

Closing rural maternity services: Is it worth the risk?

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Women from rural and remote communities with no local access to maternity services have worse maternal and newborn outcomes than women from similar communities with local access to even limited birthing services.¹ Canadian studies have demonstrated that distance to services affects maternal and newborn outcomes.²⁻⁴ Perinatal mortality is higher for populations of women who are more than 4 hours away from maternity services.¹ Women who live 2-4 hours away from the nearest maternity service show increased rates of interventions, and women living 1-2 hours away from services have increased rates of unplanned out-of-hospital deliveries.¹ There are trends across all these groups toward increased prematurity.⁵ Parturient women from communities with no local intrapartum services are 7.4 times more likely to report moderate to severe stress than women from rural communities with local birthing services.⁶ Loss of local maternity services in a rural or remote community is more than just a social and financial challenge. Translating these research findings into policy is essential: how do these issues affect clinical care, health services planning and risk management?

Clinical decision-making optimally follows full discussion of the diagnostic and therapeutic choices available with an exploration of the various risks and benefits, including social risks, as well as a discussion of alternative choices.⁷ Although this approach may be possible in a well-resourced

urban environment, a different set of issues arises in a rural and remote environment, where choices for birthing women are limited by access.^{8,9} Decision-making will be influenced by the financial costs or the social and cultural challenges resulting from an absence from home.^{8,10,11} This may be particularly significant for women living in areas with limited birthing services (without local surgical backup). In rural and remote settings, maternity care providers and their patients weigh possible clinical risks associated with birthing locally against the social and other challenges involved in travelling away from home to access services. Women may elect to accept some potential clinical risk to mitigate an apparent social or financial risk. This leads to difficult decisions for maternity care providers in small communities who may be without the surgical backup needed to manage an unexpectedly complicated delivery.

The question of whether or not a maternity care service should be supported adds another layer of complexity to analyzing risk. If a decision is made by health authorities to cease maternity services in a rural community, clinical decision-making is simplified. Services are no longer available to women, so they must travel to access services somewhere else. This is particularly challenging, however, for rural women with uncomplicated pregnancies, previous vaginal deliveries and young children at home. Although health professionals may be relieved by no longer being asked to manage the uncertainty of birth in a low-resource environment, they also

need to cope with the recognition that, beyond the inevitable precipitous deliveries, some women will choose to birth locally against professional advice or by turning up at the hospital in advanced labour.¹² Most challenging is the evidence that shows that it is safer for the community to provide maternity services than not.¹³

Across rural Canada and Australia, health care planners and administrators continue to struggle with the challenges of sustaining rural maternity services in small communities. Assuming a population of birthing women is large enough to sustain local services (e.g., a community catchment area with greater than 100 pregnancies per year more than 1 hour from the next nearest service), there are 3 possible scenarios.

First, services can be closed. If this choice is made, all parturient women are required to travel to access services at a larger centre, often an administratively compelling option owing to efficiencies of scale. Research suggests that these women will experience increased social and financial risk and personal stress from being separated from family¹⁴ and that overall there will be an increased risk to the population as evidenced by increased rates of adverse outcomes.^{3,15,16} Providers who work in the community may actually experience decreased stress in their role in that some of the uncertainties and challenges of providing maternity services on site — particularly with limited resources — are no longer part of their scope of elective practice. Conversely, dealing with unplanned births, with little or no antenatal care or resources, creates other risks and anxiety.

The second alternative is that health system leaders and planners can maintain a primary care service (with no local access to cesarean delivery). There is evidence that most women can birth relatively safely in their home community, and the women requiring specialist medical care are still encouraged to travel.^{17,18} The social risks are mitigated because the women who have the most difficulty in travelling (i.e., multiparous women with children at home) are often the safest to deliver locally.¹³ The risk to the population is decreased. There is some increased stress and risk for providers who face responsibility for unforeseen events with limited on-site support. There is also some increased risk for the health services system in that rarely there will be a bad outcome locally. There are risks associated with urgent intrapartum transfer and possible risks to transport teams due to inclement weather and challenges of rural travel.

The third alternative is to keep local maternity services open, with the benefit of local surgical care when needed, probably provided by general practitioners with enhanced surgical skills. This is an optimal solution if the population is large enough to sustain surgical services and the infrastructure for cesarean delivery is in place.⁵ Most local parturient women can deliver safely in these communities, diminishing risk and stress to the population and providers, and lowering known risks to the health system. Intrapartum transfer is uncommon, and outcomes are good.

Ideally, policy supporting the planning of rural maternity services requires a rational approach based on the population defined by number of birthing women, their social vulnerability and distance to other maternity services. Rural maternity services should not close based on the assumptions that parturient women will somehow be able to access services in another community. It's not worth the risk.

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