RESEARCH BRIEF

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Provider and Patient Perspectives on Labor and Delivery Unit Closures in Rural New Hampshire

WHY WE DID THIS STUDY

Pregnant women[¥] in rural communities that lose obstetric services face a number of challenges, including identifying new birthing hospitals. With remaining hospitals typically further from their homes, women often face transportation difficulties, childcare issues, and other obstacles to care.

Nationally, rural obstetric unit closures have been attributed to high fixed costs, low delivery volume, staffing shortages, and financial challenges—including high malpractice premiums and low Medicaid reimbursement. However, each rural community is characterized by its own set of issues. To better understand these issues, we focused our study on New Hampshire, a largely rural state that has lost more than half of its rural labor and delivery (L&D) units over the last two decades. We sought to understand how closures in New Hampshire affected the providers and patients in these communities.

KEY FINDINGS

- Financial challenges and quality and safety concerns are commonly cited reasons for labor and delivery unit closures in rural New Hampshire.
- Women in communities with a closure face transportation challenges and benefit from prenatal care in their community.
- Third-party oversight could help ensure ongoing safe and high-quality care post-closure.

HOW WE DID THIS STUDY

We conducted key informant interviews with more than 30 stakeholders, including hospital administrators and obstetric providers at hospitals that have experienced an L&D closure, hospitals that have remained open but are the receiving hospital for communities that have experienced a closure, and hospitals that are at risk for losing obstetric services. We also conducted a focus group (n=6) and small group interviews with 3 women living in communities that have experienced a closure. To supplement this case study work, we fielded a web-based survey of hospital executives in the state to understand their perceptions of why units have closed, characteristics associated with closures, the impact closures have had on other services, and the effects of closures on nearby hospitals still providing obstetric services. Fifteen out of 24 hospital executives recruited responded to the survey. The survey instrument was adapted with permission from a prior study carried out by researchers from the University of Minnesota Rural Health Research Center. Study protocols were approved by the Dartmouth-Hitchcock Medical Center's Institutional Review Board and the Urban Institute Institutional Review Board. In a separate brief, we describe our analysis of New Hampshire birth records, and findings from that analysis also inform the results and interpretations presented here.

WHAT WE FOUND

Cause of Unit Closures

Hospital administrators and providers pointed to concerns regarding quality and safety as a root cause for closures. The overall birth rate in New Hampshire fell by over 15% between 2007 and 2017, with larger declines in rural versus urban hospitals. Declining clinical volume results in less frequent exposure to both routine and high acuity events, degrading

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Top-Ranked Reasons for Labor and Delivery Unit Closure Were Quality or Safety Concerns and Low Medicaid Reimbursement

Among Five New Hampshire Hospitals without a L&D Unit

	Quality and/or safety concerns	Medicaid Payment	Fixed Costs	Nursing Recruitment	Physician Recruitment
Top-ranked reason					
Second-ranked reason					
Third-ranked reason					

staff competencies. Hospital administrators also highlighted financial constraints as a major contributor to unit closures. Specifically, they pointed to high fixed costs associated with L&D in the context of declining volumes, low Medicaid reimbursement rates, and costs associated with malpractice insurance. Three out of five survey respondents (each representing one hospital without a L&D unit) indicated that quality and safety concerns were the number one reason for closure, while two responded that Medicaid reimbursement rates were the primary cause for closure. Despite financial causes ranking at or near the top, key informants told us that their hospitals did not necessarily see improvements in their bottom line after units closed.

Hospital administrators acknowledged that messaging about closures is a sensitive topic. Administrators pointed out that quality and safety concerns were perceived as a more palatable explanation to the community than financial reasons.

Personnel Challenges Pre/Post Closure

Personnel challenges also played a prominent role in closures. Hospital leaders shared that they were often unable to attract nurses and obstetric providers to their communities for myriad reasons, including low salaries, burdensome call schedules, and other quality-of-life considerations. In addition, while younger or less experienced providers might have more flexibility to work in rural hospitals, the lower birth volumes at many remote hospitals may discourage physicians, midwives, and nurses whose opportunities to practice their skills would be limited in these settings.

Personnel challenges extend beyond L&D staff. To care for birthing women, a robust pediatric service must also exist. Administrators made the point that retaining obstetric staff is challenging without an adequate pediatric staff and vice versa.

When a community's L&D unit closes, the hospital and providers who assume the care of displaced patients face a new set of concerns. Several interviewees raised a range of preoccupations regarding where and how patients were receiving prenatal and postpartum care. They also raised concerns related to professional liability during these transitions, when there were not clear guidelines in place regarding care transfers, electronic medical record (EMR) data were not easily shared, sending and receiving provider groups had different norms, and inpatient staff were less familiar with the community resources patients could access postpartum. Findings suggested a lack of trust among providers, along with a host of assumptions by the receiving hospital about the inherited patient population.

This anxiety can be heightened by how quickly a unit may close after the news becomes public. Key informants and focus group participants remarked that when a closure is announced, there is very little time to prepare for change. Staff, whose jobs are at risk, may begin leaving for other job opportunities. Without key staff, units often close even faster than originally planned. This poses unique challenges around messaging. Trust between the hospital and the community, as well

> **"*It felt a little bit like drive thru delivery.*"**
>
> — *Provider in a receiving hospital*

as between staff at the closing and receiving hospitals, can quickly erode when this happens, jeopardizing thoughtful planning for currently pregnant women and undermining efforts to set up systems for ongoing care in the community.

Heightened anxiety about where women will receive prenatal care after a closure (and by whom) has resulted in some provider groups establishing clinics in communities newly without delivery services. This solution was designed to ensure that women who did not have the ability or the time to travel long distances to prenatal care visits could continue to receive the care they needed with few barriers. Efforts to expand the reach of providers into workplaces and other community-based settings were additional ideas proposed by key informants.

Mitigating the Fallout After Unit Closure

Pregnant and postpartum women in communities that have experienced a closure indicated the critical importance of retaining prenatal and postpartum care close to home, noting they were unlikely or unable to travel the distance to seek this care for routine visits. Women shared that travel to both prenatal care and L&D care was complicated by limited access to a car, job inflexibility, childcare, and other responsibilities.

Retaining prenatal care in a community experiencing a closure has not, however, been consistently implemented throughout the state. When it is implemented, questions about care coordination and continuity between prenatal care and delivery providers can persist. Furthermore, incompatible EMR systems can pose challenges to coordinating between the outpatient clinics serving pregnant patients and the hospitals that will be receiving them for labor and delivery. Ideally, those providing prenatal care in the community are the same providers who will attend births. As one woman shared during a focus group: "*I'd like to at least see your face once before you see me in my glory*!"

WHAT THESE FINDINGS MEAN

Findings from this case study work resulted in several recommendations from providers, administrators, and other stakeholders in the state. We paired these ideas with findings on what is most valued by women who live in the communities that have lost services.

Hospital administrators suggested that thoughtful regionalization of services would help to ensure that L&D care exists within a reasonable distance from all women in rural New Hampshire while relieving some of the financial and staffing burdens leading to closures. Transportation challenges would, however, need to be addressed. Some suggested that regular shuttles from one site to another could be helpful, but may have limits, especially in urgent situations.

Closures should be overseen by a third party to ensure that the closing unit is acting responsibly, following key (pre-established) steps, and that receiving units are kept updated and prepared as well as possible. For example, many recommended that emergency department physicians should be trained to manage emergency births when a unit closes—recognizing that some women may not be able or willing to travel to an open unit. Also, plans for transferring care during the transition need to be clearly established and followed. Oversight could be led by the state, the Hospital Association, or a selected, representative set of advisors. Making maternity care a requirement for critical access designation or creating a separate designation for maternity care could help stem the wave of closures. This would create a disincentive for closing L&D units and potentially address some financial challenges, but provider retention and recruitment difficulties would likely remain.

Recommendations from the field

- Strategic regionalization of maternity care.
- Third party oversight of L&D closures.
- In-community prenatal and postpartum care.
- Hiring and retention of interdisciplinary maternity care teams.

Transforming the dominant approach to obstetric care could also help to alleviate the challenges associated with a closure. For instance, a greater investment in interdisciplinary teams (midwives, OBs, nurse practitioners, family practice MDs) could help with personnel challenges. These could be coupled with loan forgiveness or other incentives to draw providers to rural areas. Lower frequency prenatal care and utilization of telemedicine could also reduce patient burden. These strategies could help to ensure that all women have access to a safe and secure pregnancy and delivery, regardless of where they live.

[¥]*We use the terms women and mothers throughout this analysis but recognize that not all people who give birth identify as such.*

ABOUT THE AUTHORS

This brief was authored by Sarah Benatar and Stacey McMorrow of Urban Institute, and Timothy Fisher, MD of Dartmouth Hitchcock Medical Center. They are 2018 Robert Wood Johnson Foundation Interdisciplinary Research Leaders fellows. For questions please contact: Sarah Benatar (sbenatar@urban.org)