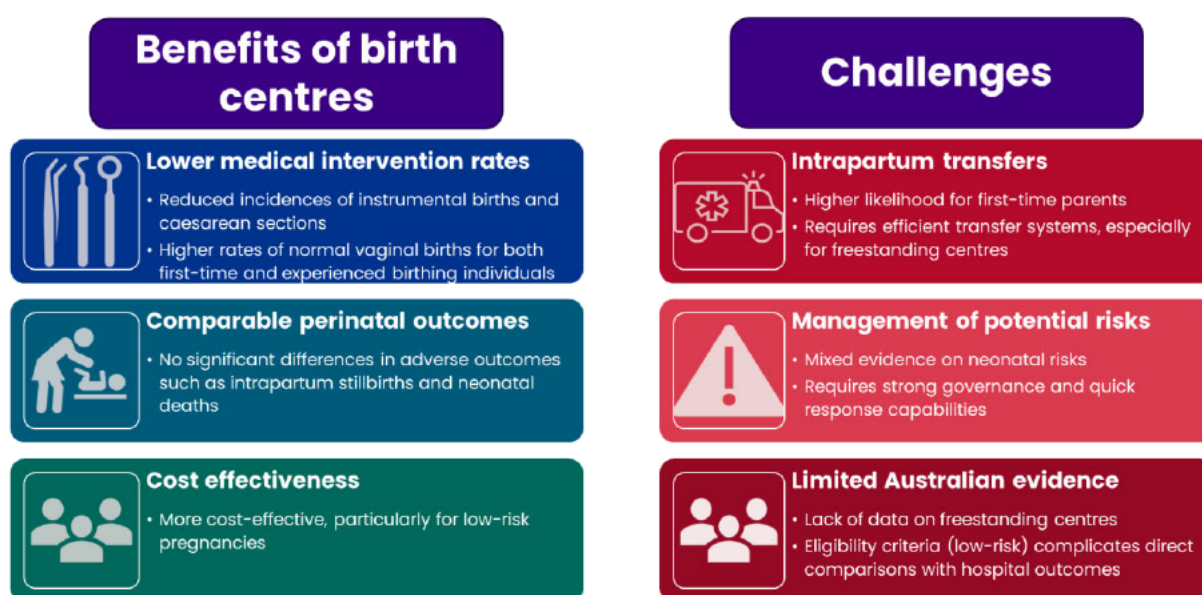
- 1. Optimal birth centre model for the northside hospital:** Evaluate and recommend the most suitable birth centre model for integration into the northside hospital redevelopment.
- 2. Feasibility of an additional freestanding birth centre:** Assess the viability of establishing a community-based, freestanding birth centre to complement the current and proposed hospital-based facilities in the ACT.

What are birth centres?

Birth centres are a place of birth that support a philosophy that offers continuity of midwifery care in a home-like environment, focusing on low-risk pregnancies and births that do not require medical intervention. The intimate, less clinical atmosphere of birth centres appeals to those seeking a more natural birthing experience. The success of birth centres can be attributed to the midwifery continuity of care model, where care is provided by a known midwife or small team throughout pregnancy, birth, and the postnatal period.

There are many known benefits for birthing in the birth centre, however, still need to be weighed up against the key challenges that may be faced in this environment as demonstrated in Figure 1.

Figure 1: Key benefits and challenges or risks of birth centres

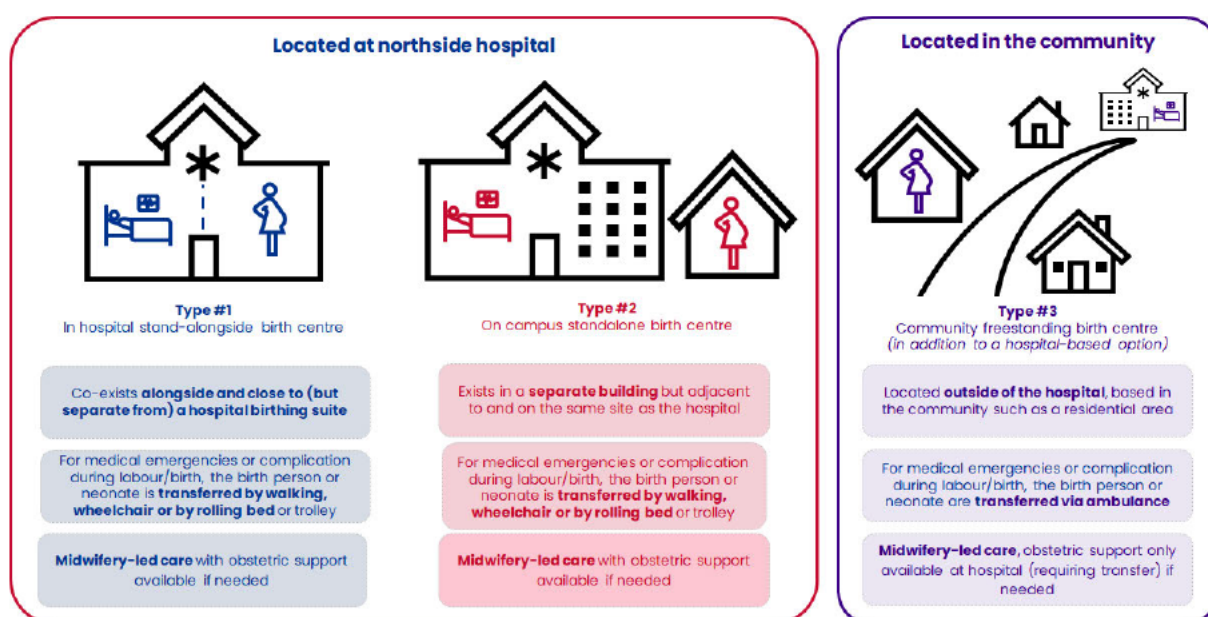


Birth centre options assessed

Three primary options were identified for the feasibility study as illustrated in Figure 2 and defined as:

1. **Stand-alongside birth centre:** Located within the same building as the main maternity unit, but on a separate floor or in a distinct area. While it maintains its own identity and midwifery-led model of care, it is in close proximity to the hospital's obstetric and neonatal services. This arrangement allows for quick access to medical intervention if needed, while still providing a more home-like environment than a traditional birthing suite. This is the approach utilised for both of the birth centres at Centenary Hospital for Women and Children (CHWC) and North Canberra Hospital (NCH).
2. **Standalone birth centre:** Separate building on the hospital campus that is connected to the main hospital via a covered walkway to enable a safe, effective and dignified transfer of mothers and birth people by hospital staff without the need for an ambulance. For the feasibility study, the term "adjacent" was used to define within immediate proximity or directly connected to the hospital to allow for rapid, non-ambulance transfers by the hospital medical team.
3. **Freestanding birth centre:** Located in community setting, away from a hospital, with separate staffing to the hospital and ambulance transfer required in event of an emergency during labour. The freestanding option is considered only in addition to a hospital-based birth centre (standalone or stand-alongside) at the northside hospital, not as a replacement.

Figure 2: Options for the birth centre being explored for feasibility study



The option of a birth centre on the campus of, but not adjacent to, the main hospital building (i.e. a separate building without a designated safe and dignified transfer pathway for access to the hospital) was not assessed for feasibility in this study. It is considered that **the benefits of a standalone birth centre will be reduced if it is further away from the main hospital**, for example requiring ambulance transfer to the birthing suite/ theatres/ nursery in the event of higher care requirements. Such an option, if considered, would be assessed as similar to the freestanding birth centre option.

This is because any birth centre option requiring ambulance transfer introduces the same challenges as the freestanding option, as many of the benefits of having a birth centre on the hospital campus come from avoiding the need for ambulance transfers, thus maintaining rapid access to specialist services if needed. These benefits are available in both the stand-alongside and standalone options as defined and have been assessed accordingly in this study.

Key recommendations

Three primary recommendations for the birth centre in the ACT emerged from this feasibility study:

1. It is recommended a standalone birth centre be pursued for the northside hospital.

A standalone birth centre is the preferred model over the stand-alongside option (noting that this recommendation is made pending further design and capital cost assessments in relation to the northside hospital). Both models scored similarly across various feasibility criteria, with only a small difference in the final scores. This close scoring indicates overall safety and viability of both options for the northside hospital.

However, the standalone option better supports the service reform outlined in the Maternity in Focus Strategy by offering several distinct advantages that align with the key strategic objectives for ACT Health:

- The standalone option provides a unique opportunity to **support culturally safe and inclusive models of care**, such as Birthing on Country initiatives, whilst also enabling some of the goals put forward by proponents of freestanding birth centres to be met if it is designed with the community's considerations in mind.
- The standalone option provides for a **more home-like environment**, which aligns closely with the preferences expressed by many consumers and midwives during consultations. This setting is designed to offer a more natural birthing experience while still maintaining the safety net of proximity to hospital services.
- The standalone option also has the potential **to improve midwife attraction and retention**. Many midwives expressed a desire for greater autonomy and the ability to work to the full scope of their practice. The separation from the main hospital in a standalone centre could provide this sense of independence while still allowing for seamless collaboration with obstetric, medical and allied health services, as needed.
- While proximity to a birth centre primarily determines where women birth, the standalone option provides a **distinct alternative to the stand-alongside centre** at CHWC. This diversity in models of care can potentially benefit the entire ACT region by offering greater choice through the availability of varied birthing environments.

2. Establishing a freestanding birth centre in addition to a birth centre based at northside hospital is currently not feasible.

Several factors contributed to this conclusion:

- There is **limited Australian evidence** on the safety and outcomes of freestanding birth centres. This lack of local data makes it challenging to confidently assess the risks and benefits in the ACT context.
- The ACT is currently **struggling to meet existing continuity of care targets** with its midwifery workforce. Adding a freestanding birth centre would further strain these resources, potentially compromising care quality across all maternity settings.
- **Significantly higher cost**. Projections indicate that a freestanding birth centre would serve only a small portion of the ACT birthing population, primarily catering to women and birth people with a low-risk pregnancy who wish to birth at the centre. The substantial extra investment required to meet the initial capital costs, and the ongoing higher operational costs may not be justified given the limited reach.
- There is a notable **lack of support from the medical community**, including hospital-based obstetricians and community-based General Practitioners (GPs). Many

expressed concerns about the model's ability to withstand scrutiny in the event of adverse outcomes, particularly given the physical separation from hospital facilities.

While the freestanding option garnered support from a passionate segment of consumers and midwives, these challenges render it infeasible in the current landscape. However, the study suggests that this option could be reconsidered in the future if certain conditions are met, such as increased demand, expansion of the public and private midwifery workforce, and development of a stronger evidence base supporting the safety of freestanding birth centres. It should also be considered that a freestanding birth centre could potentially operate under governance independent of ACT Health, and this alternative management model could be explored further in the future (as is the case in Tasmania).

3. It is recommended that the new birth centre be designed and constructed with a strong emphasis on cultural safety, trauma-informed care, and person-centred principles, particularly supporting Aboriginal women and birthing people in the ACT.

The consultations with community members, health professionals, and Aboriginal Elders revealed a strong desire for a birth centre that goes beyond traditional clinical settings. The design principles that emerged from these discussions highlight the potential for creating a space that not only meets medical needs but also respects and celebrates cultural diversity, particularly Aboriginal culture and traditions.

A key finding was the importance of incorporating Aboriginal cultural principles – including any considerations to emerge from Birthing on Country – into the design. This approach involves more than just aesthetic considerations; it represents a fundamental shift in how birth spaces are conceptualised. By integrating Indigenous leadership in the design process and creating areas for traditional practices and ceremonies, the birth centre can become a place of cultural healing and reconnection. This aligns with the expressed need for spaces that allow for connection to Country, which was seen as crucial for supporting Aboriginal women and birthing people.

The emphasis on a homely, non-medical atmosphere was another significant outcome of the consultations. Community members often expressed a desire for a birth environment that feels distinctly separate from a traditional hospital setting. This is a key reason the standalone birth centre attained the highest score in the feasibility study, irrespective of its additional costs when compared to the stand-alongside option.

There is a significant opportunity for the new birth centre to not only meet the specific needs of Aboriginal women and birthing people but also create an inclusive, respectful, and holistic environment for all families. This approach has the potential to support the Birthing on Country model of care in the future as well as support improved birthing outcomes and experiences for the entire community.

The design process should involve ongoing consultation with Aboriginal Elders, community members, and health professionals to ensure the centre truly reflects the needs and values of the community it serves. By implementing these design principles, the new birth centre has the potential to set a new standard for culturally safe, trauma-informed, and person-centred birthing environments, ultimately leading to better outcomes and experiences for all birthing families in the ACT.

1. Project overview

The ACT Health Directorate ('ACT Health') engaged HealthConsult to:

to undertake a detailed assessment of midwife-led birth centre options to inform the decisions regarding the birth centre at the new northside hospital, whilst also reviewing other evidence-based birth centre models, such as freestanding birth centres located in the community.

1.1. Key drivers

There are three key strategic issues driving the need for the feasibility study:

- 1. Northside hospital redevelopment:** The new northside hospital redevelopment in Canberra represents a significant investment in the region's healthcare infrastructure. Scheduled to begin construction by mid-decade, this facility is set to replace the existing North Canberra Hospital (NCH).
- 2. ACT Legislative Assembly motion for the feasibility study:** In February 2023, a petition was put to the ACT Legislative Assembly requesting that the Assembly call on the ACT Government to invest in building a freestanding birth centre in the northside of Canberra.ⁱ Based on this petition, the ACT Legislative Assembly committed to a feasibility study into the birth centre to be co-designed as part of the new northside hospital redevelopment.
- 3. Maternity in Focus:** The *Maternity in Focus: The ACT Public Maternity System Plan 2022-2032*ⁱⁱ and *First Action Plan 2022-2025*ⁱⁱⁱ outlines the key territory priorities over the next 10 years, with several goals relevant to this project outlined in Table 1.

Table 1: Selected objectives and goals of Maternity in Focus

Goal No. #	Objective	Description
Goal 8	Continuity of Care	Expand midwifery-led continuity of care models to 50% of all births in ACT by 2028
		Support endorsed privately practising midwives to provide continuity of care within the ACT public maternity system
Goal 10	Birth on Country	Co-design a Birth on Country model of care with consumers and Aboriginal community-controlled organisations
Goal 11	Culturally Appropriate Care	Co-design culturally sensitive and appropriate maternity services to provide the best start in life for women, pregnant people and families from cultural and linguistically diverse (CALD) communities

1.2. Purpose of this document

This report presents the findings of the feasibility study on the birth centre options for the ACT. The study addresses two primary objectives:

- 1. Optimal birth centre option for the northside hospital:** Evaluate and recommend the most suitable birth centre model for integration into the northside hospital redevelopment.
- 2. Feasibility of an additional freestanding birth centre in the ACT:** The second area of inquiry explores the viability of establishing a community-based, freestanding birth centre in addition to a hospital-based facility at northside.

The key findings presented are designed to support decision-making on the optimal configuration of maternity services for the northside hospital and the potential expansion of birth centre options in the ACT. This report aims to provide ACT Health with the insights needed to shape the future of maternity care in the territory, ensuring it meets the evolving needs of families and continues to align with best practice in midwifery-led care.

1.3. Methodology

The feasibility study for ACT birth centres employed a comprehensive approach for the study, triangulating information from three key sources:

1.3.1. Stakeholder consultation

The stakeholder engagement strategy for this feasibility study was designed to be comprehensive and inclusive, ensuring a wide range of perspectives were captured. The approach centred on two main streams of consultation:

- **Community engagement:** focus groups targeting diverse demographics, including the general public, Aboriginal and Torres Strait Islander people, and birth centre advocates.
- **Workforce and professional stakeholders:** interviews with peak bodies and clinical colleges, local health and community services, consultations with ACT Health healthcare professionals including midwives, obstetrics and gynaecology staff specialists, nurses, allied health and ambulance services.

A comprehensive list of stakeholders engaged throughout this study is available in Appendix A.

1.3.2. Data sources and analysis

Data from various sources was analysed to identify trends and project demand:

- Non-admitted Patient (NAP) and Admitted Patient Classification (APC) data across ACT Hospitals (2018–19 to 2022–23)
- Chief Minister, Treasury and Economic Development Directorate (CMTEDD) population forecasting for ACT newborns (2022 to 2060)
- Australian Bureau of Statistics (ABS) ACT fertility and birthing data (2021)

Using these sources, a model was developed to estimate demand for different birth centre options, considering demographics, demand projections, expected changes in maternity service provision, operational costs, and current/future birthing capacity in ACT maternity services over the next ten to 30 years (see 5.7). The model is parameter driven to allow users to see how the financial viability changes when key assumptions are varied, such as preferences for community-based birthing or staff availability.

1.3.3. Feasibility assessment

A ranking and weighting system was created to evaluate options against key criteria:

- **Alignment with the *Maternity in Focus* plan**
- **Quality of care**
- **Workforce sustainability**
- **Community preferences**
- **Accessibility**
- **Financial viability**

The detailed considerations associated with each criterion are available in Appendix B.

The feasibility study integrates findings from stakeholder consultations and data modelling to provide a basis for comparison. Triangulating these three components – stakeholder input, data analysis, and criteria-based assessment ensured a comprehensive and robust evaluation of birth centre options for the ACT.

1.4. Assumptions

A series of assumptions needed to be made to allow financial models to be developed for the operating costs of the three options. Key assumptions were:

- Capital costs have not been included in financial modelling due to lack of specific facility designs.
- Historical data used includes COVID-19 period, affecting service utilisation patterns – five-year averages have been used where possible to mitigate this impact.

- Modelling has included unmet demand for birth centres in the ACT, such as current waiting lists and the community petition indicating growing demand for birth centres as a place of birth.
- The new birth centre will be established in 2030, with capacity to meet 2050 forecast demand.

More detailed information on the assumptions underpinning the project is available in Section 5.7.1.

1.5. Structure of this report

This draft feasibility study provides an overview of the findings and assessment of the birth centre options identified throughout the project. The structure of this report is as follows:

- **Chapter One:** provides an overview of the project.
- **Chapter Two:** an overview of birth centres and key model of care considerations
- **Chapter Three:** key data on birthing in the ACT
- **Chapter Four:** a summary of the birth centre options for the ACT
- **Chapter Five:** an overview of the feasibility assessment against key criteria
- **Chapter Six:** a summary of key findings and conclusions.

2. Place of birth and birth centres

This chapter provides context for birth centres in Australia, including their role, benefits, and challenges. It covers various birthing options, the unique aspects of birth centres, and considerations for culturally appropriate care for Aboriginal and Torres Strait Islander families.

2.1. Place of birth

There are three main places of birth available to expectant parents:

- the hospital birthing suite
- a birth centre, or
- a home birth.

Most women and birthing people will give birth in a birthing suite environment, which is a dedicated area within a hospital equipped with medical staff and facilities. In Australia, 97% of births take place in the birthing suite environment.^{iv} These suites, also known as maternity or labour and delivery suites, are versatile spaces that can accommodate various birth plans, making them suitable for both straightforward and high-risk pregnancies. In this setting, care is typically shared among obstetricians and midwives, providing a multidisciplinary approach.

For some people identified as low-risk or without any known risk factors, giving birth in the comfort of their own home is also an option. Home births support a highly personalised experience, typically with midwives – either privately practising or, in some areas, publicly funded such as in the ACT – providing the care in the familiar surroundings of the family's home.

However, the birth centre model continues to emerge as an ideal choice for many women and people giving birth because of its unique model of care and reported benefits. It should be noted that compared to the national average, the ACT has a higher proportion of mothers and birthing people giving birth in a birth centre (5.8% of births compared to 2% national rate).^{iv}

These midwifery-led units support a birth centre philosophy of care that offers continuity of care in a home-like environment, focusing on low-risk pregnancies and births that do not require medical intervention. The intimate, less clinical atmosphere of birth centres appeals to those seeking a more natural birthing experience.

The key element of the birth centre is its separation from the more mediclised birthing suite and its focus on women and birthing people with low-risk or normal pregnancies. These are defined as birth without induction, epidural or spinal analgesia, general anaesthetic, caesarean section, episiotomy or use of forceps or ventouse.^v The birth centre is available to pregnant women and people who are eligible under the definition of low-risk births taking into other individual factors such as weight, presence of comorbidities (such as high blood pressure, breech presentation at term), and experiences with previous births (e.g. recurrent pre-term birth).^{vi}

While birth centres are a valued option, they remain less common compared to hospital birthing suites. In Australia, only 6.4% of maternity care services include a birth centre as a planned setting for birth, compared to 96.7% that offer hospital-based birthing options.^{iv}

2.2. Birth centres in Australia

Based on the literature and examples domestically and internationally, birth centres can be characterised into three types:

1. **Stand-alongside birth centre:** defined as located within the same hospital building as the main maternity unit, but on a separate floor or in a distinct area. While it maintains its own identity and midwifery-led model of care, it is in close proximity to the hospital's obstetric, theatre and neonatal services. This arrangement allows for quick access to medical intervention if needed, while still providing a more home-like environment than a traditional birthing suite.
2. **Standalone birth centre:** separate building on the hospital campus that is connected to the main hospital via covered walkway to enable safe, effective and dignified transfer of women or birth persons, and potentially babies by hospital staff without the need for an ambulance. For the feasibility study, the term "adjacent" was used to define within immediate proximity or directly connected to the hospital to allow for rapid, non-ambulance transfers by the hospital medical team.
3. **Freestanding birth centre:** most often defined as a facility located in a community setting where birth is planned to take place outside of and completely separate from the hospital, with ambulance transfer required in event of emergency during the intrapartum period.

In Australia, most birth centres share common characteristics, often resembling those found in the ACT. These centres are typically "stand-alongside" units, meaning they are situated close to the main birthing suite, neonatal services and theatres within public hospitals. This proximity allows for quicker access to more advanced medical care, if necessary, while still providing a distinct, midwife-led environment for low-risk births. The

number of birthing rooms in these centres generally ranges between two and six, offering a more intimate setting compared to the larger hospital maternity wards.^{vii}

There are also examples of public birth centres that are considered "standalone" within their hospital settings. For instance, the Mackay Birth Centre is located on-site at Mackay Base Hospital, adjacent to the main maternity services building, providing a distinct space within the hospital complex. Similarly, the Darwin Birth Centre, situated on a different level within Royal Darwin Hospital, operates separately from the main birthing suite, with its own entrance and facilities, ensuring a unique, dedicated environment for those seeking midwifery-led care.

An exception to the typical model is the publicly funded freestanding birth centre currently under construction in Western Australia. The new Midwifery Birth Centre at Bentley Hospital is expected to open in the second half of 2024. Unlike most birth centres in Australia, this centre will be entirely separate from any hospital with maternity services. This means that if complications arise during labour/birth, the individual or neonate will need to be transferred to a local maternity hospital, highlighting the centre's distinct nature and why it is being considered as a freestanding birth centre.

Another example of a freestanding birth centre is the privately operated Launceston Birth Centre in Tasmania. Located across the road from the Queen Victoria Maternity Unit at Launceston General Hospital, this centre offers two birthing suites and is managed by a consumer committee, with services provided by private midwives. Privately practising midwives can access the centre by paying a fee to the governing body, making it a unique option within the Australian birth centre landscape.

More information and examples of standalone and freestanding birth centres around Australia is available in Appendix C.

2.3. Evidence for birth centres

Birth centres offer an alternative to traditional hospital-based births, with evidence suggesting several benefits for low-risk pregnancies. The evidence supporting birth centre outcomes highlights both the benefits and the challenges associated with them as a place of birth, especially as there are some notable limitations in the current research, particularly when it comes to implementation of freestanding birth centres in Australia.

2.3.1. Benefits

Overall, the evidence for birth centre births (noting the associated midwifery continuity of care model) in Australia demonstrates the following benefits (compared to planned hospital birthing suite births):

- **Lower medical interventions rates:** Women and birthing people in the birth centre environment are significantly more likely to have a spontaneous vaginal birth (86%) compared to the labour ward (74%) and less likely to require an instrumental vaginal birth (9% compared with 16%) or an intrapartum caesarean section (5% compared with 10%) than in the birthing suite setting.^{viii}
- **No significant differences in adverse perinatal outcomes** such as intrapartum stillbirths and neonatal deaths.^{ix}
- **Positive maternal outcomes**, such as higher rates of normal vaginal births for both nulliparous (first-time) and multiparous (experienced) birthing individuals.^x
- **More cost-effective** particularly for low-risk pregnancies, with a New South Wales (NSW) study finding the overall cost by place of birth was \$4,979 for a birth centre birth compared to \$5,463 for a hospital birth.^{xi}

Notably, a UK study found that the increased intervention rate and difference in outcomes between birth centres and hospitals could not be explained by differences in maternal characteristics.^{xii}

2.3.2. Key challenges and limitations

While birth centres offer numerous benefits, they also present challenges that require careful management. It is important to note that the Australian evidence primarily relates to all types of birth centres in Australia, however, there is limited specific data on the outcomes associated with freestanding birth centres due to their scarcity in the country.

An overview of the key challenges and limitations for the evidence of safety of birth centres – particularly freestanding facilities – is presented in Table 2.

Table 2: Overview of key challenges and limitations of evidence for birth centres

Category	Challenge/Limitation	Description
Intrapartum transfers	Higher risk for first-time parents	Nulliparous birthing parents are more likely to require transfers
	Reasons for transfer	Prolonged labour, need for interventions (e.g., antibiotics, continuous foetal monitoring), complications like meconium-stained liquor
	Transfer logistics	Freestanding centres require ambulance transfers Hospital-based birth centres can use internal medical emergency teams (MET) if it is directly attached to the hospital via covered walkway or corridor
	Transfer rates	Birthplace in England study found higher transfer rates from stand-alongside than freestanding

Category	Challenge/Limitation	Description
Management of potential risks		centres; complex interpretation as transfers can indicate good clinical decision-making ^v
	International evidence	U.S. study (2016–2019) reported higher neonatal death risks in freestanding birth centres (four-fold overall, and seven-fold for nulliparous birthing parents) ^{xiii}
	Australian evidence	Nationwide study (2000–2012) found no increased risk of maternal or neonatal death in birth centres compared to hospitals ^x (with limitations of the evidence previously highlighted)
Limitations of Australian evidence	Lack of freestanding birth centre data	Most Australian studies do not distinguish between types of birth centres, making it difficult to extrapolate safety and outcomes data specific to freestanding birth centres
	Small sample sizes	Low number of birth centre births, especially in freestanding settings, limits statistical power of studies
	Inconsistent data collection	Hospital record-keeping about planned place of birth is not standardised across Australia, complicating research efforts
	Differing eligibility criteria	Birth centres typically serve low-risk pregnancies, while hospitals manage a broader risk profile, making direct comparisons challenging

Australian evidence supports the relative safety of birth centre births compared to hospital birthing suite births. However, studies are limited by the relatively small numbers of birth centre births (particularly in freestanding community settings) compared to hospital birthing suite births. Similarly, in gathering data to inform this study, it was evident that hospital record-keeping about planned place of birth is not consistently collected in Australia, making conclusions about the evidence difficult to draw.

Comparing outcomes between birth centres and hospital birthing suite births also presents challenges due to differing eligibility criteria. Birth centres typically cater to low-risk pregnancies, while birthing suites manage a broader risk profile. This difference must be considered when interpreting comparative studies.

2.4. Midwifery continuity of care

The midwifery continuity of care model, where care during pregnancy, birth, and the postnatal period is provided by a known midwife or small team of midwives, is a key contributor to the success and positive outcomes seen in birth centres. This model aligns

with the midwifery philosophy of pregnancy and childbirth as normal physiological processes and provides holistic, women- and person-centred care that promotes choice, control and individualised support.

Research demonstrates the benefits of midwifery continuity of care models across all maternity settings.^{v,xiv} The benefits of the midwifery continuity of care model include:

- **Better maternal and newborn health outcomes**, including reduced rates of pre-term birth, instrumental delivery and caesarean section.^{xv}
- **Reduced stress and higher satisfaction** compared to standard care, resulting in improved mental health, with lower rates of anxiety and depression in the perinatal period.^{xvi}
- **Enables the development of a trusting relationship** between the woman or birthing parent and their midwife.
- **Shown to be cost-effective compared to other maternity models of care**, by focusing on normal physiological processes, avoiding unnecessary interventions and resulting in fewer bed days.^{xvii}
- **Maintains same evidence-based guidelines** and works collaboratively with other health professionals when needed to ensure safety and appropriate care.

Midwifery continuity of care not only enhances maternal and newborn health outcomes but also contributes to a more positive and empowering birth experience, improved mental health outcomes, and cost-effective care delivery, making it a crucial element in the success of birth centres and an important consideration for maternity care models overall.

2.5. Birthing on Country

A crucial consideration for any new birth centre in the ACT is how it can support Birthing on Country practices, especially in light of the *Maternity in Focus* goals and Closing the Gap Target 2, “Children are born healthy and strong”.^{xviii} This is important given the poorer perinatal outcomes experienced by Aboriginal and Torres Strait Islander mothers, birthing people, and infants compared to their non-Indigenous counterparts.^{xix}

2.5.1. What is Birthing on Country?

Birthing on Country is a model of maternity care that aims to provide culturally safe and appropriate care for First Nations families. Key elements include:

- Community-based and governed services
- Incorporation of traditional practice
- Involves a connection with land and Country
- Incorporates a holistic definition of health

- Values Indigenous and non-Indigenous ways of knowing and learning
- Culturally competent care
- Development by or in partnership with Indigenous people.^{xx}

This model provides holistic and culturally appropriate care for First Nations families and their babies and has demonstrated better health outcomes relating to pre-term birth, antenatal visits and breastfeeding when compared to other models of care.^{xx}

2.5.2. Key considerations

To support Birthing on Country practices, new birth centres should consider:

- Partnerships with Aboriginal health services
- Cultural awareness training for all staff
- Employment of First Nations midwives and health workers
- Design that accommodates cultural practices (e.g., space for extended families, access to nature)
- Flexible, person-centred processes
- Culturally relevant design elements (e.g., art, naming of spaces).

There was feedback from stakeholders that the Birthing on Country model is ideally implemented in a freestanding birth centre if that birth centre is also governed by the local Aboriginal community as an Aboriginal Community Controlled Health Organisation (ACCHO) service. The Waminda Birth Centre currently being built on the South Coast NSW provides a basis for how this could operate in the ACT context – an Aboriginal-controlled service but also allows for births from everybody in the community.

By incorporating these elements, ACT birth centres can contribute to improving health outcomes and experiences for Aboriginal and Torres Strait Islander families while providing culturally safe care for all community members.

3. Birthing in the ACT

This section provides an overview of maternity services and birthing in the ACT, including current service offerings and birth statistics.

3.1. Birth centres in the ACT

ACT's public maternity service offers a range of models of care and additional services through the two main facilities at CHWC and NCH. **There are currently two birth centres in the ACT, one at each location**, supported by a midwifery-led continuity of care (low-risk) model of care.

As outlined in Table 3, comparing the utilisation between the two birth centres reveals that CHWC has more than twice the number of births compared to NCH, although it has a slightly lower proportion of births in the birth centre than NCH.

Table 3: ACT public maternity service births in 2022-23

Health Service	Capacity (Rooms)			Births per year (2022-23)	Birth centre births (2022-23) ^a
	Birth Centre	Birthing Suite	Postnatal Beds		
CHWC	5	15	N.A.	3,295	225 <i>6.8% of CHWC births</i>
NCH	2	6	14	1,624	124 <i>7.6% of NCH births</i>
Total	7	21	N.A.	4,991	349

^aOnly including births undertaken in the birth centre (i.e. excludes transfers).

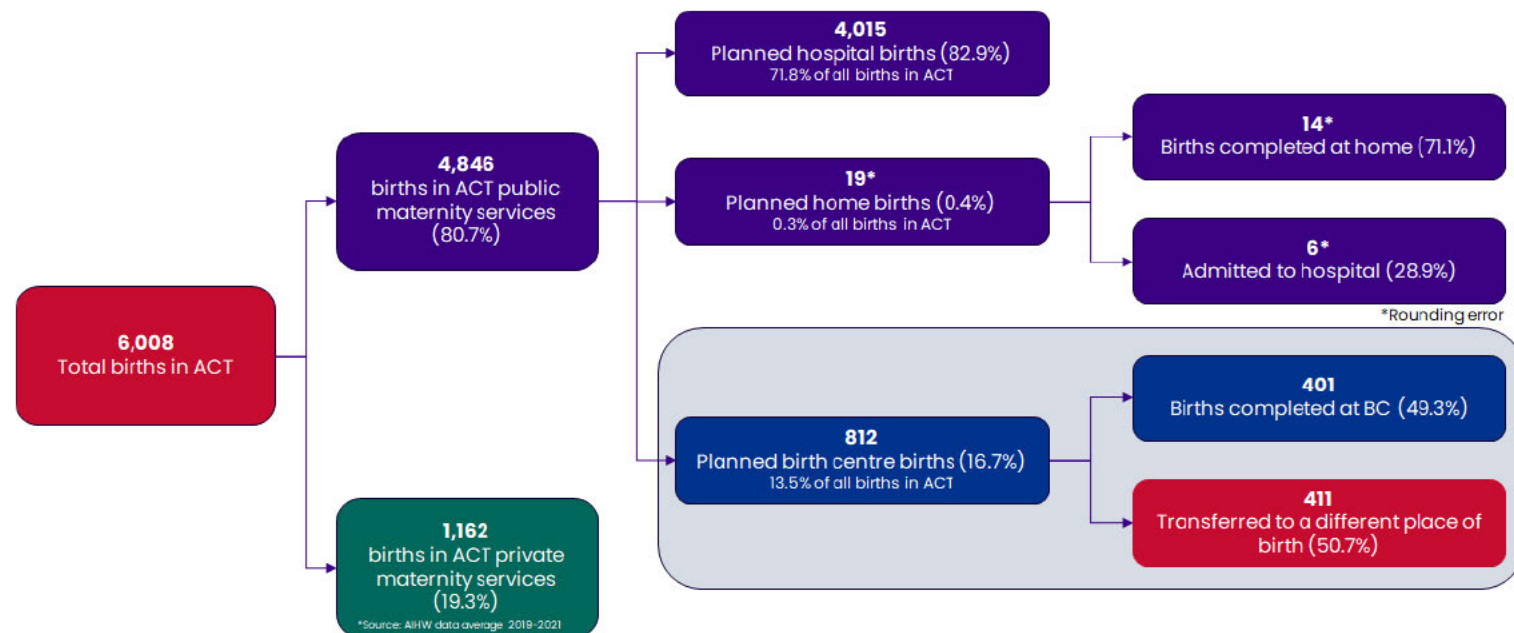
Source: APC data provided by ACT Health

3.2. Births in the ACT

As demonstrated in Figure 3, based on average births in the past five years:

- There are approximately 6,000 births per year in the ACT, with approximately 81% of births in ACT public maternity services.
- Of the births in public hospitals, 16.7% are planned birth centre births (13.5% of all births in the ACT) with approximately half of these births occurring in the birth centre (resulting in approximately 400 births per year in the two ACT birth centres).
- Of the other 50% planned birth centre births, the intended place of birth changes during pregnancy (i.e. required to have a birthing suite birth due to emergence of a risk factor during pregnancy) or were transferred to the birthing suite due to complications during labour.

Figure 3: Journeys of births in the ACT based on averages of the past five-year (2018-19 – 2022-23)



Source: HealthConsult, constructed based on data provided by ACT Health

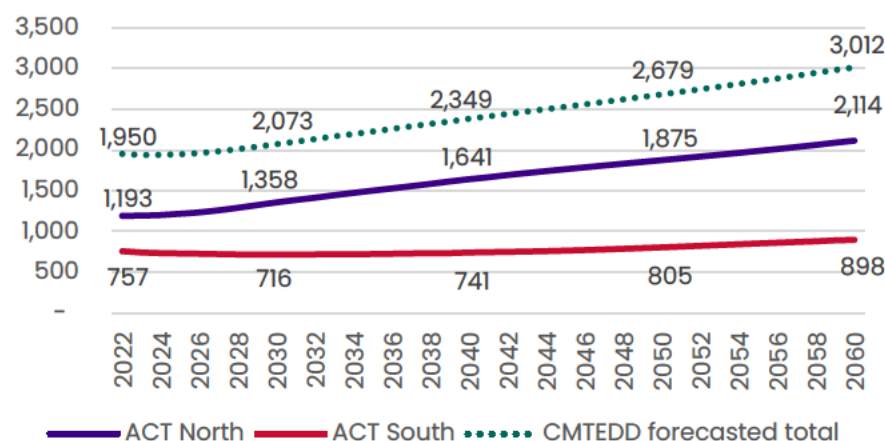
3.3. Birth projections

Newborn forecasting provided by ACT Health predicts a significant increase in the number of births per annum in the ACT – it is expected to rise from 5,808 in 2022 to 8,969 in 2060, with the northside of ACT seeing the largest growth. Figure 4 shows the low-risk births, which could be eligible for birth centre care. These are defined as births from women and birthing people aged 18 to 40 within the minor complexity diagnosis related group (DRG). Key points include:

- Low-risk births are projected to increase from 1,950 in 2022 to 3,012 in 2060
- North Canberra accounts for the largest proportion of these births with 1,193 or 61% of those low-risk births in 2022, and 2,114 or 70% in 2060.

This trend suggests a growing need and expansion of the birth centre in ACT's northern region.

Figure 4: Projected low-risk births in the ACT considered birth centre eligible



Note: eligibility criteria are derived from the average of births from the last five years with birthing age between 18 and 40, and minor complexity birth DRGs

Source: analysis of CMTEDD Newborn forecasting by SA3 level and APC and NAP data supplied by ACT Health

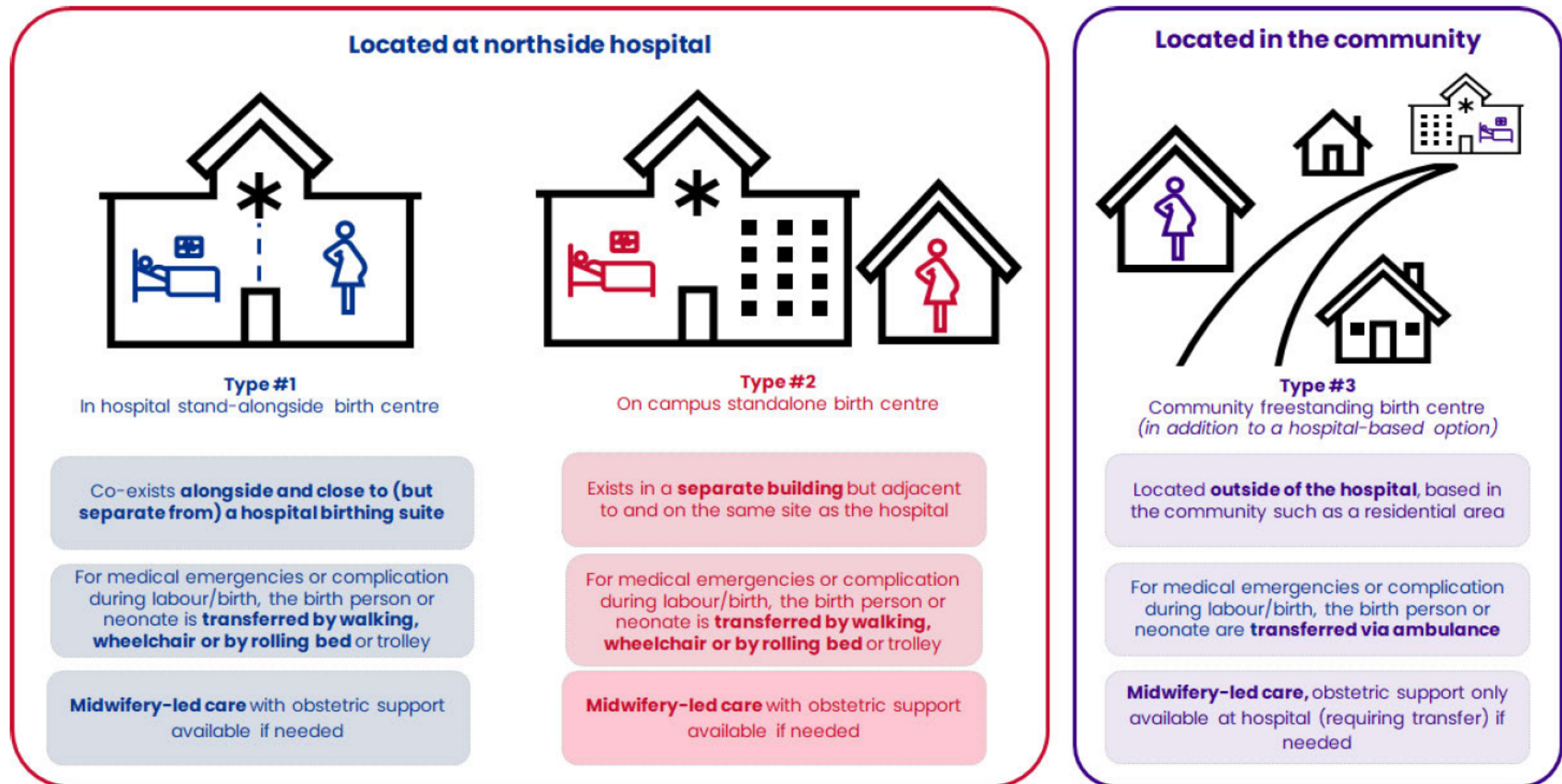
4. Birth centre options for the ACT

This study aims to address both the specific needs of the northside hospital redevelopment and the broader community interest in expanded birth centre options in the ACT to understand:

- What is the optimal birth centre model for the northside hospital, and
- Is an additional freestanding birth centre feasible in the ACT.

The options, as presented in Figure 5 and further detailed in this chapter, form the foundation of the feasibility study.

Figure 5: Options for the birth centre being explored for feasibility study



4.1. Birth centre options

Through our research and stakeholder consultations, three primary options emerged for exploration in the feasibility study with definitions and key features outlined in Table 4.

Table 4: Definition and key features of each birth centre option

Parameter	Stand-alongside birth centre	Standalone birth centre	Freestanding birth centre
Definition	Located within the same hospital and immediately adjacent to birthing and maternity services	Located adjacent to the main hospital but in a separate building <i>Note: Assumed that the standalone option would be immediately adjacent to the main hospital with a covered walkway or corridor between the birth centre and the hospital should transfer be required, eliminating the need for ambulance transfer.</i>	Located away from hospital grounds, often in a residential or community setting <i>Note: the freestanding birth centre option has only been considered in conjunction with either a standalone or stand-alongside birth centre based at the northside hospital.^{xxi}</i>
Key features	Separate from, but with quick access to, obstetric, theatre and neonatal services Midwifery-led care with obstetric support available if needed.	Separate from, but with quick access to, obstetric, theatre and neonatal services Midwifery-led care with obstetric support available if needed	Completely separate staffing and workforce required from the hospital-based birth centre Midwifery-led care with obstetric support only available if the mother or birthing parent and/or baby are transferred to the hospital via ambulance Designed to provide a more home-like environment for childbirth

It should be noted that the key assumptions underpinning the assessment of these options for the feasibility assessment are as follows:

- Based on stakeholder feedback, it is assumed that the standalone option for the northside hospital would be immediately adjacent to the main hospital with a covered walkway or corridor between the birth centre and the hospital should transfer be required. This eliminates the need for ambulance transfer from the facility to the hospital.

- The option for a birth centre on the hospital campus but not immediately adjacent to the main hospital building (i.e. a completely separate building without direct access to the hospital) was not assessed for feasibility in this study due to the benefits of a standalone birth centre being reduced if further away from the main hospital, for example requiring ambulance transfer to the birthing suite in event of higher care requirements.
- The feasibility study is only considering the freestanding birth centre option in conjunction with either a standalone or stand-alongside birth centre based at the northside hospital.^{xxii} There is no intention of decoupling birth centre services from the redeveloped northside hospital's maternity offering, as the goal is to enhance current services rather than remove or diminish the existing state or status quo.
- Based on stakeholder feedback and the expectation of the freestanding birth centre being available to all women and birthing people in the ACT, it is assumed a freestanding birth centre would be less than 20 minutes away from one or other of ACT's two hospitals in the event of a transfer being required.

4.2. Key differences

The primary differences between these options are:

- **Their physical location relative to hospital facilities.** Stand-alongside units are within or immediately next to the hospital, standalone units are on the hospital campus but in a separate building, and freestanding units are completely separate from hospitals.
- **Access to medical interventions:** Stand-alongside and standalone centres have quicker access to obstetric, theatre and neonatal services compared to freestanding centres.
- **Atmosphere:** Freestanding and standalone centres often provide a more home-like environment, while stand-alongside units may feel more clinical due to their close proximity to hospital services.

4.3. Shared characteristics

Despite their differences, all three models share several important characteristics:

- **Midwifery-led care:** All these birth centre models prioritise midwifery-led care, focusing on natural physiological birthing processes and minimal medical interventions.
- **Low-risk pregnancies:** They primarily cater to women with low-risk pregnancies who are unlikely to require complex medical interventions during labour and birth.

- **Philosophy of care:** All models emphasise a woman- and person-centred approach, promoting informed choice, continuity of care, and a focus on normal physiological birth.
- **Transfer protocols:** While the logistics may differ, all these models have established protocols for transferring women/babies to hospital obstetric units, theatres and neonatal services if complications arise.
- **Evidence-based practice:** Regardless of location, birth centres adhere to evidence-based practices and guidelines for maternity care.

5. Feasibility assessment

This chapter presents a comprehensive evaluation of the feasibility of different birth centre options for the ACT. The assessment provides a structured approach to determining the most viable birth centre model that aligns with the ACT's maternity services goals and community needs. The following section also describes the evidence and perspectives that have informed the feasibility scoring of each birth centre option.

5.1. Feasibility scoring methodology

A methodology was developed to evaluate the different birth centre options using a weighted scoring system. It involved independent assignment of weights by key stakeholders from ACT Health, followed by analysis to determine final weights for each of the key criteria, as shown Table 5.

Table 5: Feasibility criteria weighting

Criterion	Feasibility question	Weight
#1: Alignment with the Maternity in Focus Plan and goals	To what degree does the birth centre align with the goals and objectives outlined in Maternity in Focus?	1.00
#2: Quality of care	How effectively will the birth centre deliver high-quality, safe and evidence-based care?	3.25
#3: Workforce	To what extent can the birth centre be safely and appropriately staffed?	2.75
#4: Accessibility	How well does the birth centre ensure accessibility, considering physical availability, affordability, appropriateness, and acceptability?	2.50
#5: Community preferences	Does the birth centre align with the desires of the community and contribute to the individual choices available to women, birthing people and families?	1.75
#6: Financial viability	To what extent is the birth centre able to achieve the expected quality of care while operating efficiently, given the likely demand for the service?	3.00

The process to obtain these weights was:

- **Independent scoring:** Project Working Group members independently assigned a weight to each criterion from #2 through to #6, relative to criterion #1, which was assigned a fixed weight of one (1). For example:
 - Weight of 2 = twice as important as criterion #1

- Weight of 4 = four times as important as criterion #1
- Weight of 0.5 = half as important as criterion #1
- **Calculate the final weight for each criterion:** Weightings from the group were submitted to HealthConsult and analysed to determine the final weight (based on the average of the weights submitted) for each criterion.
- **Scores for each birth centre option:** Raw scores against each criterion for each birth centre option were independently assigned by the HealthConsult team (with the scores discussed and reviewed with the Project Working Group) by considering the evidence, stakeholder perspectives and other inputs. These scores are reflected in the following sections with the justification and analysis included under each criterion.

5.2. Alignment with Maternity in Focus

Based on consultations with key stakeholders and consumers, the three birthing centre options have been evaluated for their ability to meet the *Maternity in Focus* goals (defined in Table 6). The evaluation results are presented in Table 6 below.

The assessment shows that the stand-alongside and standalone options received equal scores, while the freestanding option scored slightly higher in its alignment with the *Maternity in Focus* goals. This higher score for the freestanding option reflects its greater potential to support Birthing on Country, better support of the expansion of privately practising midwives in ACT and provide an additional option to meet diverse preferences.

Table 6: Justification and scoring of birth centre options against *Maternity in Focus* goals

	Stand-alongside	Standalone	Freestanding
Score out of 10	8	8	8.5
Justification for scoring	• Can strongly support expansion of midwifery-led continuity of care models • Currently unable to support privately practising midwives (work in progress) • Cannot provide true Birthing on Country, but can incorporate cultural appropriateness principles • Potential to be co-designed with CALD communities and staffed by culturally trained midwives • Hospital setting may be preferred by some cultures with medicalised approaches to birth		• Can strongly support expansion of midwifery-led continuity of care models • Highest potential to support and expand opportunities for privately practising midwives • Only option that could provide true Birthing on Country (if operated by an ACCHO) • Greatest potential for culturally appropriate accommodation and flexible policies

The following sections provide more detailed assessments of each option against the sub-criteria.

5.2.1. Expand midwifery-led continuity of care models

All three birth centre options – stand-alongside, standalone, and freestanding – prioritise midwifery-led care, focusing on natural birthing processes and minimal medical interventions. As a result, they are rated similarly in their ability to achieve the goal of expanding midwifery-led continuity of care models in the ACT.

5.2.2. Support endorsed privately practising midwives

The two hospital-based options (stand-alongside and standalone) rate similarly in their current inability to support this goal. Privately practising midwives are currently unable to care for birthing parents within ACT Health facilities, although work is underway to address this issue.

The freestanding birth centre option, however, has the highest potential to support this goal. It expands opportunities for privately practising midwives to utilise the birth centre, noting they are currently limited to private home births. There are currently only a few private midwives in ACT, but stakeholders strongly believe that more midwives would be attracted to practice in the ACT if this option were available.

5.2.3. Co-design a Birthing on Country model of care

The stand-alongside and standalone options rate similarly, as a true Birthing on Country model of care cannot be achieved on hospital grounds or in a government-run facility. However, there is an opportunity to incorporate principles of Birthing on Country, particularly if co-designed with First Nations Elders and community and staffed with First Nations midwives and support staff. These options could achieve culturally appropriate design and space, with the standalone option better able to reflect these features than the stand-alongside. Some First Nations stakeholders considered it inappropriate to refer to a hospital-based birth centre as "Birthing on Country," suggesting that "culturally safe/appropriate" would be more suitable terminology.

The freestanding option is the only one that could provide true Birthing on Country, assuming it incorporates the necessary principles and is owned and operated by an ACCHO. Consultations with First Nations stakeholders and organisations indicated that the ACT would require a First Nations' organisation with the capacity and support to assume this role, and that more time and organisation would be required for this to be feasible.

5.2.4. Co-design culturally sensitive and appropriate maternity services

The freestanding option has the highest potential to meet this goal, providing greater opportunity to offer culturally appropriate accommodations and space for cultural preferences. Stakeholders highlighted how the freestanding birth centre also offers a non-

hospital environment for those who may have past experiences of racism or culturally inappropriate care within hospitals or government-run institutions.

Of the hospital-based options, the standalone option has the greatest potential to be built with enough space to accommodate extended families and cultural practices such as ceremonies and gatherings. Stakeholder feedback revealed that some cultures with medicalised approaches to birth may prefer a hospital-based birth centre.

All options, regardless of location, can and should be co-designed with CALD community members, be staffed by CALD and other midwives trained in cultural safety, provide access to interpreters, and operate with a model and ethos of communication, transparency, education, and flexibility to meet cultural preferences and needs. Some stakeholders considered that the further from the main hospital, the more likely it is for the birth centre to have flexible processes and policies for accommodating diversity.

5.3. Quality of care

Overall, quality of care was rated highest for the hospital-based birth centre options because of the short transfers, ease of clinical relationships, and mixed evidence and lack of Australian studies about the safety of freestanding birth centres. Given the different settings and research limitations, it is difficult to definitively conclude that the freestanding birth centre is as safe as hospital-based birth centres in preventing rare but severe outcomes for mothers and babies. The evaluation results are presented in Table 7 with a more detailed assessment of the options against the sub-criteria below.

Table 7: Justification and scoring of birth centre options against Quality of Care criterion

	Stand-alongside	Standalone	Freestanding
Score out of 10	8.5	8.5	7.5
Justification for scoring	• All options associated with lower rates of intervention and improved maternal outcomes. • Australian evidence shows no difference in rate of neonatal deaths between birth centre and labour ward births. • Lowest risk in terms of transfer logistics and quickest access to specialised care in emergencies.	• Similar benefits to stand-alongside in terms of intervention rates and maternal outcomes • Supported by existing examples in other Australian states and territories • Moderate level of risk, depending on proximity and connection to the main hospital, however, can still utilise hospital MET teams for transfers • Maintains good relationships and	• Could access hospital clinical governance, if under CHS governance, though slightly less integrated than stand-alongside • Highest level of risk due to reliance on ambulance transfers, unpredictability of ambulance availability adds risk • Most challenging for fostering clinical relationships and requires separate

Stand-alongside	Standalone	Freestanding
Supports strong relationships and collaboration between medical and midwifery teams and benefits from close proximity and oversight of hospital clinical governance.	- collaboration between medical and midwifery teams - Benefits from hospital clinical governance, though slightly less integrated than stand-alongside	governance, policies, and processes

5.3.1. Evidence-based

High-quality health care is founded on up-to-date, evidence-based practice, which is balanced with clinical judgement, and the patient's needs and preferences.^{xxiii} The evidence surrounding the safety of birth centres is varied:

- Midwives, midwifery peak bodies and some consumers that we consulted cited research demonstrating that most birthing parents and babies experience improved outcomes from birth centre births, with positive long-term health and wellbeing outcomes for the baby and parent (see Section 2.3.1 for further information). Given the scarcity of freestanding birth centres in Australia, the Australian evidence supporting the safety of birth centres is limited to standalone and stand-alongside.
- Interviewed medical doctors from obstetrics and gynaecology point to evidence that demonstrated increased rates (albeit, rare) of severe outcomes for freestanding birth centre births compared to hospital births (see Section 2.3.2 for further information).

Philosophical differences contribute to the different approaches to weighting the evidence for and against birth centres depending on the profession.

5.3.2. Proximity for transfer

While pregnancies can be risk-screened during antenatal care, there is an ongoing chance of being escalated to a medium- to high-risk level of care not only during the pregnancy but also once the labour has commenced, necessitating a transfer to the hospital for some births in the freestanding birth centre.

Stakeholders discussed different types of intrapartum transfers, varying in urgency and cause, ranging from change in birthing plan (i.e. desire for greater intervention than offered in the birth centre) to emergency, high-risk situations for the woman or birth person and/or baby. Proximity of the birth centre to the hospital has implications for the mode of transfer (whether it is via ambulance or led by the medical team) and duration of transfer from origin to destination hospital. The proximity has a potential flow-on impact on outcomes for patients, and the stress and risks associated with transfers can vary significantly depending on the birth centre type (i.e. change in environment or disruption

to care continuity) that could potentially affect the birthing experience for the woman or birth person parent and potentially impact the progress of labour.

There was a divergence of perspectives on the risk associated with transfers during labour. Whilst most stakeholders considered a transfer via ambulance as undesirable for the woman or birth person, baby, midwife, ACT Ambulance Service (ACTAS) and the broader community, the reliance on the timeliness and availability of an ambulance can potentially introduce risk.

In interviews conducted with ACTAS, staff expressed significant concerns about the reliability and timeliness of ambulance transfers for birthing parents, highlighting the unpredictable nature of emergency service availability

Similarly, RANZCOG's position is:

"...that it is desirable for metropolitan standalone primary childbirth units to be sited within, or immediately adjacent to, a 24-hour hospital facility with access to obstetric, anaesthetic/analgesia, neonatal paediatric and intensive care services, as well as operating theatres and blood products, to ensure timely access to these services should they be required."^{xxiv}

Some midwives, when considering the evidence for birth centres and transfers, did not consider ambulance transfer as introducing risk because their clinical decision-making mitigates transfer risks and unexpected emergencies are rare. Existing protocols and guidelines (such as the Australian College of Midwives National Midwifery Guidelines for Consultation and Referral^{xxv}) support the midwives' escalation of care as well as publicly funded homebirth programs with transfer processes in place with ACTAS would be used for the basis of designing processes for the birth centre, irrespective of location to the main hospital.

While most stakeholders agree that proximity is less critical if within a 20-minute transfer window, there remains a subset of medical professionals who stress the importance of minimising transfer time and distance. The general consensus favoured birth centre designs that allow for quick, discrete transfers, that minimise exposure to the main hospital environment during labour and birth.

5.3.3. Clinical relationships and governance

Strong clinical relationships and effective governance are crucial components of high-quality care in any healthcare setting, and birth centres are no exception. These factors play a significant role in ensuring smooth operations, particularly when escalation of care becomes necessary.

It was highlighted by stakeholders that hospital-based birth centres, including both stand-alongside and standalone options, generally benefit from their proximity to other medical

services. This closeness naturally fosters stronger relationships and collaboration between midwifery and medical teams. The shared hospital environment facilitates easier communication, joint training opportunities, and a more integrated approach to care. Moreover, these models benefit from the established clinical governance structures of the hospital, providing a clear framework for decision-making and accountability.

In contrast, the addition of a freestanding birth centre to the ACT may face unique challenges in developing and maintaining strong clinical relationships with transfer hospitals and other clinical staff. The physical separation can lead to communication barriers and potentially reduced familiarity between midwives and hospital-based medical professionals. However, examples such as the Launceston Birth Centre, reported that with significant effort and the right personnel, strong relationships between freestanding centres and hospital specialists can be achieved. Freestanding centres must also establish separate governance structures, education programs, and specific policies and processes for transfers, including arrangements with ambulance services.

The perspectives on the ideal level of integration between birth centres and hospitals vary among healthcare professionals. Interviewed doctors expressed a desire for earlier and more frequent consultation with midwives, particularly in cases with known risk factors (although much rarer given the focus on low-risk pregnancies and births in the birth centre context). They believe this approach could lead to better-coordinated care throughout the pregnancy. However, many midwives view early or frequent involvement of doctors as a potential risk to the midwifery-led model of care, fearing it might lead to unnecessary interventions. Some midwives even consider the separation of freestanding centres from hospitals as advantageous, arguing it reduces unnecessary medical involvement and preserves the integrity of the midwifery-led approach.

The establishment of a freestanding birth centre within the community also raised concerns about potential barriers to collaboration between doctors and midwives. Many medical professionals expressed apprehension that such a model could inadvertently signal a division in maternity care provision, suggesting that doctors and midwives cannot work together effectively. This perception could have significant implications for workforce dynamics and the overall quality of maternity care.

5.4. Workforce

The feasibility of establishing and operating any of the birth centre options relies heavily on the availability of a workforce to safely staff the facility, particularly with midwives but also other professionals as outlined further below. Other influencing factors include staffing composition, the ability to attract and retain suitable staff, and job satisfaction across the different birth centre options.

As demonstrated in Table 8, with further analysis provided below, the standalone option scored slightly higher than the stand-alongside option due to increased midwife satisfaction and autonomy, as well as preferences heard from the current midwifery workforce about the ideal location they wish to work in. There would be workforce challenges the additional freestanding option would need to overcome to be more feasible.

Table 8: Justification and scoring of birth centre options against Workforce criterion

	Stand-alongside	Standalone	Freestanding
Score out of 10	8	8.5	7
Justification for scoring	- Offers staffing flexibility and integration with hospital resources. - Can draw from broader hospital midwifery pool, making it easier to staff safely. - Highly flexible in managing staff shortages. - May be less attractive to midwives seeking full autonomy and may risk midwives being pulled into standard maternity duties.	- Provides a balance between autonomy and hospital proximity. - Requires autonomous midwives working to full scope of practice. - Slightly higher staff satisfaction due to midwifery workforce preferences. - Still benefits from being on-campus for resource sharing.	- Highly attractive to midwives seeking full autonomy and continuity of care model. - Appeals to those preferring to work outside the hospital system. - May face significant staffing challenges including difficulty in sourcing enough midwives, maintaining safe staffing levels, and managing shortages. - Requires midwives with specialised skills and presents more complex rostering needs.

The following sections provide more detailed assessments of each option against the sub-criteria.

5.4.1. Staffing composition and requirements

All birth centre options are underpinned by midwives as the main workforce. The success of a birth centre, regardless of its model, hinges on its ability to attract, retain, and keep satisfied its midwifery workforce.

However, the composition of the workforce varies somewhat between different birth centre models. Some stakeholders considered that the freestanding birth centre is going to require midwives with specialised skills to undertake tasks such as suturing, while hospital-based options have access to registrars for these procedures.

On-campus birth centres (stand-alongside and standalone) can offer more flexibility in staffing and succession planning, as they can draw from the broader hospital workforce and a bigger pool of midwives. However, these settings may not fully capitalise on the benefits of midwifery-led care models and still risk higher levels of potentially unnecessary medical intervention when too close to hospital governance and protocols.

There is also an additional burden on the midwifery pool in the freestanding option because of the need for two midwives for each birth. This would create more complex rostering and scheduling between the two northside birth centre facilities to ensure the availability of an additional midwife on-site at the freestanding birth centre when a woman or birthing person goes into labour. The benefit of the hospital-based options is that there is usually a midwife rostered on 24/7, they are more available because there are more births occurring on-site (both within the birthing suite and the birth centre) and can be asked to support births more easily to maintain the two midwives per birth ratio.

While birth centres are primarily midwife-led, they operate within a collaborative framework that includes or interfaces with obstetricians, allied health, nurses, Aboriginal midwifery liaison midwives and/or Aboriginal health workers, lactation consultants, parenting educators, perinatal mental health services, and other support staff. In the freestanding birth centre, the risk of losing these connections and opportunities to work in a collaborative team model is higher and has been considered in assessing the feasibility of this option from a workforce perspective.

5.4.2. Staffing availability

According to stakeholder feedback and position papers from peak bodies, a significant risk to implementing and expanding midwifery-led continuity of care models is the ongoing national attrition of the midwifery workforce^{xxvi}, particularly among early career midwives.^{xxvii} Stakeholders reported challenges with recruiting and retaining midwives in the ACT, however, it was noted that recent efforts to increase midwives in the NCH birth centre have also resulted in more births in those rooms. Regardless, this trend will have implications for staffing any of the birth centre options but will be more difficult to address with the addition of the freestanding centre.

The potential addition of a freestanding birth centre in the ACT, while aligned with the goal of expanding birthing options, raised several workforce availability issues. Introducing a new facility could further disperse an already limited workforce, potentially compromising staffing levels and quality of care in the other hospital-based maternity facilities. The feasibility and sustainability of a new freestanding birth centre are contingent on proper workforce planning to achieve and maintain the required staffing numbers. Stakeholders emphasised that staffing a new freestanding birth centre should not come at the expense

of hospital-based birth centres, underscoring the need for a holistic approach to workforce distribution across all maternity care settings.

5.4.3. Staffing satisfaction

Feedback from midwives and their representative peak bodies suggested that the location and philosophy of the proposed birth centre can significantly impact its ability to attract and retain midwives.

The freestanding birth centre was highlighted for its appeal to attract midwives who wish to practice more autonomously and work to the full scope of their practice. Over time, the freestanding birth centre may attract midwives who prefer working outside of the public hospital system, tapping into the underutilised private midwifery workforce and increasing overall capacity to deliver more births in the birth centre context.

However, the freestanding option may also experience workforce challenges if it cannot draw from a wider pool of capable midwives with the necessary skills to work in what is considered to be an isolated setting. Additionally, some midwives may not wish to work in this setting at all because of the risk factors but would have options depending on their preferred location with the two hospital-based birth centres at the new northside hospital and the existing one at CHWC.

Research has shown that the midwifery-led continuity of care model employed in birth centres has higher levels of job satisfaction and lower stress levels among midwives compared to traditional obstetric settings.^{xvii} This model allows midwives to practice with greater professional autonomy, moving away from hierarchical medical structures typically found in hospital environments. This research aligns with stakeholder feedback received that higher job satisfaction can be attained when midwives can work to their full scope of practice, when professional decisions are trusted and this autonomy is more available and achievable in the freestanding birth centre, with standalone also being able to provide this opportunity to the midwifery workforce.

5.5. Accessibility

Accessibility is a crucial factor in planning and implementing a birth centre in the ACT. Evaluation of accessibility across birth centre options considered geographical location, transport access, cultural appropriateness for diverse communities, and consistent low-risk eligibility criteria. Stakeholder consultations highlighted varying accessibility considerations: hospital-based options offer proximity to medical facilities, while freestanding centres provide advantages in cultural safety and community integration. A freestanding option could enhance accessibility, choice, and inclusivity for diverse populations while maintaining a low-risk focus.

An analysis of the key considerations factored into assessing accessibility across the options is presented in Table 9 with further details provided below.

Table 9: Justification and scoring of birth centre options against Accessibility criterion

Criteria	Stand-alongside	Standalone	Freestanding
Score out of 10	7.5	8	9
Justification for scoring	- Based at the northside hospital precinct, making it accessible via existing along public transport routes - Based in a high growth area in Canberra northside region - Proximity to hospital facilities	- Based at the northside hospital precinct, making it accessible via existing along public transport routes - Based in a high growth area in Canberra northside region - Proximity to hospital facilities - Potentially offers more autonomy than stand-alongside, which was preferred by some consumers	- Enhances overall accessibility and choice for women and birthing people - Could be more accessible for pre- and postnatal care if located in the community - Offers unique advantages in cultural safety and community integration - Provides a distinct alternative to hospital-based options, increasing overall birth centre capacity - Creates a more inclusive maternity care system in the ACT

5.5.1. Accessible to the target population

The location of any new birth centre should consider Canberra's population growth patterns, particularly the expansion in the northside. Situating a centre to serve these growing areas could enhance overall accessibility and use of the birth centre, enhancing its ongoing viability.

The addition of a freestanding birth centre option to complement the new hospital-based centre (regardless of the preferred option), would significantly enhance choice for all women and people birthing in the ACT, while maintaining consistent low-risk eligibility criteria across all options. This increased range of options could improve accessibility for diverse groups, including Aboriginal and CALD women, by providing birthing environments that align with various cultural preferences and needs (as assessed under Criterion 1). The expansion of choice overall creates a more inclusive maternity care system in the ACT. This also has the potential to increase the overall number of people who can access midwifery-led care in a birth centre setting across Canberra.

Through consumer consultations, it was revealed that there might be a perception that a freestanding birth centre would require stricter eligibility criteria due to its separation from the hospital and location in the community. However, midwives consulted during this process confirmed that this would not be the case, and the focus would be maintained on low-risk births as per current eligibility criteria across all birth centre options.

While each option may have its own advantages and disadvantages when it comes to accessibility considerations, the addition of a freestanding birth centre to the overall maternity landscape provides the most comprehensive solution because of its ability to service Canberra's growth corridors and diverse populations, while adhering to the same low-risk model as other birth centre options.

5.6. Community preference

Consultations with members of the community revealed a diverse range of perspectives and preferences for the location of the birth centre.

As highlighted in Table 10 and detailed further below, the addition of a freestanding birth centre emerged as the preferred option, with the community consultations suggesting that a combination of options would best meet diverse preferences and align with increasing consumer choice.

Table 10: Justification and scoring of birth centre options against the Community preferences criterion

	Stand-alongside	Standalone	Freestanding
Score out of 10	7	8	9
Justification for scoring	- Least preferred option by consumers - Represents a continuation of the status quo - Stand-alongside already available at CHWC and NCH should women and birthing parents wish to birth in this type of birth centre	- Preferred by some for its balance of safety (proximity to hospital) and non-medical environment - Preferred by individuals with various backgrounds, including those with past traumatic births and positive natural birth experiences - Seen as a compromise between hospital and community-based option - While proximity to birth centre model of care primarily determines where women birth, this option provides a distinct alternative to the stand-	- A significant number of community participants strongly preferred this option - Stakeholders highlighted the community petition garnered almost 3,000 signatures, highlighting demand from community - Presents unique offering relative to hospital-based options already available

Stand-alongside	Standalone	Freestanding
	alongside centre at CHWC, adding to the diversity of birthing environments in the ACT	

5.6.1. Consumer preferences and choice

Consumer preference refers to the individual choices and desires expressed by potential users of the birth centre.

The freestanding birth centre emerged as the preferred option among a significant number of community participants. This preference was underscored by a community petition that garnered almost 3,000 signatures, highlighting strong demand from the community for this option.

The standalone birth centre was the second most preferred option. It appealed to individuals from various backgrounds, including those with past traumatic births and positive natural birth experiences. Many viewed it as a balanced compromise between the safety of hospital proximity and a non-medical environment.

The stand-alongside option was least preferred by consumers, as it represents a continuation of the status quo. With the stand-alongside birth centre option already available at CHWC and NCH, maintaining this model in the northside hospital does not offer additional choice for women and birthing parents. While proximity to birth centre model of care primarily determines where women and birthing people give birth, the standalone option provides a distinct alternative to the existing stand-alongside birth centres. This diversity in models of care can potentially benefit the entire ACT region by offering varied birthing environments.

Increasing capacity and places for the midwifery-led continuity of care model also emerged as a key priority for consumers. Those consulted expressed a strong desire for consistent support from a known midwife throughout pregnancy, labour, and postpartum care. Importantly, they emphasised that this continuity should be maintained even in cases where transfer to a hospital became necessary, ensuring familiar support during potentially stressful situations.

5.6.2. Community acceptance

Community acceptance refers to the broader community's willingness to support and integrate a particular option into the healthcare system.

The community showed the highest level of acceptance for the freestanding birth centre option. This was evidenced by the strong preference expressed during consultations and the significant support demonstrated through the community petition.

The standalone option also received positive community acceptance, particularly from those who valued a balance between a non-medical environment and proximity to hospital facilities. Its acceptance extended beyond potential users to include healthcare providers who saw it as a viable compromise.

The stand-alongside option, while accepted as a familiar model, didn't generate the same level of enthusiasm or acceptance as the other options, likely due to its similarity to existing services.

While consumer preference is a crucial factor in determining the potential utilisation of a birth centre, community acceptance plays a vital role in the long-term sustainability and integration of the chosen model into the broader healthcare system. The standalone birth centre option emerges as a strong candidate when balancing these factors because it addresses many of the preferences expressed by consumers whilst maintaining a level of proximity to hospital services for quick access to emergency care if needed. It also has the strongest potential to bridge the gap between the strong consumer preference for a freestanding option and the broader community's need for a safe, integrated birthing service.

5.6.3. Uniqueness compared to other services available

The freestanding birth centre presents a unique offering relative to the hospital-based options already available in the ACT. It would provide a completely different birthing environment and experience compared to the current options.

The standalone birth centre, while still hospital-based, would provide a different option to CHWC's stand-alongside model, offering a middle ground between hospital and community-based care.

The stand-alongside option, being similar to the existing service at CHWC, doesn't offer a unique service in the ACT's maternity care landscape.

Overall, the community consultations suggest that a combination of a freestanding birth centre in the community, alongside a standalone centre on hospital grounds, would provide the most comprehensive range of choices for parents. This approach would address the preferences of those seeking a completely non-hospital environment while also catering to those who prefer proximity to medical facilities, thereby maximising consumer choice and satisfaction.

5.7. Financial viability

Financial viability is a crucial factor in determining the feasibility and sustainability of different birth centre options. This criterion considers operational costs, demand forecasts, and capacity requirements for each option. Table 11 presents the assessment results,

followed by a more comprehensive analysis of the options against various financial considerations.

Table 11: Justification and scoring of birth centre options against the financial viability criterion

	Stand-alongside	Standalone	Freestanding
Score out of 10	9	8	6
Justification for scoring	- Lowest operational costs - Efficient use of existing hospital resources such as staffing	- Slightly higher operational costs than stand-alongside - Good balance between cost-effectiveness and autonomy	- Highest operational costs - Additional staffing and resource requirements - Potential for higher capital costs - Challenges in achieving economies of scale

5.7.1. Modelling assumptions

The following key assumptions underpin the modelling (further assumptions underpinning the model are detailed further in Appendix D):

- **Capital costs were not included in the financial modelling** as they could not be determined by ACT Health, as there are no designs for facilities that would reflect each option. However, some issues associated with the costs of building an additional freestanding birth centre have been considered in the assessment of financial viability as outlined in Section 5.7.3 below.
- **Cost savings realised outside of the birth centres as a result of an increase in birth centre rooms, such as savings in birthing suites have not been accounted for.** Additionally, no potential revenue to offset costs, e.g., from hiring out of birthing rooms to private midwives under the freestanding centre has been included.
- **The impact of COVID-19:** The demand modelling is based on historical data on community demographics and service utilisation, and it therefore includes data for the period impacted by COVID-19, which caused changes in health service utilisation patterns in Australia, including maternity services.^{xxviii} To mitigate the impact of this data, five-year averages have been used instead where possible.
- **Unmet demand:** Current midwifery continuity of care waiting lists, community petition and growing births per annum in ACT North (see 3.3) signify that the demand for birthing in a birth centre environment may continue to grow with a new birth centre option available in the ACT. Whilst it was difficult to precisely measure unmet demand, it has been modelled by assuming an increase in the proportion of women and birthing people who will use birthing centres in the future relative to historical levels.^{xxix}

- **It has been assumed that the birth centre would be established in 2030**, with capacity to meet forecast demand in 2050. It is also assumed that utilisation would ramp up to the forecast level over the first three to five years post-commissioning, with 50% of the forecast level achieved in 2030, 70% in 2031, 90% in 2032 and 100% in 2033 onwards.
- **The impact of COVID-19:** The demand modelling is based on historical data on community demographics and service utilisation, and it therefore includes data for the period impacted by COVID-19, which caused changes in health service utilisation patterns in Australia, including maternity services.¹ To mitigate the impact of this data, five-year averages have been used instead where possible.
- **Unmet demand:** Current midwifery continuity of care waiting lists, community petition and growing births per annum in ACT North (see 3.3) signify that the demand for birthing in a birth centre environment may continue to grow with a new birth centre option available in the ACT. Whilst it was difficult to precisely measure unmet demand, it has been modelled by assuming an increase in the proportion of women and birthing people who will use birthing centres in the future relative to historical levels.²
- **It has been assumed that the birth centre would be established in 2030**, with capacity to meet forecast demand in 2050. It is also assumed that utilisation would ramp up to the forecast level over the first three to five years post-commissioning, with 50% of the forecast level achieved in 2030, 70% in 2031, 90% in 2032 and 100% in 2033 onwards.

5.7.2. Demand for birth centre options

Demand is a crucial factor in determining the feasibility of different birth centre options. Several factors are expected to influence the demand for the birth centre options such as:

- **Increased awareness:** a new facility is likely to attract attention and increase awareness of birth centre options among expectant parents.
- **Expanded choice:** A new birth centre, particularly if it offers a different setting (such as standalone or freestanding), would expand the choices available to women and birthing people in the ACT.
- **Changing preferences:** As highlighted in previous sections, there is a growing preference amongst stakeholders for more natural, less medicalised birthing environments, which could drive demand for birth centre options.
- **Population growth:** The projected population growth in North Canberra is a key factor in the increasing demand for birth centre services.

¹ For example, there were 335 births completed at NCH birth centre in 2018 compared to 215 in 2021 (~35.8%). Five-year averages (2018–19 to 2022–23) have been used where possible rather than the most recent year of data (2022–23) to minimise this impact, however ultimately the limitations associated with using COVID-19 impacted data should be noted when considering the outcomes of the model.

² In 2022, 19% of low risk births in ACT North were completed at the NCH birth centre.

- **Shift in care models:** The growing emphasis on midwifery-led continuity of care models could increase interest in birth centre options.

These factors have been considered when modelling the expected demand – and therefore the financial and operational costs associated – with each birth centre option.

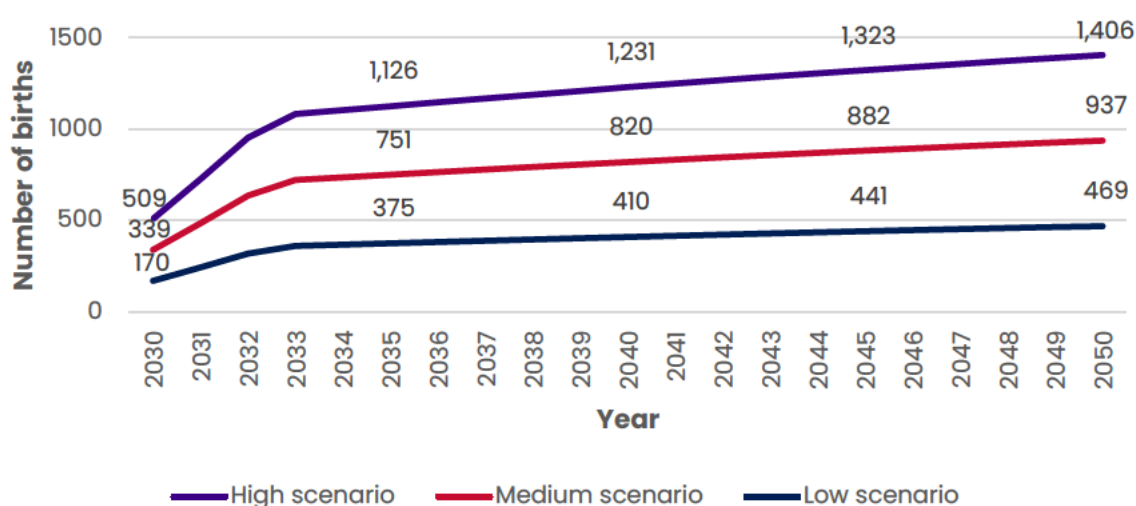
To assess the financial viability of each birth centre option, a model to forecast demand for the various options in North Canberra over the next 30 years and required operational costs (ten years from establishment) was developed.

The model considered the three main options (stand-alongside, standalone, and an additional freestanding birth centre) with each evaluated under the following demand scenarios (see Appendix E for detailed financial model results for each option):

- **Base model (medium scenario):** 50% of low-risk births in ACT North would be at the new northside hospital birth centre and/or in the freestanding birth centre
- **Low scenario:** 25% of low-risk births in ACT North would be at the northside hospital birth centre and/or in the freestanding birth centre
- **High scenario:** 75% of low-risk births in ACT North would be at the northside hospital birth centre and/or in the freestanding birth centre.

Figure 6 shows the results of demand forecasting for all three scenarios, highlighting that under the base model (medium scenario), up to **937 low-risk births** would occur in the birth centre by 2050, representing a three-fold increase from current level.

Figure 6: Birth centre demand scenarios



Note: Birth centre utilisation ramps up to forecast level between 2030 and 2034.

Source: HealthConsult analysis of CMTEDD Newborn forecast and APC and NAP data from ACT Health

To meet this future demand, Table 12 displays the required birth centre and antenatal clinic rooms, with **six birthing rooms and four antenatal rooms** required for the stand-

alongside and standalone options. Under the Additional freestanding options, **five birthing rooms and three antenatal rooms** would be built in the hospital-based birth centre, whilst **two birthing rooms and two antenatal rooms** would be built in the freestanding centre.

Table 12: Birth centre rooms required under each scenario

Scenario	Type	Option 1: Stand- alongside	Option 2: Standalone	Additional freestanding + Option 1	Additional freestanding + Option 2
Low scenario	Birthing rooms	3	3	3 in-hospital + 1 freestanding	3 in-hospital + 1 freestanding
	Antenatal rooms	2	2	2 in-hospital + 1 freestanding	2 in-hospital + 1 freestanding
Base model (Medium scenario)	Birthing rooms	6	6	5 in-hospital + 2 freestanding	5 in-hospital + 2 freestanding
	Antenatal rooms	4	4	3 in-hospital + 2 freestanding	3 in-hospital + 2 freestanding
High scenario	Birthing rooms	9	9	7 in-hospital + 3 freestanding	7 in-hospital + 3 freestanding
	Antenatal rooms	5	5	4 in-hospital + 2 freestanding	4 in-hospital + 2 freestanding

Note: the above figures have been derived from demand using the assumptions listed in Appendix D.

5.7.3. Operational costs of the birth centre options

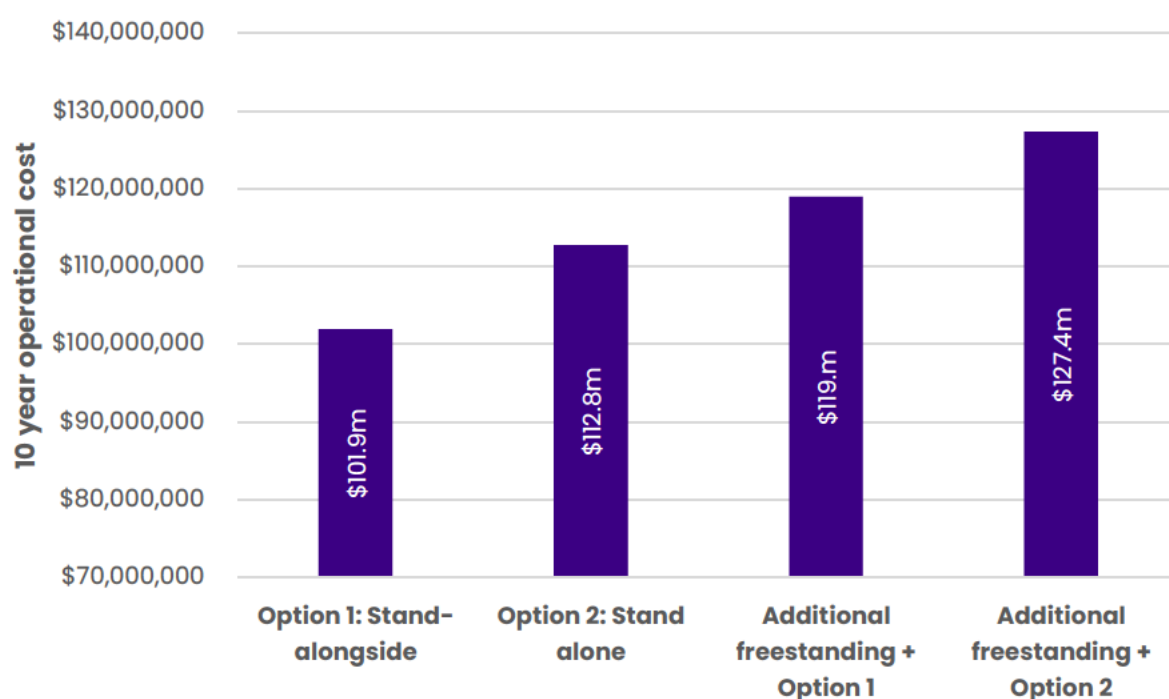
Based on feedback from stakeholders and an understanding of the costs associated with each option, the 10-year operational costs have been calculated and are summarised in Figure 7 (noting that capital costs are not included as per the assumptions).

While all options appear financially viable, the stand-alongside model emerges as the lowest cost option based on operational costs alone. Key operational cost considerations driving the variation between the options include:

- The **higher ten-year operational costs for standalone compared to stand-alongside birth centre** (\$112.8m compared to \$101.9m, \$10.8m or 10.6% higher) is primarily driven by:
 - An estimated 10% cost premium for goods and services such as pharmaceuticals, domestic services and food and beverages at the standalone birth centre
 - Longer hours and duplication of resources required by security and administrative staff at the standalone centre.
- The **additional freestanding birth centre option has higher ten-year operational costs** than the standalone or stand-alongside in isolation (\$119.0m compared to \$101.9m, \$17.1m higher or 16.8% under Option 1, or \$127.4m compared to \$112.8m, \$14.6m higher or 13.0% under Option 2). This higher cost is primarily driven by:
 - Additional midwives required to ensure two-to-one patient ratios and to account for suturing time by midwives in the freestanding birth centre

- An estimated 25% cost premium for goods and services such as pharmaceuticals, domestic services and food and beverages at the freestanding birth centre
- Overnight coverage required by security, and additional administrative Full-Time Equivalent (FTE) at the freestanding birth centre to maintain a separate reception.
- **It is anticipated that the inclusion of capital costs would materially increase the cost differential for the additional freestanding birth centre** as supplementary to either of the hospital-based birth centre options.

Figure 7: Comparison of 10-year operational costs for the Base Model (medium scenario)



While all options appear financially viable, the inclusion of capital costs would likely increase the cost differential for the additional freestanding birth centre option. The stand-alongside and standalone options benefit from integration with existing hospital systems and resources, contributing to their lower operational costs.

5.8. Final feasibility scoring

The final feasibility assessment synthesises the evaluations across all criteria, providing a comprehensive comparison of the stand-alongside, standalone, and the additional freestanding birth centre option. As shown in

Table 13, the final score for each birth centre option was calculated using the raw score and weights for each criterion.

Table 13: Feasibility score for each birth centre

Criteria	#1: Stand-alongside birth centre		#2: Standalone birth centre		+ Additional freestanding birth centre	
	Raw Score	Adjusted score	Raw Score	Adjusted Score	Raw Score	Adjusted score
Alignment with Maternity in Focus Plan and goals	8	8	8	8	8.5	8.5
Quality of care	8.5	27.625	8.5	27.625	7.5	24.375
Workforce	8	22	8.5	23.375	7	19.25
Accessibility	7.5	18.75	8	20	9	22.5
Community preferences	7	12.25	8	14	9	15.75
Financial viability	9	27	8	24	6	18
Raw Score	48/60	115.625/142.5	49/60	117/142.5	47	108.375/142.5
Out of 100	81/100		82/100		76/100	

Based on the final feasibility scores, the standalone birth centre emerges as the highest-scoring option (with 82 out of 100), closely followed by the stand-alongside option at 81 out of 100. The additional freestanding birth centre, while offering unique benefits in some areas, scores slightly lower (at 76 out of 100), primarily due to financial viability concerns and workforce challenges. These results suggest that both hospital-based options are highly feasible, with the standalone option offering a slight edge in overall performance across the evaluated criteria.

6. Key recommendations

This chapter presents the final recommendations to emerge from the feasibility study.

Recommendation 1: Pursue a standalone birth centre for the northside hospital.

A standalone birth centre is the preferred model over the stand-alongside option (noting that this recommendation is made pending further design and capital cost assessments in relation to the northside hospital). Both models scored similarly across various feasibility criteria, with only a small difference in the final scores. This close scoring indicates overall safety and viability of both options for the northside hospital. The key advantages and disadvantages of the standalone compared to stand-alongside birth centre are outlined in Table 14.

Table 14: Key pros and cons of standalone compared to stand-alongside

Pros	Cons
• Preferred by majority of consumers and midwives due to its greater potential to create a more homely and natural birthing experience • Provides a unique opportunity to support culturally safe and inclusive models of care, particularly for Aboriginal and Torres Strait Islander women and birthing people, whilst also meeting some of the goals of proponents of freestanding birth centres if designed with the community's considerations in mind • More opportunities to design in an ideal way, with separate entryway and carpark from main hospital • Less risk to midwifery-led model of care model being compromised than stand-alongside • Potential to improve midwife attraction but still benefit from hospital staffing models • Provides a distinct alternative to the stand-alongside centre at CHWC, adding to diversity in models of care which benefit the entire ACT region • Better aligned to the principles underpinning the Maternity in Focus goals and commitments	• Less integrated with hospital (physically and potentially with clinical relationships) • Slightly longer transfer, and therefore could be considered slightly higher risk in emergency situations • Slightly more expensive considering both operational and assumed capital costs compared to stand-alongside.

As previously highlighted, the option for a birth centre on the hospital campus but not immediately adjacent to the main hospital building (i.e. a completely separate building without direct access to the hospital) was not assessed for feasibility in this study due the benefits of a standalone birth centre being reduced if further away from the main hospital.

Any birth centre option requiring ambulance transfer introduces the same level of challenges as the freestanding option and the primary benefits of having a birth centre on the hospital campus come from avoiding the need for ambulance transfers and maintaining quick access to specialist services. These benefits are preserved in both the stand-alongside and standalone options and have been defined and assessed accordingly in this study.

By recommending a standalone birth centre, this study fulfils and extends the ACT Legislative Assembly's motion, providing a concrete direction for the development of maternity services that balances innovation, safety, and community preferences.

Recommendation 2: Establishing a freestanding birth centre in addition to a birth centre based at northside hospital is currently not feasible.

Whilst community consultations suggest that a combination of a freestanding birth centre in the community, with a standalone centre based at northside hospital, would provide the most comprehensive range of choices for parents, based on comprehensive analysis, the establishment of an additional freestanding birth centre in the ACT community does not appear feasible at this time.

Several critical factors contribute to this conclusion:

- **Limited Australian evidence** of safety and outcomes of freestanding birth centres from which to make informed decisions about safety and sustainability.
- **Workforce constraints** with the ACT currently unable to meet continuity of care targets with existing midwifery workforce. Additional risks associated with splitting this already stretched workforce between two sites, potentially reducing overall capacity and compromising care quality across both hospital and community settings.
- **Significantly higher cost:** Projections indicate that a freestanding birth centre would serve only a small portion of the ACT birthing population, primarily catering to low-risk women and birth people preferring an intervention-free birth. This limited demand raises significant concerns about cost-effectiveness and long-term sustainability, especially considering that this option is the most expensive to establish and operate. Furthermore, the public home birth program already serves at least part of the target demographic, potentially leading to service duplication.
- **Lack of support from medical community**, including hospital-based obstetricians and community-based GPs. The willingness of GPs and obstetricians to recommend these facilities to expectant parents could significantly impact utilisation and overall success of the centre.

While the freestanding birth centre is supported by a passionate segment of the ACT community of consumers and midwives, it does not appear to be currently feasible in addition to a birth centre at the northside hospital. However, in the future, with the

establishment of the preferred birth centre in the northside hospital precinct, a freestanding birth centre could become more feasible should:

- Demand for the northside hospital birth centre births exceeds its capacity
- The midwifery workforce working in continuity of care models in the ACT expanded
- Enhanced evidence for the safety of freestanding birth centres and consequent support from the medical community within ACT.

Additionally, a freestanding birth centre could potentially operate under governance independent of ACT Health, and this alternative management model could be explored further in the future (as is the case in Tasmania).

Recommendation 3: Design and construct the new birth centre with a strong emphasis on cultural safety, trauma-informed care, and person-centred principles.

It is recommended that the new birth centre be designed and constructed with a strong emphasis on cultural safety, trauma-informed care, and person-centred principles, particularly supporting Aboriginal women and birthing people in the ACT.

The consultations with community members, health professionals, and Aboriginal Elders revealed a strong desire for a birth centre that goes beyond traditional clinical settings. The design principles that emerged from these discussions (outlined in Section 7.1) highlight the potential for creating a space that not only meets medical needs but also respects and celebrates cultural diversity, particularly Aboriginal culture and traditions.

A key finding was the importance of incorporating Aboriginal cultural principles – including any considerations to emerge from Birthing on Country – into the design. This approach involves more than just aesthetic considerations; it represents a fundamental shift in how birth spaces are conceptualised. By integrating Indigenous leadership in the design process and creating areas for traditional practices and ceremonies, the birth centre can become a place of cultural healing and reconnection. This aligns with the expressed need for spaces that allow for connection to Country, which was seen as crucial for supporting Aboriginal women and birthing people.

The emphasis on a homely, non-medical atmosphere was another significant outcome of the consultations. Community members often expressed a desire for a birth environment that feels distinctly separate from a traditional hospital setting. This is a key reason the standalone birth centre attained the highest score in the feasibility study, irrespective of its additional costs when compared to the stand-alongside option.

There is a significant opportunity for the new birth centre to not only meet the specific needs of Aboriginal women and birthing people but also create an inclusive, respectful, and holistic environment for all families. This approach has the potential to support the

Birthing on Country model of care in the future as well as support improved birthing outcomes and experiences for the entire community.

The design process should involve ongoing consultation with Aboriginal Elders, community members, and health professionals to ensure the centre truly reflects the needs and values of the community it serves. By implementing these design principles, the new birth centre has the potential to set a new standard for culturally safe, trauma-informed, and person-centred birthing environments, ultimately leading to better outcomes and experiences for all birthing families in the ACT.

7. Other considerations

A range of additional considerations emerged throughout stakeholder consultations which, whilst not necessarily forming part of the feasibility assessment, are important to consider for the ongoing sustainability and success of any of the birth centre options.

7.1. Design principles and infrastructure requirements

Community members emphasised the importance of specific features they would want to see or expect from the birth centre that they regarded as more important than the final location. The primary concern expressed by many community members was the need for increased capacity for birth centre births in the ACT. This was seen as crucial to meeting the growing demand for midwifery-led care and providing more birthing options for families.

Key design features highlighted from consultations, regardless of the location of the birth centre, included:

- **Culturally safe, trauma-informed, and person-centred care.** Creating an environment that respects diverse cultural backgrounds, acknowledges and accommodates past traumas, and places the woman's or birthing person's needs and preferences at the forefront of care decisions. This principle aligns closely with the Birthing on Country model, which emphasises:
 - Connection to Country: Designing spaces that allow for traditional birthing practices and ceremonies
 - Cultural healing: Incorporating elements that promote healing from intergenerational trauma and reconnection with cultural identity
 - Indigenous leadership: Ensuring Indigenous voices are central in the design and operation of the birth centre.
- **Separate entrance and facilities from the main hospital,** if on hospital grounds. This was seen as crucial for maintaining a distinct, non-clinical atmosphere and allowing birthing families to avoid the busy, often stressful hospital environment when going into birth. This could be achieved with either stand-alongside or standalone options.
- **Homely, non-medical design with comfortable amenities.** Features such as soft lighting, comfortable furnishings, private bathrooms with birthing pools, and spaces that accommodate families (including children) comfortably. The ability to access outdoor areas was also mentioned as desirable. Spaces such as a place for parents to stay overnight and parenting education rooms were also raised as necessary in the

birth centre environment. Additional Birthing on Country considerations include incorporating natural elements into the design (plants, natural materials, and access to outdoors) to strengthen connection to Country, creating areas for communal activities, and integrating Indigenous art, symbols, and design elements throughout the centre to reinforce cultural identity and connection.

- **Dedicated spaces for silent births or pregnancy loss.** Separate, private areas for families experiencing loss and spaces for bereavement were seen as necessary in the birth centre. In the context of Birthing on Country, these spaces should also consider spaces for cultural mourning practices and healing circles for community support and healing following loss.
- **Additional Birthing on Country design considerations** which were raised by community members and Elders also included outdoor areas for birthing and designated areas for traditional ceremonies, flexible and multipurpose areas that can adapt to various cultural practices and family sizes and incorporating eco-friendly design elements that reflect Indigenous values of caring for Country.

By prioritising these characteristics and Birthing on Country principles, regardless of the birth centre's location, parents felt that their birthing experiences could be significantly enhanced, leading to more positive outcomes and greater satisfaction with their care. The standalone and freestanding options were identified as better able to reflect these features, particularly in achieving a culturally appropriate design with space for families, ground floor access to nature, and the inclusion of Indigenous art and design elements.

This approach not only meets the needs of Indigenous families but also creates a more inclusive, respectful, and holistic environment for all birthing families, regardless of their cultural background.

7.2. Governance of freestanding birth centres

A key consideration that arose during stakeholder consultations and review of other birth centres in Australia and internationally was the potential for the freestanding birth centre in the ACT to be governed by an organisation other than ACT Health. There are various governance options, highlighting that direct management by ACT Health is not the only viable approach.

Some of the alternative models that could present unique opportunities, particularly in advancing Aboriginal community-controlled healthcare and the Birthing on Country model of care, include:

1. **ACT Health governance:** Under this model, the freestanding birth centre would be run and governed by ACT Health and Canberra Health Services as a "satellite" service offsite from the northside hospital. This approach maintains direct control and

integration with existing health services but may limit flexibility and community involvement. This feasibility study has assumed and modelled demand and financial feasibility based on this approach.

- 2. Independent, community governance:** Some stakeholders supported the idea of a community-owned and governed freestanding birth centre. An example of this approach can be found in Tasmania at the Launceston Birth Centre, which operates independently and is run and operated by local midwives who bring private patients for births. It is staffed by a combination of professional midwives and volunteers, operating as a not-for-profit organisation. A fee is paid to the governing body for each birth in the centre.
- 3. Aboriginal-Controlled Health Service:** This model would see the birth centre governed by the local Aboriginal community as an ACCHO service, while still receiving government funding. This approach aligns closely with the Birthing on Country model and could significantly enhance culturally appropriate care for Aboriginal and Torres Strait Islander families. An example of this approach is the Waminda South Coast Women's Health and Welfare Aboriginal Corporation, which is currently about to build a birth centre in NSW. This model emphasises community control and cultural safety in healthcare delivery.

Understanding that there are different governance models for a potential freestanding birth centre in ACT presents an opportunity for ACT Health to consider alternative models – particularly those emphasising community control and cultural appropriateness – in the future. These models have the potential to better meet the needs of the community, especially in supporting Aboriginal and Torres Strait Islander families through the Birthing on Country initiative.

7.3. Opportunity to innovate and contribute to training and evidence for birth centres

The establishment of a standalone or freestanding birth centre in the ACT presents a unique opportunity to drive innovation and contribute to the Australian evidence base for birth centre models of care. Whilst there are few standalone or freestanding birth centres currently in Australia, the ACT has the potential to position itself at the forefront of innovation in this space and help improve midwifery practices and highlight the benefits of birthing in the birth centre context.

Regardless of the location, an additional birth centre could also be utilised as a site for training midwives in the continuity of care model and birth centre-based midwifery practices, enhancing the capability of the workforce in the ACT.

7.4. Enhanced maternity services through birth centres

Stakeholder feedback highlighted other opportunities to enhance maternity services through the birth centre, including the potential for more holistic wraparound care to encompass a wider range of services and support. It was highlighted by both consumers and health professionals that a “hub” or central point for multiple maternity services would support a more comprehensive, integrated care model for families and children.

Based on stakeholder feedback, the following services and healthcare professionals could be included in a holistic wraparound model within a birth centre:

- **Extended midwifery continuity of care**, beginning earlier in pregnancy and continuing longer post-birth
- **Newborn and child services**, such as paediatricians and child GPs as well as other screening services for newborns
- **Maternal education**, such as antenatal classes and parenting education
- **Support services** such as lactation consultants (pre- and post-birth), perinatal mental health, and other social supports to provide assistance before and after birth
- **Allied health services** including physiotherapy and occupational therapy.

By incorporating a wider range of services, the birth centre (regardless of its location) can offer more integrated care for families and their children, improving outcomes and providing comprehensive and continuous support throughout the pregnancy journey and beyond. The design of the birth centre would need to account for these additional services.

7.5. Equity and awareness of birth centres as a place of birth

The focus on understanding the best birth centre option for the northside should be part of a broader strategy to improve maternity care and availability of options for all women and birthing people. While birth centres offer valuable choices for low-risk pregnancies, it is also crucial to ensure there is an overall focus on improving the quality, experience, and options available across all birth settings and for all women and birthing people in the ACT. This includes enhancing the environment and care in standard hospital birthing suites and rooms, ensuring that improvements benefit the entire spectrum of birthing experiences and preferences.

The establishment of a freestanding birth centre raises important considerations about equity in maternity care services. Whilst the addition of a freestanding birth centre in the ACT can offer benefits, choice and a unique birthing environment, it is the most expensive option to establish and operate. It caters to a relatively small segment of the birthing

population – specifically, low-risk women or birthing people who prefer a community-based setting. While valuable for those who use it, some stakeholders questioned the equitable allocation of healthcare resources. They suggested that the substantial investment required for a freestanding birth centre might yield broader benefits if redirected to initiatives that serve a larger portion of the birthing population, including those with higher risk profiles. It is also notable that this equity concern, while most pronounced for the freestanding option, was extended by some stakeholders to all birth centre models. The challenge lies in balancing the desire to provide diverse birthing options with the need to ensure equitable access to high-quality maternity care for all members of the community.

Equitable access to birth centres may also be hindered by disparities in health literacy and awareness. Currently, consumers highlighted that accessing birth centre care in the ACT often requires proactive knowledge and advocacy, potentially excluding women who are less informed about their birthing options. This creates an equity gap, where the choice of a birth centre may be unavailable or unknown to those with lower health literacy. Additionally, there's a need for comprehensive community education about birth centres, including realistic risk assessments and the potential to create a homely environment in hospital-based centres. This education would help bridge the understanding gap between healthcare professionals and the community, ensuring informed decision-making and potentially broadening the appeal of birth centres to a more diverse range of women and birthing people.

7.6. Medico-legal consequences and reputation risks

Whilst not directly considered in the feasibility assessment, interviews with stakeholders identified significant concerns associated with the establishment of a freestanding birth centre regarding potential medico-legal consequences and reputational risks for ACT Health and Canberra Health Services. Many interviewed doctors expressed apprehension about the model's ability to withstand scrutiny in the event of a serious incident, whether it occurs in the freestanding birth centre itself or in a hospital following a transfer. This concern stems from their perception of increased risks associated with the physical separation from hospital facilities.

As a result, numerous doctors, including hospital-based obstetricians and community-based GPs, indicated they would be hesitant to recommend or refer patients to a freestanding birth centre. Their willingness to support the model through referrals is closely tied to their comfort level with its safety profile. These medical professionals emphasised that their confidence in the safety measures and protocols of the freestanding birth centre would be crucial in determining whether they would consider it as a viable option for their

low-risk patients. This underscores the importance of addressing safety concerns and building trust among the medical community to ensure the success and integration of any new birth centre model within the broader maternity care system.

Appendix A List of stakeholders engaged in the project

Stakeholder	Group	Engagement method
Australian Nursing and Midwifery Foundation (ACT Branch)	ACT public midwifery workforce peak body / union	Written feedback
Australian College of Midwives (ACM)	Midwifery clinical peak body	Online interview
Midwives Australia	Private midwifery workforce peak body	Online interview
Perinatal Wellbeing Centre	ACT perinatal mental health service	Online interview
Winnunga Nimmityjah Aboriginal Health & Community Services	ACT Aboriginal health service	Online interview
Australian Medical Association (AMA)	Medical workforce peak body	Online interview
ACT Ambulance Service	ACT ambulance providers	Online interview
Tresillian	ACT postnatal health service	In person group meeting
University of Canberra	Local university	Online interview
Australian Catholic University	Local university	Online interview
Women's Health Matters	ACT local research organisation	Online interview
Launceston Birth Centre	Tasmanian private birth centre	Online interview
CHWC	Public midwives	In person focus group
	Obstetricians	Online focus group
NCH	Executive Director, Clinical Director, Public midwives, obstetricians, nurses and allied health	In person focus group
General practitioners	Local ACT GPs	Online interview
Birthing on Country Cultural Advisory Group	Aboriginal advisory group under Maternity in Focus	In person focus group
General public	Community representatives	In person and online focus groups

Appendix B Feasibility criteria

Table 15 provides an overview of the six criteria that have been agreed by the Working Group to be used to assess the feasibility of the birth centre options for the northside hospital and if an additional freestanding birth centre for the ACT. It also outlines the information or data sources that was used to inform the assessment for each criterion.

Table 15: Criteria informing each feasibility criteria for the assessment of birth centre options

Feasibility Dimension	Criteria	Information or Data Source/s
1. Alignment with the Maternity in Focus Plan and goals Consistent with the goals and objectives set out by <i>Maternity in Focus</i>	Meets goals associated with: • Expansion of midwifery-led continuity of care models • Support endorsed privately practising midwives • Birthing on Country model of care • Providing culturally sensitive and appropriate maternity services	• Feedback from ACT Health • Alignment of birth centres with meeting and achieving these goals
2. Quality of care Delivering the desired needs and health outcomes for mothers and babies	Aligned with evidence-based practices	• Guidance and professional opinion from midwives, clinical colleges and other healthcare professionals • Alignment with clinical guidelines and evidence
	Suitability of the facility for providing safe and comfortable birthing experiences	• Alignment with clinical guidelines and evidence

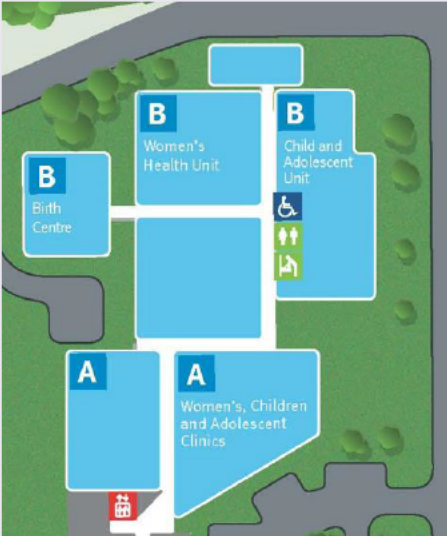
	Proximity to healthcare facilities in case of emergencies	- Distance to hospital-based maternity services - Alignment with clinical guidelines and evidence
	Supports safe governance and productive clinical relationships	- Guidance and professional opinion from midwives, clinical colleges and other healthcare professionals - Alignment with clinical guidelines and evidence
3. Workforce Ability to staff the birth centre safely and appropriately, with reference to the impact on other maternal and child health services in the ACT	Staffing composition: - Current workforce model - Number of women in a midwife's caseload	- Workforce models and data from current ACT services - Literature on midwifery caseloads - Enterprise agreement for ACT midwives - Alignment with clinical and best practice guidelines
	Staffing availability	- Workforce availability in the ACT and nationally - Guidance and professional opinion from midwives, clinical colleges and other healthcare professionals
	Staff satisfaction	- Literature on workforce satisfaction (i.e. of midwives) - Staff surveys and feedback - Feedback from midwives, clinical colleges and other healthcare professionals
4. Accessibility The ease of accessing the facility to ensure it is physically available,	Accessible to the target population (i.e. in high growth area based on expected demand)	- Utilisation data based on population demographics (who is currently choosing and likely to use the birth centre) - Consumer feedback

affordable (economically accessible), appropriate and acceptable	Provides culturally appropriate and safe services for First Nations people	• Consumer feedback • Ability to deliver Birthing on Country model • Alignment with best practice
	Provides culturally appropriate and safe services for CALD people	• Consumer feedback • Alignment with best practice
	Accessible to other identified groups of people	• Consumer feedback • Alignment with best practice
	Availability to eligible women and people wishing to give birth in the birth centre	• Consumer feedback • Alignment with best practice
5. Community preferences Aligns with the desires of the community and contributes to the individual choices available to the woman	Consumer choice and acceptance of giving birth in the birth centre	• Consumer feedback
	Community preference of the birth centre options	• Consumer feedback
	Uniqueness of option compared to current available services	• Consumer feedback • Clinical guidelines and models of care
6. Financial viability Ability to achieve the expected quality of care while operating efficiently, given the likely demand for the service.	Current and future projections of:	• Historical and projected data
	• Birth rates • Population demographics • Where people are giving birth currently	• Benchmarking data

	Where people are likely to give birth in the future (growth opportunity)	
	Capacity requirements (i.e. the number of births and rooms required)	- Historical and projected data - Anticipated utilisation, which may vary with location under the various options - Consumer feedback
	Funding source and level of for volume of services projected to be delivered (activity)	- Historical and projected activity data - Estimated funding provided by ACT Health
	Establishment costs (pre-commissioning and commissioning [to get to first birth])	Estimated costings to be provided by ACT Health
	Ongoing operating costs	Estimated costings to be provided by ACT Health
	Staffing model	Analysis of costs of birth centre staffing model
	Cost-effectiveness	Comparative analysis of birth centre options
	Transfer costs (ambulance vs on-site)	- Benchmarks on number of births transferred to another model - Transfer costs in ACT - Comparative analysis of birth centre options relative to transfer costs

Appendix C Examples of birth centres in Australia

Table 16: Examples of standalone and freestanding birth centres in Australia

Birth Centre	Overview	Type of birth centre
Queensland		
Mackay Birth Centre	The Mackay Base Hospital Birth Centre is a standalone, home-like maternity care facility located adjacent to the labour ward. The birth centre has two birthing rooms with ensuite bathrooms, including baths. They offer water births and water immersion during labour. Mackay Base services include birthing with one-to-one care from a clinical midwife, and they offer childbirth and parenting education for the expecting couple.  The site plan shows the Mackay Base Hospital layout. A central corridor connects several units. To the left is the 'B Birth Centre'. To the right of the corridor are the 'B Women's Health Unit' and the 'B Child and Adolescent Unit'. Below the corridor are the 'A Women's, Children and Adolescent Clinics'. A red cross icon is located at the bottom left of the plan, near the entrance.	Standalone (within the Mackay Base Hospital complex)

Birth Centre	Overview	Type of birth centre
Northern Territory		
Darwin Birth Centre	The Darwin Birth Centre is located on the ground floor of the Royal Darwin Hospital. It has two birth rooms, each with a bath and toilet. All women with normal risk pregnancies and labours can use the birth centre. The delivery suite on the sixth floor of the Royal Darwin Hospital. It has six birth rooms, showers, toilets and two baths. All women with high-risk pregnancies and labours will have their baby here.	Standalone / stand-alongside Within the same building but not directly attached to the birthing suite
Tasmania		
Launceston Birth Centre	The Launceston Birth Centre is Australia's first private birth centre. Their commitment to natural birth choice provides the option to birth at home or at the Launceston Birth Centre, quality pre and postnatal care with a primary registered and endorsed midwife, two midwives at the birth, safe practice in a healthy birthing environment, an openness to family-centred birth, self-contained accommodation, and a central location, over the road from the Queen Victoria Maternity Unit at Launceston General Hospital.	Freestanding Across the road from the Launceston General Hospital
Western Australia		
Midwifery Birth Centre, Bentley Hospital (currently being built)^{xxx}	A new Midwifery Birth Centre at Bentley Hospital in Western Australia is set to open in the second half of 2024. This centre will offer a unique model of care that includes continuity of care by the same endorsed midwife throughout pregnancy, labour, birth, and postnatal period. There will be two birth rooms. If during labour a woman requests opioids or epidural analgesia for their labour. They will need to transfer to the local maternity hospital.	Freestanding As Bentley Hospital does not have maternity services on-site.

Appendix D Assumptions underpinning the financial and demand modelling

Freestanding centre demand

Under the option to build a freestanding birth centre in addition to an in-hospital birth centre, it has been assumed that 30% of the demand under the chosen scenario (low, medium or high) will complete birthing in the freestanding birth centre, and 70% of the demand will complete birthing in-hospital.

Antenatal clinics

To calculate the number of antenatal clinics required under each scenario, it has been assumed each birth requires 15 antenatal visits of 30 minutes duration (nine midwifery-led and six social or allied health worker-led), and that antenatal clinics provide 6 hours of direct care per day.

Midwife caseload

Based on current caseload data, the model has assumed midwives in the stand-alongside and standalone birth centres will facilitate 38 births per FTE per year. The freestanding caseload has been assumed to be 30% lower at 27 births per FTE per year, to account for suturing (as it has been assumed midwives complete suturing instead of registrars as costed in option 1 and 2) as well as accounting for additional staffing required to ensure a minimum of two midwives on-site during both labour and birth.

Birth room capacity

Birth room capacity has been assumed at 160 births per year in line with best practice handbooks for continuity of care models.

Staff mix and salary

All salaries, wages and on-costs have been indexed according to the five-year average Wage Price Index (WPI)³. On-costs have been estimated from award rates in June 2024 ACT Health Enterprise Agreements, adding superannuation (12.0%), shift penalties (26.8%), and leave loading (2.0%). The modelled staff mix includes:

- Registered Midwives (RMs) Grade 2.4

³ Australian Public Health Care and Social Assistance Quarterly Index, source: ABS (2024). Wage Price Index, Australia. Retrieved from: <https://www.abs.gov.au/statistics/economy/price-indexes-and-inflation/wage-price-index-australia/latest-release>.

- 1 FTE Clinical Development Midwife per 400 births, costed at the rate of a RM Grade 2.4 for a continuity of care model
- 1 Psychologist fixed at one day per month per centre
- 1 Social worker fixed at one day per month per centre
- 1 maternal physio fixed at one day per month per centre
- 1 FTE Cleaner, assuming 2 hours cleaning per birth
- Security at a fixed FTE, with double security assumed for standalone, and overnight security for freestanding plus leave coverage
- Administrative Service Officers (ASOs) class 3 per birthing room and per antenatal room for clinical notes and reception plus leave coverage, with increased time for standalone and freestanding to account for additional maintenance
- Staff specialist at the rate of 2 hours per week for most recent (2022) volume
- Registrar at the rate of 30 mins per birth for suturing, except for freestanding where it has been assumed midwives will complete suturing (see Midwife Caseload)

Goods and services

It has been assumed that 7.5% of births at the freestanding birth centre require ambulance transport during labour,⁴ costed at the rate of \$1,107 per birth.⁵

An additional cost premium for most standalone (10%) and freestanding (25%) goods and services has been assumed to account for the physical separation from the hospital. The exceptions are transport, and repairs, maintenance and renewals (RMR) costs which are assumed to be the same across the three options.

Goods and services including medical and surgical and domestic services have been indexed according to the consumer price index (CPI)⁶ over the last ten years.

RMR costs have been approximated as 10% per annum of an expertly informed medical equipment and furniture list for a birth centre.

⁴ Scarf, V.L., Viney, R., Yu, S. et al. Mapping the trajectories for women and their babies from births planned at home, in a birth centre or in a hospital in New South Wales, Australia, between 2000 and 2012. BMC Pregnancy Childbirth 19, 513 (2019). <https://doi.org/10.1186/s12884-019-2584-0>

⁵ ACT Emergency Services Agency (2024). Fees and Charges. Retrieved from: <https://esa.act.gov.au/about-esa-emergency-services/ambulance/fees-and-charges>

⁶ Under the Canberra All Groups Consumer Price Index, source: ABS (2024). Consumer Price Index. Retrieved from: <https://www.abs.gov.au/statistics/economy/price-indexes-and-inflation/consumer-price-index-australia/jun-quarter-2024>

Appendix E Financial modelling

The financial modelling for the base model (medium scenario) is presented in the body of the report, however an additional low and high scenario were also costed, detailed in this appendix. Section E.1 illustrates a ten-year summary of overhead costs, while E.2, E.3, and E.4 further detail a per annum cost under each scenario.

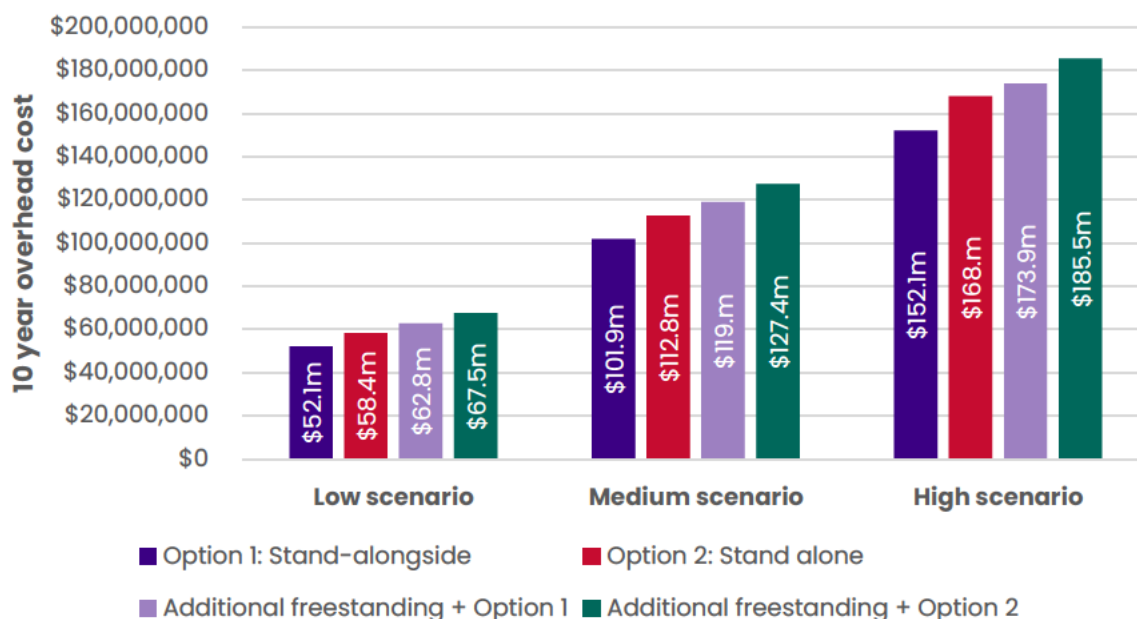
E.1. Ten-year summary of scenarios

Figure 8 summarises the ten-year operational costs under each scenario.

Under the low scenario, Option 1 costs \$52.1m between 2030 and 2039, Option 2 costs \$58.4m, and the additional freestanding would cost \$62.8m with a stand-alongside birth centre or \$67.5m with a standalone birth centre. **The addition of the freestanding option increases ten-year operational costs by 20.4% for option 1 (\$10.6m increase) or by 15.8% for option 2 (\$9.2m increase) under the low scenario.**

Under the high scenario, Option 1 costs \$152.1m between 2030 and 2039, Option 2 costs \$168.0m, and the additional freestanding would cost \$173.9m with a stand-alongside birth centre or \$185.5m with a standalone birth centre. **The addition of the freestanding option increases ten-year operational costs by 14.3% for option 1 (\$21.7m increase) or by 10.4% for option 2 (\$17.5m increase).**

Figure 8: Birth centre financial modelling 10 year overhead operational costs



E.2. Per annum costs: Base Model

E.2.1. Option 1: Stand-alongside birth centre

Stand-alongside 10-year financial viability – Medium scenario													
Calendar year		2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	
		Year 0	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Total
Forecast births at the birth centre			339	485	636	722	737	751	765	778	792	806	6,808
Birthing rooms required		6*	3	4	4	5	5	5	5	5	5	6	
AN clinic rooms required		4*	2	3	3	3	3	3	3	3	3	4	
Operating expenses	Cost Type		\$4.9m	\$7.1m	\$9.2m	\$10.6m	\$10.9m	\$11.2m	\$11.5m	\$11.8m	\$12.1m	\$12.6m	\$101.9m
S, W & O – RM 2.4	variable /birth		\$1.9m	\$2.7m	\$3.7m	\$4.2m	\$4.4m	\$4.6m	\$4.8m	\$4.9m	\$5.1m	\$5.3m	\$41.6m
S, W & O – CMD (RM2.4 CMCS)	Variable /birth		\$0.2m	\$0.3m	\$0.3m	\$0.4m	\$0.4m	\$0.4m	\$0.5m	\$0.5m	\$0.5m	\$0.5m	\$4.4m
S, W & O – Psychologist P6	fixed		\$0.0m	\$0.0m	\$0.0m	\$0.0m	\$0.0m	\$0.0m	\$0.0m	\$0.0m	\$0.0m	\$0.0m	\$0.1m
S, W & O – Social worker L3	fixed		\$0.0m	\$0.0m	\$0.0m	\$0.0m	\$0.0m	\$0.0m	\$0.0m	\$0.0m	\$0.0m	\$0.0m	\$0.1m
S, W & O – Maternal physio L5	fixed		\$0.0m	\$0.0m	\$0.0m	\$0.0m	\$0.0m	\$0.0m	\$0.0m	\$0.0m	\$0.0m	\$0.0m	\$0.1m
S, W & O – Cleaner 3.1	variable /birth		\$0.0m	\$0.0m	\$0.1m	\$0.1m	\$0.1m	\$0.1m	\$0.1m	\$0.1m	\$0.1m	\$0.1m	\$0.7m
S, W & O – Security L5	fixed		\$0.0m	\$0.0m	\$0.0m	\$0.0m	\$0.0m	\$0.0m	\$0.0m	\$0.0m	\$0.0m	\$0.0m	\$0.2m
S, W & O – ASO C3 – birth centre	variable /room		\$0.2m	\$0.3m	\$0.3m	\$0.3m	\$0.3m	\$0.3m	\$0.4m	\$0.4m	\$0.4m	\$0.4m	\$3.2m
S, W & O – ASO C3 – Antenatal	variable /room		\$0.1m	\$0.2m	\$0.2m	\$0.2m	\$0.2m	\$0.2m	\$0.3m	\$0.3m	\$0.3m	\$0.4m	\$2.5m
S, W & O – Senior Specialist	variable /birth		\$0.1m	\$0.1m	\$0.1m	\$0.1m	\$0.1m	\$0.1m	\$0.1m	\$0.1m	\$0.1m	\$0.2m	\$1.2m
S, W & O – Registrar L3	variable /birth		\$0.0m	\$0.0m	\$0.0m	\$0.0m	\$0.0m	\$0.0m	\$0.0m	\$0.0m	\$0.0m	\$0.1m	\$0.4m
Total salaries and wages			\$2.5m	\$3.7m	\$4.7m	\$5.5m	\$5.7m	\$5.9m	\$6.1m	\$6.3m	\$6.6m	\$7.0m	\$54.4m
G&S – med. & surg. supplies	variable /birth		\$0.2m	\$0.3m	\$0.4m	\$0.4m	\$0.5m	\$0.5m	\$0.5m	\$0.5m	\$0.5m	\$0.5m	\$4.2m
G&S – other	variable		\$2.2m	\$3.1m	\$4.1m	\$4.6m	\$4.7m	\$4.8m	\$4.9m	\$5.0m	\$5.1m	\$5.2m	\$43.7m
Ambulance transfer cost	variable /birth		\$0.0m	\$0.0m	\$0.0m	\$0.0m	\$0.0m	\$0.0m	\$0.0m	\$0.0m	\$0.0m	\$0.0m	\$0.0m
Total goods and services			\$2.4m	\$3.4m	\$4.5m	\$5.1m	\$5.2m	\$5.3m	\$5.4m	\$5.5m	\$5.6m	\$5.7m	\$47.9m
Total Operating Expenses		-	\$4.9m	\$7.1m	\$9.2m	\$10.6m	\$10.9m	\$11.2m	\$11.5m	\$11.8m	\$12.1m	\$12.6m	\$101.9m

Note: *rooms built in Year 0 to meet 2050 demand; S, W & O = Salary, Wages & On-costs, G&S = Goods and Services

E.2.2. Option 2: Standalone birth centre

Standalone 10-year financial viability – Medium scenario													
	Calendar year	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	Total
		Year	Year	Year	Year	Year	Year	Year	Year	Year	Year	Year	
		0	1	2	3	4	5	6	7	8	9	10	
Forecast births at the birth centre			339	485	636	722	737	751	765	778	792	806	6,808
Birthing rooms required		6*	3	4	4	5	5	5	5	5	5	6	
AN clinic rooms required		4*	2	3	3	3	3	3	3	3	3	4	
Operating expenses	Cost Type		\$5.6m	\$7.9m	\$10.2m	\$11.7m	\$12.m	\$12.3m	\$12.7m	\$13.m	\$13.4m	\$14.m	\$112.8m
S, W & O – RM 2.4	variable /birth		\$1.9m	\$2.7m	\$3.7m	\$4.2m	\$4.4m	\$4.6m	\$4.8m	\$4.9m	\$5.1m	\$5.3m	\$41.6m
S, W & O – CMD (RM2.4 CMCS)	Variable /birth		\$0.2m	\$0.3m	\$0.3m	\$0.4m	\$0.4m	\$0.4m	\$0.5m	\$0.5m	\$0.5m	\$0.5m	\$4.m
S, W & O – Psychologist P6	fixed		\$0.m	\$0.m	\$0.m	\$0.m	\$0.m	\$0.m	\$0.m	\$0.m	\$0.m	\$0.m	\$0.1m
S, W & O – Social worker L3	fixed		\$0.m	\$0.m	\$0.m	\$0.m	\$0.m	\$0.m	\$0.m	\$0.m	\$0.m	\$0.m	\$0.1m
S, W & O – Maternal physio L5	fixed		\$0.m	\$0.m	\$0.m	\$0.m	\$0.m	\$0.m	\$0.m	\$0.m	\$0.m	\$0.m	\$0.1m
S, W & O – Cleaner 3.1	variable /birth		\$0.m	\$0.m	\$0.1m	\$0.1m	\$0.1m	\$0.1m	\$0.1m	\$0.1m	\$0.1m	\$0.1m	\$0.7m
S, W & O – Security L5	fixed		\$0.m	\$0.m	\$0.m	\$0.m	\$0.m	\$0.m	\$0.m	\$0.m	\$0.1m	\$0.1m	\$0.5m
S, W & O – ASO C3 – birth centre	variable /room		\$0.5m	\$0.6m	\$0.6m	\$0.8m	\$0.8m	\$0.8m	\$0.9m	\$0.9m	\$0.9m	\$1.1m	\$7.9m
S, W & O – ASO C3 – Antenatal	variable /room		\$0.3m	\$0.4m	\$0.4m	\$0.4m	\$0.4m	\$0.5m	\$0.5m	\$0.5m	\$0.5m	\$0.7m	\$4.5m
S, W & O – Senior Specialist	variable /birth		\$0.1m	\$0.1m	\$0.1m	\$0.1m	\$0.1m	\$0.1m	\$0.1m	\$0.1m	\$0.1m	\$0.2m	\$1.2m
S, W & O – Registrar L3	variable /birth		\$0.m	\$0.m	\$0.m	\$0.m	\$0.m	\$0.m	\$0.m	\$0.m	\$0.m	\$0.1m	\$0.4m
Total salaries and wages			\$2.9m	\$4.2m	\$5.3m	\$6.2m	\$6.4m	\$6.6m	\$6.9m	\$7.1m	\$7.3m	\$7.9m	\$61.m
G&S – med. & surg. supplies	variable /birth		\$0.2m	\$0.3m	\$0.4m	\$0.5m	\$0.5m	\$0.5m	\$0.5m	\$0.5m	\$0.5m	\$0.5m	\$4.6m
G&S – other	variable		\$2.4m	\$3.4m	\$4.4m	\$5.m	\$5.1m	\$5.2m	\$5.3m	\$5.4m	\$5.5m	\$5.6m	\$47.1m
Ambulance transfer cost	variable /birth		\$0.m	\$0.m	\$0.m	\$0.m	\$0.m	\$0.m	\$0.m	\$0.m	\$0.m	\$0.m	\$0.m
Total goods and services			\$2.6m	\$3.7m	\$4.8m	\$5.5m	\$5.6m	\$5.7m	\$5.8m	\$5.9m	\$6.m	\$6.1m	\$51.8m
Total Operating Expenses		-	\$5.6m	\$7.9m	\$10.2m	\$11.7m	\$12.m	\$12.3m	\$12.7m	\$13.m	\$13.4m	\$14.m	\$112.8m

Note: *rooms built in Year 0 to meet 2050 demand; S, W & O = Salary, Wages & On-costs, G&S = Goods and Services

E.2.3. Additional Freestanding + Option 1

Freestanding + Stand-alongside 10-year financial viability – Medium scenario														
		Calendar year	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	
			Year	Year	Year	Year	Year	Year	Year	Year	Year	Year	Year	Total
			0	1	2	3	4	5	6	7	8	9	10	
Forecast births in-hospital birth centre				238	339	445	505	516	525	536	545	555	564	4,766
Forecast births freestanding BC				102	145	191	217	221	225	230	234	238	242	2,042
Birthing rooms required in-hospital			5*	2	3	3	4	4	4	4	4	4	4	
Birthing rooms required freestanding			2*	1	1	2	2	2	2	2	2	2	2	
AN clinic rooms required in-hospital			3*	2	2	2	3	3	3	3	3	3	3	
AN clinic rooms required freestanding			2*	1	1	2	2	2	2	2	2	2	2	
Operating expenses				\$5.9m	\$8.2m	\$10.8m	\$12.4m	\$12.7m	\$13.1m	\$13.4m	\$13.8m	\$14.2m	\$14.5m	\$119.m
Total salaries and wages - in-hospital				\$1.8m	\$2.6m	\$3.3m	\$4.m	\$4.1m	\$4.3m	\$4.4m	\$4.6m	\$4.7m	\$4.9m	\$38.7m
RMs (Freestanding BC)		variable per birth		\$0.8m	\$1.2m	\$1.6m	\$1.8m	\$1.9m	\$2.m	\$2.m	\$2.1m	\$2.2m	\$2.3m	\$17.8m
CMD (Freestanding BC)		variable per birth		\$0.1m	\$0.1m	\$0.1m	\$0.1m	\$0.1m	\$0.1m	\$0.1m	\$0.1m	\$0.1m	\$0.2m	\$1.2m
Psychologist P6 (Freestanding BC)		fixed		\$0.m	\$0.m	\$0.m	\$0.m	\$0.m	\$0.m	\$0.m	\$0.m	\$0.m	\$0.m	\$0.1m
Social worker (Freestanding BC)		fixed		\$0.m	\$0.m	\$0.m	\$0.m	\$0.m	\$0.m	\$0.m	\$0.m	\$0.m	\$0.m	\$0.1m
Physiotherapist (Freestanding BC)		fixed		\$0.m	\$0.m	\$0.m	\$0.m	\$0.m	\$0.m	\$0.m	\$0.m	\$0.m	\$0.m	\$0.1m
Cleaner (Freestanding BC)		variable per birth		\$0.m	\$0.m	\$0.m	\$0.m	\$0.m	\$0.m	\$0.m	\$0.m	\$0.m	\$0.m	\$0.2m
Security (Freestanding BC)		fixed		\$0.3m	\$0.3m	\$0.3m	\$0.3m	\$0.3m	\$0.3m	\$0.3m	\$0.3m	\$0.3m	\$0.3m	\$3.m
ASO Class 3 - BC rooms (Freestanding BC)		variable per room		\$0.2m	\$0.2m	\$0.3m	\$0.3m	\$0.3m	\$0.3m	\$0.3m	\$0.3m	\$0.4m	\$0.4m	\$3.m
ASO Class 3 - AN rooms (Freestanding BC)		variable per room		\$0.1m	\$0.1m	\$0.3m	\$0.3m	\$0.3m	\$0.3m	\$0.3m	\$0.3m	\$0.3m	\$0.3m	\$2.7m
Senior Specialist (Freestanding BC)		variable per birth		\$0.m	\$0.m	\$0.m	\$0.m	\$0.m	\$0.m	\$0.m	\$0.m	\$0.m	\$0.m	\$0.4m
Registrar (Freestanding BC)		variable per birth		\$0.m	\$0.m	\$0.m	\$0.m	\$0.m	\$0.m	\$0.m	\$0.m	\$0.m	\$0.m	\$0.m
Total salaries and wages - freestanding				\$1.5m	\$1.9m	\$2.6m	\$2.9m	\$3.m	\$3.1m	\$3.2m	\$3.3m	\$3.4m	\$3.5m	\$28.6m
Total salaries and wages				\$3.3m	\$4.5m	\$6.m	\$6.9m	\$7.1m	\$7.4m	\$7.6m	\$7.9m	\$8.2m	\$8.4m	\$67.3m
G & S - med & surg supplies in-hospital		variable per birth		\$0.1m	\$0.2m	\$0.3m	\$0.3m	\$0.3m	\$0.3m	\$0.3m	\$0.3m	\$0.3m	\$0.3m	\$2.9m
G & S - med & surg supplies freestanding		variable per birth		\$0.1m	\$0.1m	\$0.1m	\$0.2m	\$0.2m	\$0.2m	\$0.2m	\$0.2m	\$0.2m	\$0.2m	\$1.6m
G & S - other in-hospital		variable		\$1.6m	\$2.2m	\$2.9m	\$3.3m	\$3.4m	\$3.4m	\$3.5m	\$3.5m	\$3.6m	\$3.7m	\$31.1m
G & S - other freestanding		variable		\$0.8m	\$1.2m	\$1.5m	\$1.7m	\$1.7m	\$1.8m	\$1.8m	\$1.8m	\$1.8m	\$1.9m	\$16.m
Ambulance transfer cost		variable per birth		\$0.m	\$0.m	\$0.m	\$0.m	\$0.m	\$0.m	\$0.m	\$0.m	\$0.m	\$0.m	\$0.2m
Total goods and services				\$2.6m	\$3.7m	\$4.8m	\$5.5m	\$5.6m	\$5.7m	\$5.8m	\$5.9m	\$6.m	\$6.1m	\$51.7m
Total Operating Expenses			-	\$5.9m	\$8.2m	\$10.8m	\$12.4m	\$12.7m	\$13.1m	\$13.4m	\$13.8m	\$14.2m	\$14.5m	\$119.m

Note: *rooms built in Year 0 to meet 2050 demand; S, W & O = Salary, Wages & On-costs, G&S = Goods and Services

E.2.4. Additional Freestanding + Option 2

Freestanding + Standalone 10-year financial viability – Medium scenario													
	Calendar year	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	Total
		Year	Year	Year	Year	Year	Year	Year	Year	Year	Year	Year	
		0	1	2	3	4	5	6	7	8	9	10	
Forecast births in-hospital birth centre			238	339	445	505	516	525	536	545	555	564	4,766
Forecast births freestanding BC			102	145	191	217	221	225	230	234	238	242	2,042
Birthing rooms required in-hospital		5*	2	3	3	4	4	4	4	4	4	4	
Birthing rooms required freestanding		2*	1	1	2	2	2	2	2	2	2	2	
AN clinic rooms required in-hospital		3*	2	2	2	3	3	3	3	3	3	3	
AN clinic rooms required freestanding		2*	1	1	2	2	2	2	2	2	2	2	
Operating expenses			\$6.4m	\$8.8m	\$11.5m	\$13.2m	\$13.6m	\$14m	\$14.4m	\$14.8m	\$15.1m	\$15.5m	\$127.4m
Total salaries and wages – in-hospital			\$2.1m	\$3m	\$3.8m	\$4.6m	\$4.7m	\$4.9m	\$5.1m	\$5.2m	\$5.4m	\$5.6m	\$44.4m
RMs (Freestanding BC)	variable per birth		\$0.8m	\$1.2m	\$1.6m	\$1.8m	\$1.9m	\$2m	\$2m	\$2.1m	\$2.2m	\$2.3m	\$17.8m
CMD (Freestanding BC)	variable per birth		\$0.1m	\$0.1m	\$0.1m	\$0.1m	\$0.1m	\$0.1m	\$0.1m	\$0.1m	\$0.1m	\$0.2m	\$1.2m
Psychologist P6 (Freestanding BC)	fixed		\$0.m	\$0.m	\$0.m	\$0.m	\$0.m	\$0.m	\$0.m	\$0.m	\$0.m	\$0.m	\$0.1m
Social worker (Freestanding BC)	fixed		\$0.m	\$0.m	\$0.m	\$0.m	\$0.m	\$0.m	\$0.m	\$0.m	\$0.m	\$0.m	\$0.1m
Physiotherapist (Freestanding BC)	fixed		\$0.m	\$0.m	\$0.m	\$0.m	\$0.m	\$0.m	\$0.m	\$0.m	\$0.m	\$0.m	\$0.1m
Cleaner (Freestanding BC)	variable per birth		\$0.m	\$0.m	\$0.m	\$0.m	\$0.m	\$0.m	\$0.m	\$0.m	\$0.m	\$0.m	\$0.2m
Security (Freestanding BC)	fixed		\$0.3m	\$0.3m	\$0.3m	\$0.3m	\$0.3m	\$0.3m	\$0.3m	\$0.3m	\$0.3m	\$0.3m	\$3m
ASO Class 3 – BC rooms (Freestanding BC)	variable per room		\$0.2m	\$0.2m	\$0.3m	\$0.3m	\$0.3m	\$0.3m	\$0.3m	\$0.3m	\$0.4m	\$0.4m	\$3.3m
ASO Class 3 – AN rooms (Freestanding BC)	variable per room		\$0.1m	\$0.1m	\$0.3m	\$0.3m	\$0.3m	\$0.3m	\$0.3m	\$0.3m	\$0.3m	\$0.3m	\$2.7m
Senior Specialist (Freestanding BC)	variable per birth		\$0.m	\$0.m	\$0.m	\$0.m	\$0.m	\$0.m	\$0.m	\$0.m	\$0.m	\$0.m	\$0.4m
Registrar (Freestanding BC)	variable per birth		\$0.m	\$0.m	\$0.m	\$0.m	\$0.m	\$0.m	\$0.m	\$0.m	\$0.m	\$0.m	\$0.m
Total salaries and wages – freestanding			\$1.5m	\$1.9m	\$2.6m	\$2.9m	\$3m	\$3.1m	\$3.2m	\$3.3m	\$3.4m	\$3.5m	\$28.6m
Total salaries and wages			\$3.6m	\$4.9m	\$6.4m	\$7.5m	\$7.8m	\$8m	\$8.3m	\$8.6m	\$8.8m	\$9.1m	\$72.9m
G & S – med & surg supplies in-hospital	variable per birth		\$0.2m	\$0.2m	\$0.3m	\$0.3m	\$0.3m	\$0.4m	\$0.4m	\$0.4m	\$0.4m	\$0.4m	\$3.2m
G & S – med & surg supplies freestanding	variable per birth		\$0.1m	\$0.1m	\$0.1m	\$0.2m	\$0.2m	\$0.2m	\$0.2m	\$0.2m	\$0.2m	\$0.2m	\$1.6m
G & S – other in-hospital	variable		\$1.7m	\$2.4m	\$3.1m	\$3.5m	\$3.6m	\$3.7m	\$3.8m	\$3.8m	\$3.9m	\$4m	\$33.5m
G & S – other freestanding	variable		\$0.8m	\$1.2m	\$1.5m	\$1.7m	\$1.7m	\$1.8m	\$1.8m	\$1.8m	\$1.8m	\$1.9m	\$16m
Ambulance transfer cost	variable per birth		\$0.m	\$0.m	\$0.m	\$0.m	\$0.m	\$0.m	\$0.m	\$0.m	\$0.m	\$0.m	\$0.2m
Total goods and services			\$2.8m	\$3.9m	\$5.1m	\$5.8m	\$5.9m	\$6m	\$6.1m	\$6.2m	\$6.3m	\$6.4m	\$54.4m
Total Operating Expenses		-	\$6.4m	\$8.8m	\$11.5m	\$13.2m	\$13.6m	\$14m	\$14.4m	\$14.8m	\$15.1m	\$15.5m	\$127.4m

Note: *rooms built in Year 0 to meet 2050 demand; S, W & O = Salary, Wages & On-costs, G&S = Goods and Services

E.3. Per annum costs: Low scenario

E.3.1. Option 1: Stand-alongside birth centre

Stand-alongside 10-year financial viability – Low scenario													
Calendar year		2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	
		Year 0	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Total
Forecast births at the birth centre		-	170	242	318	361	368	375	383	389	396	403	3,404
Birthing rooms required		3*	2	2	2	3	3	3	3	3	3	3	
AN clinic rooms required		2*	2	2	2	2	2	2	2	2	2	2	
Operating expenses	Cost Type		\$2.6m	\$3.6m	\$4.7m	\$5.4m	\$5.6m	\$5.7m	\$5.9m	\$6.m	\$6.2m	\$6.4m	\$52.1m
S, W & O – RM 2.4	variable /birth		\$0.9m	\$1.4m	\$1.8m	\$2.1m	\$2.2m	\$2.3m	\$2.4m	\$2.5m	\$2.6m	\$2.7m	\$20.8m
S, W & O – CMD (RM2.4 CMCS)	Variable /birth		\$0.1m	\$0.1m	\$0.2m	\$0.2m	\$0.2m	\$0.2m	\$0.2m	\$0.2m	\$0.2m	\$0.3m	\$2.m
S, W & O – Psychologist P6	fixed		\$0.m	\$0.m	\$0.m	\$0.m	\$0.m	\$0.m	\$0.m	\$0.m	\$0.m	\$0.m	\$0.1m
S, W & O – Social worker L3	fixed		\$0.m	\$0.m	\$0.m	\$0.m	\$0.m	\$0.m	\$0.m	\$0.m	\$0.m	\$0.m	\$0.1m
S, W & O – Maternal physio L5	fixed		\$0.m	\$0.m	\$0.m	\$0.m	\$0.m	\$0.m	\$0.m	\$0.m	\$0.m	\$0.m	\$0.1m
S, W & O – Cleaner 3.1	variable /birth		\$0.m	\$0.m	\$0.m	\$0.m	\$0.m	\$0.m	\$0.m	\$0.m	\$0.m	\$0.m	\$0.3m
S, W & O – Security L5	fixed		\$0.m	\$0.m	\$0.m	\$0.m	\$0.m	\$0.m	\$0.m	\$0.m	\$0.m	\$0.m	\$0.2m
S, W & O – ASO C3 – birth centre	variable /room		\$0.1m	\$0.1m	\$0.1m	\$0.2m	\$0.2m	\$0.2m	\$0.2m	\$0.2m	\$0.2m	\$0.2m	\$1.9m
S, W & O – ASO C3 – Antenatal	variable /room		\$0.1m	\$0.2m	\$0.2m	\$0.2m	\$0.2m	\$0.2m	\$0.2m	\$0.2m	\$0.2m	\$0.2m	\$1.6m
S, W & O – Senior Specialist	variable /birth		\$0.m	\$0.m	\$0.1m	\$0.1m	\$0.1m	\$0.1m	\$0.1m	\$0.1m	\$0.1m	\$0.1m	\$0.6m
S, W & O – Registrar L3	variable /birth		\$0.m	\$0.m	\$0.m	\$0.m	\$0.m	\$0.m	\$0.m	\$0.m	\$0.m	\$0.m	\$0.2m
Total salaries and wages			\$1.4m	\$1.9m	\$2.4m	\$2.8m	\$2.9m	\$3.1m	\$3.2m	\$3.3m	\$3.4m	\$3.5m	\$27.9m
G&S – med. & surg. supplies	variable /birth		\$0.1m	\$0.1m	\$0.2m	\$0.2m	\$0.2m	\$0.2m	\$0.2m	\$0.2m	\$0.2m	\$0.2m	\$2.1m
G&S – other	variable		\$1.1m	\$1.6m	\$2.1m	\$2.3m	\$2.4m	\$2.4m	\$2.5m	\$2.5m	\$2.6m	\$2.6m	\$22.1m
Ambulance transfer cost	variable /birth		\$0.m	\$0.m	\$0.m	\$0.m	\$0.m	\$0.m	\$0.m	\$0.m	\$0.m	\$0.m	\$0.m
Total goods and services			\$1.2m	\$1.7m	\$2.3m	\$2.6m	\$2.6m	\$2.7m	\$2.7m	\$2.8m	\$2.8m	\$2.9m	\$24.2m
Total Operating Expenses		-	\$2.6m	\$3.6m	\$4.7m	\$5.4m	\$5.6m	\$5.7m	\$5.9m	\$6.m	\$6.2m	\$6.4m	\$52.1m

Note: *rooms built in Year 0 to meet 2050 demand; S, W & O = Salary, Wages & On-costs, G&S = Goods and Services

E.3.2. Option 2: Standalone birth centre

Standalone 10-year financial viability – Low scenario													
	Calendar year	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	
		Year	Year	Year	Year	Year	Year	Year	Year	Year	Year	Year	Total
		0	1	2	3	4	5	6	7	8	9	10	
Forecast births at the birthing centre			170	242	318	361	368	375	383	389	396	403	3,404
Birthing rooms required		3*	2	2	2	3	3	3	3	3	3	3	
AN clinic rooms required		2*	2	2	2	2	2	2	2	2	2	2	
Operating expenses	Cost Type		\$3.m	\$4.1m	\$5.2m	\$6.1m	\$6.2m	\$6.4m	\$6.6m	\$6.7m	\$6.9m	\$7.1m	\$58.4m
S, W & O – RM 2.4	variable /birth		\$0.9m	\$1.4m	\$1.8m	\$2.1m	\$2.2m	\$2.3m	\$2.4m	\$2.5m	\$2.6m	\$2.7m	\$20.8m
S, W & O – CMD (RM2.4 CMCS)	Variable /birth		\$0.1m	\$0.1m	\$0.2m	\$0.2m	\$0.2m	\$0.2m	\$0.2m	\$0.2m	\$0.2m	\$0.3m	\$2.m
S, W & O – Psychologist P6	fixed		\$0.m	\$0.m	\$0.m	\$0.m	\$0.m	\$0.m	\$0.m	\$0.m	\$0.m	\$0.m	\$0.1m
S, W & O – Social worker L3	fixed		\$0.m	\$0.m	\$0.m	\$0.m	\$0.m	\$0.m	\$0.m	\$0.m	\$0.m	\$0.m	\$0.1m
S, W & O – Maternal physio L5	fixed		\$0.m	\$0.m	\$0.m	\$0.m	\$0.m	\$0.m	\$0.m	\$0.m	\$0.m	\$0.m	\$0.1m
S, W & O – Cleaner 3.1	variable /birth		\$0.m	\$0.m	\$0.m	\$0.m	\$0.m	\$0.m	\$0.m	\$0.m	\$0.m	\$0.m	\$0.3m
S, W & O – Security L5	fixed		\$0.m	\$0.m	\$0.m	\$0.m	\$0.m	\$0.m	\$0.m	\$0.m	\$0.1m	\$0.1m	\$0.5m
S, W & O – ASO C3 – birth centre	variable /room		\$0.3m	\$0.3m	\$0.3m	\$0.5m	\$0.5m	\$0.5m	\$0.5m	\$0.5m	\$0.5m	\$0.5m	\$4.5m
S, W & O – ASO C3 – Antenatal	variable /room		\$0.3m	\$0.3m	\$0.3m	\$0.3m	\$0.3m	\$0.3m	\$0.3m	\$0.3m	\$0.3m	\$0.3m	\$3.m
S, W & O – Senior Specialist	variable /birth		\$0.m	\$0.m	\$0.1m	\$0.1m	\$0.1m	\$0.1m	\$0.1m	\$0.1m	\$0.1m	\$0.1m	\$0.6m
S, W & O – Registrar L3	variable /birth		\$0.m	\$0.m	\$0.m	\$0.m	\$0.m	\$0.m	\$0.m	\$0.m	\$0.m	\$0.m	\$0.2m
Total salaries and wages			\$1.7m	\$2.2m	\$2.8m	\$3.3m	\$3.4m	\$3.5m	\$3.6m	\$3.8m	\$3.9m	\$4.m	\$32.2m
G&S – med. & surg. supplies	variable /birth		\$0.1m	\$0.2m	\$0.2m	\$0.2m	\$0.2m	\$0.3m	\$0.3m	\$0.3m	\$0.3m	\$0.3m	\$2.3m
G&S – other	variable		\$1.2m	\$1.7m	\$2.2m	\$2.5m	\$2.6m	\$2.6m	\$2.7m	\$2.7m	\$2.8m	\$2.8m	\$23.9m
Ambulance transfer cost	variable /birth		\$0.m	\$0.m	\$0.m	\$0.m	\$0.m	\$0.m	\$0.m	\$0.m	\$0.m	\$0.m	\$0.m
Total goods and services			\$1.3m	\$1.9m	\$2.4m	\$2.8m	\$2.8m	\$2.9m	\$2.9m	\$3.m	\$3.m	\$3.1m	\$26.2m
Total Operating Expenses		-	\$3.m	\$4.1m	\$5.2m	\$6.1m	\$6.2m	\$6.4m	\$6.6m	\$6.7m	\$6.9m	\$7.1m	\$58.4m

Note: *rooms built in Year 0 to meet 2050 demand; S, W & O = Salary, Wages & On-costs, G&S = Goods and Services

E.3.3. Additional Freestanding + Option 1

Freestanding + Stand-alongside 10-year financial viability – Low scenario													
	Calendar year	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	Total
		Year	Year	Year	Year	Year	Year	Year	Year	Year	Year	Year	
		0	1	2	3	4	5	6	7	8	9	10	
Forecast births in-hospital birth centre			119	170	223	253	258	263	268	272	277	282	2,383
Forecast births freestanding BC			51	73	95	108	111	113	115	117	119	121	1,021
Birthing rooms required in-hospital		3*	1	2	2	2	2	2	2	2	2	2	
Birthing rooms required freestanding		1*	1	1	1	1	1	1	1	1	1	1	
AN clinic rooms required in-hospital		2*	1	2	2	2	2	2	2	2	2	2	
AN clinic rooms required freestanding		1*	1	1	1	1	1	1	1	1	1	1	
Operating expenses			\$3.3m	\$4.6m	\$5.8m	\$6.5m	\$6.6m	\$6.8m	\$7m	\$7.2m	\$7.4m	\$7.6m	\$62.8m
Total salaries and wages – in-hospital			\$0.9m	\$1.4m	\$1.8m	\$2m	\$2.1m	\$2.2m	\$2.3m	\$2.4m	\$2.4m	\$2.5m	\$20.1m
RMs (Freestanding BC)	variable per birth		\$0.4m	\$0.6m	\$0.8m	\$0.9m	\$0.9m	\$1m	\$1m	\$1.1m	\$1.1m	\$1.1m	\$8.9m
CMD (Freestanding BC)	variable per birth		\$0m	\$0m	\$0.1m	\$0.1m	\$0.1m	\$0.1m	\$0.1m	\$0.1m	\$0.1m	\$0.1m	\$0.6m
Psychologist P6 (Freestanding BC)	fixed		\$0m	\$0m	\$0m	\$0m	\$0m	\$0m	\$0m	\$0m	\$0m	\$0m	\$0.1m
Social worker (Freestanding BC)	fixed		\$0m	\$0m	\$0m	\$0m	\$0m	\$0m	\$0m	\$0m	\$0m	\$0m	\$0.1m
Physiotherapist (Freestanding BC)	fixed		\$0m	\$0m	\$0m	\$0m	\$0m	\$0m	\$0m	\$0m	\$0m	\$0m	\$0.1m
Cleaner (Freestanding BC)	variable per birth		\$0m	\$0m	\$0m	\$0m	\$0m	\$0m	\$0m	\$0m	\$0m	\$0m	\$0.1m
Security (Freestanding BC)	fixed		\$0.3m	\$0.3m	\$0.3m	\$0.3m	\$0.3m	\$0.3m	\$0.3m	\$0.3m	\$0.3m	\$0.3m	\$3m
ASO Class 3 – BC rooms (Freestanding BC)	variable per room		\$0.2m	\$0.2m	\$0.2m	\$0.2m	\$0.2m	\$0.2m	\$0.2m	\$0.2m	\$0.2m	\$0.2m	\$1.7m
ASO Class 3 – AN rooms (Freestanding BC)	variable per room		\$0.1m	\$0.1m	\$0.1m	\$0.1m	\$0.1m	\$0.2m	\$0.2m	\$0.2m	\$0.2m	\$0.2m	\$1.5m
Senior Specialist (Freestanding BC)	variable per birth		\$0m	\$0m	\$0m	\$0m	\$0m	\$0m	\$0m	\$0m	\$0m	\$0m	\$0.2m
Registrar (Freestanding BC)	variable per birth		\$0m	\$0m	\$0m	\$0m	\$0m	\$0m	\$0m	\$0m	\$0m	\$0m	\$0m
Total salaries and wages – freestanding			\$1m	\$1.2m	\$1.5m	\$1.6m	\$1.7m	\$1.7m	\$1.8m	\$1.8m	\$1.9m	\$1.9m	\$16.2m
Total salaries and wages			\$2m	\$2.7m	\$3.3m	\$3.7m	\$3.8m	\$3.9m	\$4.1m	\$4.2m	\$4.3m	\$4.5m	\$36.3m
G & S – med & surg supplies in-hospital	variable per birth		\$0.1m	\$0.1m	\$0.1m	\$0.2m	\$0.2m	\$0.2m	\$0.2m	\$0.2m	\$0.2m	\$0.2m	\$1.5m
G & S – med & surg supplies freestanding	variable per birth		\$0m	\$0.1m	\$0.1m	\$0.1m	\$0.1m	\$0.1m	\$0.1m	\$0.1m	\$0.1m	\$0.1m	\$0.8m
G & S – other in-hospital	variable		\$0.8m	\$1.1m	\$1.5m	\$1.7m	\$1.7m	\$1.7m	\$1.8m	\$1.8m	\$1.8m	\$1.9m	\$15.8m
G & S – other freestanding	variable		\$0.4m	\$0.6m	\$0.8m	\$0.9m	\$0.9m	\$0.9m	\$0.9m	\$0.9m	\$1m	\$1m	\$8.3m
Ambulance transfer cost	variable per birth		\$0m	\$0m	\$0m	\$0m	\$0m	\$0m	\$0m	\$0m	\$0m	\$0m	\$0.1m
Total goods and services			\$1.4m	\$1.9m	\$2.5m	\$2.8m	\$2.9m	\$2.9m	\$3m	\$3m	\$3.1m	\$3.1m	\$26.5m
Total Operating Expenses		-	\$3.3m	\$4.6m	\$5.8m	\$6.5m	\$6.6m	\$6.8m	\$7m	\$7.2m	\$7.4m	\$7.6m	\$62.8m

Note: *rooms built in Year 0 to meet 2050 demand; S, W & O = Salary, Wages & On-costs, G&S = Goods and Services

E.3.4. Additional Freestanding + Option 2

Freestanding + Standalone 10-year financial viability – Low scenario													
	Calendar year	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	Total
		Year	Year	Year	Year	Year	Year	Year	Year	Year	Year	Year	
		0	1	2	3	4	5	6	7	8	9	10	
Forecast births in-hospital birth centre			119	170	223	253	258	263	268	272	277	282	2,383
Forecast births freestanding BC			51	73	95	108	111	113	115	117	119	121	1,021
Birthing rooms required in-hospital		3*	1	2	2	2	2	2	2	2	2	2	
Birthing rooms required freestanding		1*	1	1	1	1	1	1	1	1	1	1	
AN clinic rooms required in-hospital		2*	1	2	2	2	2	2	2	2	2	2	
AN clinic rooms required freestanding		1*	1	1	1	1	1	1	1	1	1	1	
Operating expenses			\$3.6m	\$5.m	\$6.2m	\$7.m	\$7.1m	\$7.3m	\$7.5m	\$7.7m	\$7.9m	\$8.1m	\$67.5m
Total salaries and wages – in-hospital			\$1.1m	\$1.8m	\$2.1m	\$2.4m	\$2.5m	\$2.6m	\$2.6m	\$2.7m	\$2.8m	\$2.9m	\$23.5m
RMs (Freestanding BC)	variable per birth		\$0.4m	\$0.6m	\$0.8m	\$0.9m	\$0.9m	\$1.m	\$1.m	\$1.1m	\$1.1m	\$1.1m	\$8.9m
CMD (Freestanding BC)	variable per birth		\$0.m	\$0.m	\$0.1m	\$0.1m	\$0.1m	\$0.1m	\$0.1m	\$0.1m	\$0.1m	\$0.1m	\$0.6m
Psychologist P6 (Freestanding BC)	fixed		\$0.m	\$0.m	\$0.m	\$0.m	\$0.m	\$0.m	\$0.m	\$0.m	\$0.m	\$0.m	\$0.1m
Social worker (Freestanding BC)	fixed		\$0.m	\$0.m	\$0.m	\$0.m	\$0.m	\$0.m	\$0.m	\$0.m	\$0.m	\$0.m	\$0.1m
Physiotherapist (Freestanding BC)	fixed		\$0.m	\$0.m	\$0.m	\$0.m	\$0.m	\$0.m	\$0.m	\$0.m	\$0.m	\$0.m	\$0.1m
Cleaner (Freestanding BC)	variable per birth		\$0.m	\$0.m	\$0.m	\$0.m	\$0.m	\$0.m	\$0.m	\$0.m	\$0.m	\$0.m	\$0.1m
Security (Freestanding BC)	fixed		\$0.3m	\$0.3m	\$0.3m	\$0.3m	\$0.3m	\$0.3m	\$0.3m	\$0.3m	\$0.3m	\$0.3m	\$3.m
ASO Class 3 – BC rooms (Freestanding BC)	variable per room		\$0.2m	\$0.2m	\$0.2m	\$0.2m	\$0.2m	\$0.2m	\$0.2m	\$0.2m	\$0.2m	\$0.2m	\$1.7m
ASO Class 3 – AN rooms (Freestanding BC)	variable per room		\$0.1m	\$0.1m	\$0.1m	\$0.1m	\$0.1m	\$0.2m	\$0.2m	\$0.2m	\$0.2m	\$0.2m	\$1.5m
Senior Specialist (Freestanding BC)	variable per birth		\$0.m	\$0.m	\$0.m	\$0.m	\$0.m	\$0.m	\$0.m	\$0.m	\$0.m	\$0.m	\$0.2m
Registrar (Freestanding BC)	variable per birth		\$0.m	\$0.m	\$0.m	\$0.m	\$0.m	\$0.m	\$0.m	\$0.m	\$0.m	\$0.m	\$0.m
Total salaries and wages – freestanding			\$1.m	\$1.2m	\$1.5m	\$1.6m	\$1.7m	\$1.7m	\$1.8m	\$1.8m	\$1.9m	\$1.9m	\$16.2m
Total salaries and wages			\$2.1m	\$3.m	\$3.6m	\$4.m	\$4.1m	\$4.3m	\$4.4m	\$4.6m	\$4.7m	\$4.9m	\$39.7m
G & S – med & surg supplies in-hospital	variable per birth		\$0.1m	\$0.1m	\$0.2m	\$0.2m	\$0.2m	\$0.2m	\$0.2m	\$0.2m	\$0.2m	\$0.2m	\$1.6m
G & S – med & surg supplies freestanding	variable per birth		\$0.m	\$0.1m	\$0.1m	\$0.1m	\$0.1m	\$0.1m	\$0.1m	\$0.1m	\$0.1m	\$0.1m	\$0.8m
G & S – other in-hospital	variable		\$0.9m	\$1.2m	\$1.6m	\$1.8m	\$1.8m	\$1.9m	\$1.9m	\$1.9m	\$2.m	\$2.m	\$17.m
G & S – other freestanding	variable		\$0.4m	\$0.6m	\$0.8m	\$0.9m	\$0.9m	\$0.9m	\$0.9m	\$0.9m	\$1.m	\$1.m	\$8.3m
Ambulance transfer cost	variable per birth		\$0.m	\$0.m	\$0.m	\$0.m	\$0.m	\$0.m	\$0.m	\$0.m	\$0.m	\$0.m	\$0.1m
Total goods and services			\$1.4m	\$2.m	\$2.6m	\$2.9m	\$3.m	\$3.1m	\$3.1m	\$3.2m	\$3.2m	\$3.3m	\$27.8m
Total Operating Expenses		-	\$3.6m	\$5.m	\$6.2m	\$7.m	\$7.1m	\$7.3m	\$7.5m	\$7.7m	\$7.9m	\$8.1m	\$67.5m

Note: *rooms built in Year 0 to meet 2050 demand; S, W & O = Salary, Wages & On-costs, G&S = Goods and Services

E.4. Per annum costs: High scenario

E.4.1. Option 1: Stand-alongside birth centre

Stand-alongside 10-year financial viability – High scenario													
Calendar year		2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	
		Year 0	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Total
Forecast births at birth centre			509	727	954	1,083	1,105	1,126	1,148	1,168	1,188	1,209	10,212
Birthing rooms required		9*	4	5	6	7	7	8	8	8	8	8	
AN clinic rooms required		5*	3	3	4	4	4	5	5	5	5	5	
Operating expenses	Cost Type		\$7.3m	\$10.4m	\$13.7m	\$15.7m	\$16.2m	\$16.8m	\$17.3m	\$17.7m	\$18.2m	\$18.7m	\$152.1m
S, W & O – RM 2.4	variable /birth		\$2.8m	\$4.1m	\$5.5m	\$6.4m	\$6.6m	\$6.9m	\$7.1m	\$7.4m	\$7.7m	\$8.0m	\$62.4m
S, W & O – CMD (RM2.4 CMCS)	Variable /birth		\$0.3m	\$0.4m	\$0.5m	\$0.6m	\$0.6m	\$0.7m	\$0.7m	\$0.7m	\$0.7m	\$0.8m	\$5.9m
S, W & O – Psychologist P6	fixed		\$0.0m	\$0.0m	\$0.0m	\$0.0m	\$0.0m	\$0.0m	\$0.0m	\$0.0m	\$0.0m	\$0.0m	\$0.1m
S, W & O – Social worker L3	fixed		\$0.0m	\$0.0m	\$0.0m	\$0.0m	\$0.0m	\$0.0m	\$0.0m	\$0.0m	\$0.0m	\$0.0m	\$0.1m
S, W & O – Maternal physio L5	fixed		\$0.0m	\$0.0m	\$0.0m	\$0.0m	\$0.0m	\$0.0m	\$0.0m	\$0.0m	\$0.0m	\$0.0m	\$0.1m
S, W & O – Cleaner 3.1	variable /birth		\$0.0m	\$0.1m	\$0.1m	\$0.1m	\$0.1m	\$0.1m	\$0.1m	\$0.1m	\$0.1m	\$0.1m	\$1.0m
S, W & O – Security L5	fixed		\$0.0m	\$0.0m	\$0.0m	\$0.0m	\$0.0m	\$0.0m	\$0.0m	\$0.0m	\$0.0m	\$0.0m	\$0.2m
S, W & O – ASO C3 – birth centre	variable /room		\$0.2m	\$0.3m	\$0.4m	\$0.5m	\$0.5m	\$0.6m	\$0.6m	\$0.6m	\$0.6m	\$0.6m	\$4.8m
S, W & O – ASO C3 – Antenatal	variable /room		\$0.2m	\$0.2m	\$0.3m	\$0.3m	\$0.3m	\$0.4m	\$0.4m	\$0.4m	\$0.4m	\$0.4m	\$3.6m
S, W & O – Senior Specialist	variable /birth		\$0.1m	\$0.1m	\$0.2m	\$0.2m	\$0.2m	\$0.2m	\$0.2m	\$0.2m	\$0.2m	\$0.2m	\$1.8m
S, W & O – Registrar L3	variable /birth		\$0.0m	\$0.0m	\$0.1m	\$0.1m	\$0.1m	\$0.1m	\$0.1m	\$0.1m	\$0.1m	\$0.1m	\$0.6m
Total salaries and wages			\$3.7m	\$5.3m	\$7.1m	\$8.1m	\$8.5m	\$8.9m	\$9.3m	\$9.6m	\$9.9m	\$10.3m	\$80.6m
G&S – med. & surg. supplies	variable /birth		\$0.3m	\$0.4m	\$0.6m	\$0.7m	\$0.7m	\$0.7m	\$0.7m	\$0.7m	\$0.7m	\$0.7m	\$6.3m
G&S – other	variable		\$3.3m	\$4.7m	\$6.1m	\$6.9m	\$7.1m	\$7.2m	\$7.3m	\$7.5m	\$7.6m	\$7.7m	\$65.3m
Ambulance transfer cost	variable /birth		\$0.0m	\$0.0m	\$0.0m	\$0.0m	\$0.0m	\$0.0m	\$0.0m	\$0.0m	\$0.0m	\$0.0m	\$0.0m
Total goods and services			\$3.6m	\$5.1m	\$6.7m	\$7.6m	\$7.7m	\$7.9m	\$8.0m	\$8.2m	\$8.3m	\$8.5m	\$71.6m
Total Operating Expenses		-	\$7.3m	\$10.4m	\$13.7m	\$15.7m	\$16.2m	\$16.8m	\$17.3m	\$17.7m	\$18.2m	\$18.7m	\$152.1m

Note: *rooms built in Year 0 to meet 2050 demand; S, W & O = Salary, Wages & On-costs, G&S = Goods and Services

E.4.2. Option 2: Standalone birth centre

Standalone 10-year financial viability – High scenario													
	Calendar year	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	
		Year	Year	Year	Year	Year	Year	Year	Year	Year	Year	Year	Total
		0	1	2	3	4	5	6	7	8	9	10	
Forecast births at birth centre			509	727	954	1,083	1,105	1,126	1,148	1,168	1,188	1,209	10,212
Birthing rooms required		9*	4	5	6	7	7	8	8	8	8	8	
AN clinic rooms required		5*	3	3	4	4	4	5	5	5	5	5	
Operating expenses	Cost Type		\$8.2m	\$11.5m	\$15.1m	\$17.3m	\$17.8m	\$18.6m	\$19.1m	\$19.6m	\$20.1m	\$20.7m	\$168.m
S, W & O – RM 2.4	variable /birth		\$2.8m	\$4.1m	\$5.5m	\$6.4m	\$6.6m	\$6.9m	\$7.1m	\$7.4m	\$7.7m	\$8.m	\$62.4m
S, W & O – CMD (RM2.4 CMCS)	Variable /birth		\$0.3m	\$0.4m	\$0.5m	\$0.6m	\$0.6m	\$0.7m	\$0.7m	\$0.7m	\$0.7m	\$0.8m	\$5.9m
S, W & O – Psychologist P6	fixed		\$0.m	\$0.m	\$0.m	\$0.m	\$0.m	\$0.m	\$0.m	\$0.m	\$0.m	\$0.m	\$0.1m
S, W & O – Social worker L3	fixed		\$0.m	\$0.m	\$0.m	\$0.m	\$0.m	\$0.m	\$0.m	\$0.m	\$0.m	\$0.m	\$0.1m
S, W & O – Maternal physio L5	fixed		\$0.m	\$0.m	\$0.m	\$0.m	\$0.m	\$0.m	\$0.m	\$0.m	\$0.m	\$0.m	\$0.1m
S, W & O – Cleaner 3.1	variable /birth		\$0.m	\$0.1m	\$0.1m	\$0.1m	\$0.1m	\$0.1m	\$0.1m	\$0.1m	\$0.1m	\$0.1m	\$1.m
S, W & O – Security L5	fixed		\$0.m	\$0.m	\$0.m	\$0.m	\$0.m	\$0.m	\$0.m	\$0.m	\$0.1m	\$0.1m	\$0.5m
S, W & O – ASO C3 – birth centre	variable /room		\$0.6m	\$0.8m	\$0.9m	\$1.1m	\$1.2m	\$1.3m	\$1.4m	\$1.4m	\$1.4m	\$1.5m	\$11.6m
S, W & O – ASO C3 – Antenatal	variable /room		\$0.4m	\$0.4m	\$0.6m	\$0.6m	\$0.6m	\$0.8m	\$0.8m	\$0.8m	\$0.8m	\$0.8m	\$6.5m
S, W & O – Senior Specialist	variable /birth		\$0.1m	\$0.1m	\$0.2m	\$0.2m	\$0.2m	\$0.2m	\$0.2m	\$0.2m	\$0.2m	\$0.2m	\$1.8m
S, W & O – Registrar L3	variable /birth		\$0.m	\$0.m	\$0.1m	\$0.1m	\$0.1m	\$0.1m	\$0.1m	\$0.1m	\$0.1m	\$0.1m	\$0.6m
Total salaries and wages			\$4.3m	\$6.m	\$7.9m	\$9.1m	\$9.4m	\$10.1m	\$10.4m	\$10.8m	\$11.1m	\$11.5m	\$90.6m
G&S – med. & surg. supplies	variable /birth		\$0.3m	\$0.5m	\$0.6m	\$0.7m	\$0.7m	\$0.8m	\$0.8m	\$0.8m	\$0.8m	\$0.8m	\$6.9m
G&S – other	variable		\$3.5m	\$5.m	\$6.6m	\$7.5m	\$7.6m	\$7.8m	\$7.9m	\$8.m	\$8.2m	\$8.3m	\$70.4m
Ambulance transfer cost	variable /birth		\$0.m	\$0.m	\$0.m	\$0.m	\$0.m	\$0.m	\$0.m	\$0.m	\$0.m	\$0.m	\$0.m
Total goods and services			\$3.9m	\$5.5m	\$7.2m	\$8.2m	\$8.4m	\$8.5m	\$8.7m	\$8.8m	\$9.m	\$9.1m	\$77.3m
Total Operating Expenses		-	\$8.2m	\$11.5m	\$15.1m	\$17.3m	\$17.8m	\$18.6m	\$19.1m	\$19.6m	\$20.1m	\$20.7m	\$168.m

Note: *rooms built in Year 0 to meet 2050 demand; S, W & O = Salary, Wages & On-costs, G&S = Goods and Services

E.4.3. Additional Freestanding + Option 1

Freestanding + Stand-alongside 10-year financial viability – High scenario													
	Calendar year	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	Total
		Year	Year	Year	Year	Year	Year	Year	Year	Year	Year	Year	
		0	1	2	3	4	5	6	7	8	9	10	
Forecast births in-hospital birth centre			356	509	668	758	774	788	803	817	832	847	7,148
Forecast births freestanding BC			153	218	286	325	332	338	344	350	357	363	3,064
Birthing rooms required in-hospital		7*	3	4	5	5	5	5	6	6	6	6	
Birthing rooms required freestanding		3*	1	2	2	3	3	3	3	3	3	3	
AN clinic rooms required in-hospital		4*	2	3	3	3	3	3	4	4	4	4	
AN clinic rooms required freestanding		2*	1	2	2	2	2	2	2	2	2	2	
Operating expenses			\$8.4m	\$12.2m	\$15.7m	\$18.m	\$18.5m	\$19.m	\$19.7m	\$20.2m	\$20.8m	\$21.3m	\$173.9m
Total salaries and wages – in-hospital			\$2.6m	\$3.8m	\$5.m	\$5.7m	\$6.m	\$6.2m	\$6.6m	\$6.8m	\$7.m	\$7.3m	\$57.m
RMs (Freestanding BC)	variable per birth		\$1.2m	\$1.8m	\$2.3m	\$2.7m	\$2.8m	\$2.9m	\$3.1m	\$3.2m	\$3.3m	\$3.4m	\$26.7m
CMD (Freestanding BC)	variable per birth		\$0.1m	\$0.1m	\$0.2m	\$0.2m	\$0.2m	\$0.2m	\$0.2m	\$0.2m	\$0.2m	\$0.2m	\$1.8m
Psychologist P6 (Freestanding BC)	fixed		\$0.m	\$0.m	\$0.m	\$0.m	\$0.m	\$0.m	\$0.m	\$0.m	\$0.m	\$0.m	\$0.1m
Social worker (Freestanding BC)	fixed		\$0.m	\$0.m	\$0.m	\$0.m	\$0.m	\$0.m	\$0.m	\$0.m	\$0.m	\$0.m	\$0.1m
Physiotherapist (Freestanding BC)	fixed		\$0.m	\$0.m	\$0.m	\$0.m	\$0.m	\$0.m	\$0.m	\$0.m	\$0.m	\$0.m	\$0.1m
Cleaner (Freestanding BC)	variable per birth		\$0.m	\$0.m	\$0.m	\$0.m	\$0.m	\$0.m	\$0.m	\$0.m	\$0.m	\$0.m	\$0.3m
Security (Freestanding BC)	fixed		\$0.3m	\$0.3m	\$0.3m	\$0.3m	\$0.3m	\$0.3m	\$0.3m	\$0.3m	\$0.3m	\$0.3m	\$3.m
ASO Class 3 – BC rooms (Freestanding BC)	variable per room		\$0.2m	\$0.3m	\$0.3m	\$0.5m	\$0.5m	\$0.5m	\$0.5m	\$0.5m	\$0.5m	\$0.5m	\$4.4m
ASO Class 3 – AN rooms (Freestanding BC)	variable per room		\$0.1m	\$0.3m	\$0.3m	\$0.3m	\$0.3m	\$0.3m	\$0.3m	\$0.3m	\$0.3m	\$0.3m	\$2.9m
Senior Specialist (Freestanding BC)	variable per birth		\$0.m	\$0.m	\$0.m	\$0.1m	\$0.1m	\$0.1m	\$0.1m	\$0.1m	\$0.1m	\$0.1m	\$0.5m
Registrar (Freestanding BC)	variable per birth		\$0.m	\$0.m	\$0.m	\$0.m	\$0.m	\$0.m	\$0.m	\$0.m	\$0.m	\$0.m	\$0.m
Total salaries and wages – freestanding			\$1.9m	\$2.8m	\$3.5m	\$4.1m	\$4.2m	\$4.4m	\$4.5m	\$4.7m	\$4.8m	\$5.m	\$39.9m
Total salaries and wages			\$4.5m	\$6.6m	\$8.5m	\$9.8m	\$10.2m	\$10.5m	\$11.1m	\$11.5m	\$11.8m	\$12.2m	\$96.9m
G & S – med & surg supplies in-hospital	variable per birth		\$0.2m	\$0.3m	\$0.4m	\$0.5m	\$0.5m	\$0.5m	\$0.5m	\$0.5m	\$0.5m	\$0.5m	\$4.4m
G & S – med & surg supplies freestanding	variable per birth		\$0.1m	\$0.2m	\$0.2m	\$0.3m	\$0.3m	\$0.3m	\$0.3m	\$0.3m	\$0.3m	\$0.3m	\$2.4m
G & S – other in-hospital	variable		\$2.3m	\$3.3m	\$4.3m	\$4.9m	\$5.m	\$5.1m	\$5.2m	\$5.3m	\$5.4m	\$5.5m	\$46.4m
G & S – other freestanding	variable		\$1.2m	\$1.7m	\$2.2m	\$2.5m	\$2.6m	\$2.6m	\$2.6m	\$2.7m	\$2.7m	\$2.8m	\$23.6m
Ambulance transfer cost	variable per birth		\$0.m	\$0.m	\$0.m	\$0.m	\$0.m	\$0.m	\$0.m	\$0.m	\$0.m	\$0.m	\$0.3m
Total goods and services			\$3.9m	\$5.5m	\$7.2m	\$8.2m	\$8.3m	\$8.5m	\$8.6m	\$8.8m	\$8.9m	\$9.1m	\$77.m
Total Operating Expenses		-	\$8.4m	\$12.2m	\$15.7m	\$18.m	\$18.5m	\$19.m	\$19.7m	\$20.2m	\$20.8m	\$21.3m	\$173.9m

Note: *rooms built in Year 0 to meet 2050 demand; S, W & O = Salary, Wages & On-costs, G&S = Goods and Services

E.4.4. Additional Freestanding + Option 2

Freestanding + Standalone 10-year financial viability – High scenario													
	Calendar year	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	Total
		Year	Year	Year	Year	Year	Year	Year	Year	Year	Year	Year	
		0	1	2	3	4	5	6	7	8	9	10	
Forecast births in-hospital birth centre		347	356	509	668	758	774	788	803	817	832	847	7,500
Forecast births freestanding BC		149	153	218	286	325	332	338	344	350	357	363	3,214
Birthing rooms required in-hospital		7*	3	4	5	5	5	5	6	6	6	6	
Birthing rooms required freestanding		3*	1	2	2	3	3	3	3	3	3	3	
AN clinic rooms required in-hospital		4*	2	3	3	3	3	3	4	4	4	4	
AN clinic rooms required freestanding		2*	1	2	2	2	2	2	2	2	2	2	
Operating expenses			\$9.1m	\$13.m	\$16.8m	\$19.1m	\$19.6m	\$20.2m	\$21.1m	\$21.6m	\$22.2m	\$22.8m	\$185.5m
Total salaries and wages – in-hospital			\$3.m	\$4.4m	\$5.7m	\$6.4m	\$6.7m	\$6.9m	\$7.5m	\$7.7m	\$8.m	\$8.2m	\$64.6m
RMs (Freestanding BC)	variable per birth		\$1.2m	\$1.8m	\$2.3m	\$2.7m	\$2.8m	\$2.9m	\$3.1m	\$3.2m	\$3.3m	\$3.4m	\$26.7m
CMD (Freestanding BC)	variable per birth		\$0.1m	\$0.1m	\$0.2m	\$0.2m	\$0.2m	\$0.2m	\$0.2m	\$0.2m	\$0.2m	\$0.2m	\$1.8m
Psychologist P6 (Freestanding BC)	fixed		\$0.m	\$0.m	\$0.m	\$0.m	\$0.m	\$0.m	\$0.m	\$0.m	\$0.m	\$0.m	\$0.1m
Social worker (Freestanding BC)	fixed		\$0.m	\$0.m	\$0.m	\$0.m	\$0.m	\$0.m	\$0.m	\$0.m	\$0.m	\$0.m	\$0.1m
Physiotherapist (Freestanding BC)	fixed		\$0.m	\$0.m	\$0.m	\$0.m	\$0.m	\$0.m	\$0.m	\$0.m	\$0.m	\$0.m	\$0.1m
Cleaner (Freestanding BC)	variable per birth		\$0.m	\$0.m	\$0.m	\$0.m	\$0.m	\$0.m	\$0.m	\$0.m	\$0.m	\$0.m	\$0.3m
Security (Freestanding BC)	fixed		\$0.3m	\$0.3m	\$0.3m	\$0.3m	\$0.3m	\$0.3m	\$0.3m	\$0.3m	\$0.3m	\$0.3m	\$3.m
ASO Class 3 – BC rooms (Freestanding BC)	variable per room		\$0.2m	\$0.3m	\$0.3m	\$0.5m	\$0.5m	\$0.5m	\$0.5m	\$0.5m	\$0.5m	\$0.5m	\$4.4m
ASO Class 3 – AN rooms (Freestanding BC)	variable per room		\$0.1m	\$0.3m	\$0.3m	\$0.3m	\$0.3m	\$0.3m	\$0.3m	\$0.3m	\$0.3m	\$0.3m	\$2.9m
Senior Specialist (Freestanding BC)	variable per birth		\$0.m	\$0.m	\$0.m	\$0.1m	\$0.1m	\$0.1m	\$0.1m	\$0.1m	\$0.1m	\$0.1m	\$0.5m
Registrar (Freestanding BC)	variable per birth		\$0.m	\$0.m	\$0.m	\$0.m	\$0.m	\$0.m	\$0.m	\$0.m	\$0.m	\$0.m	\$0.m
Total salaries and wages – freestanding			\$1.9m	\$2.8m	\$3.5m	\$4.1m	\$4.2m	\$4.4m	\$4.5m	\$4.7m	\$4.8m	\$5.m	\$39.9m
Total salaries and wages			\$5.m	\$7.2m	\$9.2m	\$10.5m	\$10.9m	\$11.3m	\$12.m	\$12.4m	\$12.8m	\$13.2m	\$104.4m
G & S – med & surg supplies in-hospital	variable per birth		\$0.2m	\$0.3m	\$0.5m	\$0.5m	\$0.5m	\$0.5m	\$0.5m	\$0.6m	\$0.6m	\$0.6m	\$4.8m
G & S – med & surg supplies freestanding	variable per birth		\$0.1m	\$0.2m	\$0.2m	\$0.3m	\$0.3m	\$0.3m	\$0.3m	\$0.3m	\$0.3m	\$0.3m	\$2.4m
G & S – other in-hospital	variable		\$2.5m	\$3.6m	\$4.7m	\$5.3m	\$5.4m	\$5.5m	\$5.6m	\$5.7m	\$5.8m	\$5.9m	\$49.9m
G & S – other freestanding	variable		\$1.2m	\$1.7m	\$2.2m	\$2.5m	\$2.6m	\$2.6m	\$2.6m	\$2.7m	\$2.7m	\$2.8m	\$23.6m
Ambulance transfer cost	variable per birth		\$0.m	\$0.m	\$0.m	\$0.m	\$0.m	\$0.m	\$0.m	\$0.m	\$0.m	\$0.m	\$0.3m
Total goods and services			\$4.1m	\$5.8m	\$7.6m	\$8.6m	\$8.8m	\$8.9m	\$9.1m	\$9.2m	\$9.4m	\$9.6m	\$81.m
Total Operating Expenses		-	\$9.1m	\$13.m	\$16.8m	\$19.1m	\$19.6m	\$20.2m	\$21.1m	\$21.6m	\$22.2m	\$22.8m	\$185.5m

Note: *rooms built in Year 0 to meet 2050 demand; S, W & O = Salary, Wages & On-costs, G&S = Goods and Services

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- ^{xxi} This decision stems from stakeholder agreement within ACT Health and Canberra Health Services (those engaged with the Project Working Group) that a birth centre should still be located at the new hospital, and the community freestanding birth centre is additional to any hospital-based option provided at northside hospital.
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^{xxviii} For example, there were 335 births completed at NCH birth centre in 2018 compared to 215 in 2021 (-35.8%). Five-year averages (2018-19 to 2022-23) have been used where possible rather than the most recent year of data (2022-23) to minimise this impact, however ultimately the limitations associated with using COVID-19 impacted data should be noted when considering the outcomes of the model.

^{xxix} In 2022, 19% of low risk births in ACT North were completed at the NCH birth centre.

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