

A toolkit for reopening remote birthing services: enablers, barriers, tasks and processes

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Abstract

Background: Rural and remote birthing services have been closing for several decades. The rationale behind these closures are concerns about safety, economic resources, and professional indemnity. Such closures have considerable implications for patients and the community, workforce and local health service provision. Many non-metropolitan community members continue to lobby for the reinstatement of local birthing care they want safe, equitable service access and, high quality care. After many years of closures, the state of Queensland in Australia has seen increased interest and success in restarting remote birthing services. There are significant challenges to be overcome for any birthing service to restart, including ensuring: appropriate skills amongst staff, consideration of community expectations, equipment availability, navigating health system requirements and the politics of the time. Those wishing to reopen a rural birthing service would benefit from understanding the essential tasks and processes required and the enablers and barriers to achieving this. Analysing and collating this data from a number of services into a 'toolkit' may assist the direction of other remote health services seeking to reopen birthing care after a period of closure.

Aim: This paper will outline results from the first case study of a reopened birthing service in a remote northern Queensland health service.

Methods: A qualitative, case study approach was employed to investigate key enablers, barriers, tasks and processes associated with reopening a remote birthing service. Purposive sampling was used to identify key stakeholders and actors throughout the system including clinical and support staff, local service managers, community advocates and those in relevant district management roles. These actors were invited to participate in individual semi-structured, in-depth interviews during which they discussed the experience of reopening the birthing service from their perspective; highlighting enablers, challenges, and important influences. Interviews were transcribed and analysed using an iterative, thematic technique.

Results: Qualitative analysis of the results found key enablers, barriers, tasks and processes can be categorised into thematic groups; the largest of which were associated with workforce, funding and safety. These will be discussed in light of the timeline for reopening: from initial groundwork required to start the process, service reopening and then ongoing concerns after the service recommences. The contextual factors surrounding the service recommencing are presented from community, staff and political perspectives.

Background

Despite having one of the safest and high quality health and maternity system in the world, rural and remote Australian women find it difficult to access local maternity services (1). Many must leave their families and communities and travel long distances to access maternity services (2). Women living in rural and remote regions have worse perinatal outcomes than their urban counterparts (3). One aim of

the Australian National Maternity Services Plan 2010 (NMSP) (4) is that rural and remote women will have access to a safe, high quality and sustainable maternity health system.

Australian research has shown that obstetric outcomes in small maternity units are as good as, and often better than those of larger hospitals (5). Quality care can be provided in maternity units with relatively few births when local expertise is supported by ongoing professional education, good teamwork and back-up systems for special care. General Practitioner (GP) obstetricians contribute to rural communities by providing local access to care, patient-centred care and continuity of care which all contribute to a stronger community (6).

Background to maternity services closures

Rural maternity units are vulnerable to many pressures, including: (a) trends towards health service centralisation; (b) achieving cost-efficiencies in service delivery; and risk-aversion (7). Between 1995 and 2005 over 130 rural maternity units closed across Australia (1), 36 in Queensland alone. Simultaneously, the Australian procedural GP workforce had reached critically low levels and a potential crisis in the provision of rural obstetrics services was identified (8). Safety, cost, workforce and demographic issues were the main factors attributed to the closure of small, rural maternity units (9), however the use of these factors to justify rural birthing service closures has been challenged (10).

When local birthing services are closed, the costs and risks that were previously borne by the government are transferred to rural families and communities (7). Costs are shifted to rural families who have to pay for transport, accommodation, loss of income when they are required to travel for delivery and care (2, 11). The wellbeing of mothers and babies is compromised by forcing mothers to travel to give birth (12). Removal of services increases patient risk-taking, for example, women will knowingly trade off some element of clinical risk for physical and psycho-social safety (12).

Closures of a rural maternity service has a cascade effect, reducing health care access in rural communities and opportunities for midwives and procedural doctors to train, work and maintain their skills in rural and regional areas (8). Recruitment and retention of health practitioners in rural areas attracts ongoing attention in the literature and there are various government and industry-led strategies aimed at addressing these (12).

The inequity of rural and remote Australians' access to maternity and birthing services has been acknowledged and improving access to maternity care recognised as a priority for Australian maternity care services (4,13).

There is limited literature about re-opening of rural birthing services. Reimer (1989) describes the rebuilding of an obstetric unit with a small rural hospital in Nevada, US (14). He identified five major steps contributing to the success of the program: administration recognition of the need, attracting and organising obstetric staff, funding up to date equipment, marketing the obstetrical program to the community, and ensuring quality of care through the establishment of protocols and auditing outcomes (14). A team approach and community support were considered essential, whilst rising obstetric malpractice liability insurance and concerns over financial viability were major threats (14)

In Queensland, the Beaudesert Hospital birthing unit was closed in 2002. Community support and multidisciplinary collaboration in 2011 lead to reopening of the service. In 2012, the then Minister for Health, Lawrence Springborg, declared that Beaudesert would be a "test-case" for re-establishing birthing services across rural Queensland and would be operational in 2014 (newspaper item 1). The

facility opened in March 2014 but was reviewed in June that year over concerns about the quality of care given to women (newspaper item 2). Despite this early setback, birthing has continued in Beaudesert with over 300 babies delivered 2014–2016 (media release item 3).

The objective of this study was to identify the tasks required to re-establish a maternity service in a rural hospital. The aim was to provide information to help direct the activities of health service providers and managers and policy makers attempting to re-open a rural or remote birthing service.

Methods

We adopted a qualitative approach using semi-structured face-to-face interviews. The research questions examined were:

1. What tasks and processes are needed to re-establish a remote birthing service?
2. What are the barriers to and enablers in the re-opening of a remote birthing service?

Medical, midwifery, and administration staff of a Multipurpose Health Service, executive members of the Health Service and community members were purposively sampled as key stakeholders in the re-establishment of the maternity service. Invitations to participate were emailed to potential participants with an information statement and consent form. Participants were asked to return these to the investigators. Any potential participant who did not respond was considered ineligible for the study.

Ethical approval for the study was obtained by the Far North Queensland Human Research Ethics Committee (HREC/15/QCH/80 – 995 LR).

An open-ended, semi-structured interview guideline was developed by the investigators. The interview was designed to seek participant's views and reflections about the tasks and processes required to re-establish the local maternity service. The questions focused on the tasks, the enablers and barriers to re-establishment of the maternity service. Interviews were conducted face-to-face at the local town and at the regional centre (where district management were located), and one by telephone by GA. Interviews were conducted over a 3 week period in 2015 with each interview taking 20 to 60 minutes.

The interviews were audio recorded and transcribed verbatim by GA and organised for analysis using NVIVO11 (QSR International). The researchers (GA & RE) read through the interview transcripts, and interview notes to acquire a feeling of the content. Analysis of the transcripts, once uploaded into NVivo 11 (QSR International), was conducted independently by two researchers (GA & RE) to check inter-rater reliability of the emerging themes. This was a process of coding or labelling concepts and theoretical memoing (describing the conceptualisation of categories, links between categories and development of hypotheses) (15). Any discrepancies were resolved by discussion before reporting.

Participant identity is attributed at the end of each quote using the identifiers P1, P2 etc.

Results and discussion

Qualitative thematic analysis of the community and staff interview transcripts found themes could be usefully considered alongside the phases of reopening a birthing service: contextual factors or the precipitating environment for reopening a service; groundwork; process of reopening; and ongoing concerns (after reopening). A number of themes recur throughout the phases but with differing emphases.

Precipitating environment and contextual factors

In this phase, there is consideration of the contextual and motivating factors that motivate staff to recommence birthing care where it had ceased. Two themes were clearly identifiable.

Desire: That is, the desire of community and staff to have a functioning and accessible local birthing service. The desire of the community was demonstrated by local women arriving to birth even when the hospital was not a birthing unit. Further, a well-organised local Community Advisory Network voiced concerns about mothers having to relocate to the regional centre at 36 weeks gestation.

The semi-regular occurrence of unplanned births at the local hospital was a large factor in staff motivation to reopen a birthing service that would 'normalise' local birthing and ensure that the hospital was equipped and staff prepared for birthing scenarios. Having a birthing service would mean that staff could mitigate the risk of unplanned deliveries.

Alignment of political agendas: Having a favourable political environment where government supports rural and remote birthing services was vital. In this case there was political goodwill and local clinicians had a proposal ready to present the business case for reopening services to government and district-level health management.

Groundwork

In this 'groundwork' phase, themes related to the tasks of preparing appropriate foundations for a reopened birthing service are considered. Here, findings can be grouped into themes of: workforce, funding and data.

Workforce issues: The capacity for birthing services was built by recruitment of the necessary clinicians before the service opened including a midwife with leadership skills to develop the business case and plan for a safe birthing service appropriate to the local area.

...I started recruiting doctors with obstetric skills and trying to build capacity within our medical workforce to be able to, I guess, remove any barrier from the staffing perspective to re-birthing. And we were actively I guess recruiting even though there wasn't a requirement for any of the job descriptions...certainly if they had midwifery [qualifications] that was an advantage over other applicants for permanent positions here [at the local hospital]. – P4

You either need someone who is really good that can pick that up [working knowledge of midwifery group practice (MGP) or have someone that already has the knowledge of how MGP practice is supposed to work and look at that model of care and ensure that they are doing that to the Award. Good people—you need someone that is a lead in it [developing the business case for reopening birthing service]...– P5

Funding: Funding is required for key staff positions. Lump sum funding for re-opening a service is rare. In this case funding was obtained individually for key roles from various government funding initiatives before recurrent government funding was secured.

Data: Data needed to be collected and maintained to inform service model planning.

... there was very little data captured, there were no databases. So I set up a database and I set up my own audit tool and I audited everyone over the last 2 years who presented to [the local hospital] pregnant. So I started to get this picture of who was presenting... things like BMI, smoking...diabetes so I was starting in my own mind to form an idea of what it was going to look like... - P3

The significant process steps during this phase as identified by interviewees included:

- The hospital secured aliquots of money enabling appointment to key strategic roles while a birthing service business case was developed.
- It was challenging to recruit adequately skilled obstetric and midwifery staff to a hospital without a birthing unit.

Process

When reopening of a service is imminent, processes take on a different emphasis or become more urgent.

Workforce: To minimise clinical risk the birthing services team requires a specific set of skills. The right clinicians with the right skills must be employed into positions within the service model.

Funding: A consistent and protected line of longer term funding is required to sustain a service with the right clinicians with the right skills.

Political support: The support of local politicians can be pivotal in reopening a birthing service.

...I go back to the conference I was at and they said to me “Could you have services up and running by the December?”... so the minister made a directive he wants the midwifery services in [town] up and running....because it was getting political. Because we were going to an election in the March the next year....We’ve been given this directive—six months. - P3

... [the health minister] announced that [town] would re-establish birthing services. Which was great and I certainly remember then standing and making it very clear that it was great and very much appreciated—would there be new money to go along with that commitment because that has been the disabling in the past and he said yes. And so it was like “oh great—get that on paper”. - P4

In the development of this service model a political agenda added complexity and urgency to discussions where clarity of purpose and calm decision making were needed, however the politically determined deadline set an imperative to conclude discussion and create the service.

It was interesting. I remember it being remarked that now money had been I guess guaranteed or promised, there was no more kind of developing under the radar, there would be lots of people interested in what we were doing and how we were doing it and also lots of people wanting to tell us what to do and how to do it. And that was almost prophetic. Because that’s exactly how it played out....It complicated things. - P4

Deciding on a service model: There are important resourcing and staffing implications associated with the decision of which service delivery model to pursue (e.g. midwife-led, continuity of midwife carer, stand alone with medical backup etc). Decisions about this may be affected by geography (e.g. how far to a referral centre, how long for a retrieval) and staff skills (enough midwives with sufficient skills, confidence of medical staff with skills to provide back-up). Safety concerns featured prominently in discussions about the most appropriate model. Medical input with independent caesarean section capability was important at this site:

And it was one the GP obstetricians who actually said “the most frightening position that I could be in as a GP obstetrician is coming in and seeing a flat trace and knowing that I could do a caesar on this baby that needed immediate delivery, but that I wasn’t funded or supported by my service to do so.”....And it was like yeah and that’s why we’re pushing forward for a stand-alone service. I think anywhere that can’t access, I mean we only had air evacuation as an option and best case scenario we could get a caesar within two hours—probably on best case scenario, but that is rarely available and certainly not reliably so. - P4

Business case: The business case identified the service vision and consolidated ideas of how the birthing service would operate and did not address risk.

Ongoing concerns

After the service was reopened, there were ongoing concerns about the development and maintenance of the birthing service:

Workforce: To ensure the sustainability of the service staff must be retained and their skills maintained, if doctors or midwives did not feel adequately skilled for service provision they might leave.

...but I suppose what worries me currently is the risk of the doctors not getting enough experience ongoing, and not wanting to continue in that...service. It's vital that our service [is] sustained once it's up and running, that it doesn't fall over...So we certainly want a sustainable service. – P1

Facilities: There are important space and equipment considerations associated with reopening a service. In this case there were existing facilities that could be used at start up and refurbished or when funding was available. Interviewees described the importance of consulting with all including support staff to design fit for purpose maternity facilities. Having dedicated room for birthing and post-partum mothers and babies was important, as was planning for service expansion.

Safety

In this case study, safety was more than a theme: it was the lens through which the reopening was considered. Safety was not an 'activity' or 'task', it was a concept that was highly influential in decision making. The concept of safety for birthing women and the hospital staff drove the campaign to establish birthing services, helped determine which model 'was best fit', and was the major drive for clinician skills maintenance. Concerns about safety were very much intertwined with the desire to manage clinical risk and minimise risks of seeing adverse outcomes. Staff recognised the risks associated with both: the absence of regular local birthing and also implementing a service that was not 'safe'.

Conclusion

The interviews from this project provide an insight to the key enablers, barriers, tasks and processes associated with reopening this remote birthing service. Other services in other contexts will face different issues, but we contend that there are themes here that will become a useful toolkit for services planning to open a birthing service.

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Presenter

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