National Rural Health Association Policy Brief

Rural Obstetric Unit Closures and Maternal and Infant Health

Authors: Lindsay Corcoran, MHA, Catherine Clary, JD, Sarah Brinkman, MBA, MA

I. Introduction

Approximately 18 million reproductive-aged women live in rural America.[1] While about three out of four rural women give birth at local hospitals, many rural hospitals have discontinued obstetric (OB) services since 2005, resulting in detrimental outcomes for mothers and babies.[2,3] Studies show an increase in rates of out-of-hospital births, in hospital births without OB services and preterm births, as well as low prenatal care use in rural counties that have lost OB services.[1] There are also corresponding increases in costs, risks of complications, and longer lengths of stay when mothers have to travel further for obstetric care.[4, 5] A recent study found that rural residents have a 9 percent greater probability of severe maternal morbidity and mortality when compared to their urban counterparts, when controlled for sociodemographic factors and clinical conditions.[6]

Hospitals that have discontinued OB services are more likely to:

- Have lower birth volumes (fewer than 100 births annually) and be smaller in bed-size; specifically, critical access hospitals are more likely than other rural hospitals to close OB services[7]
- Be in states that have not expanded Medicaid[3]
- Experience financial distress[7]
- Be in communities with limited supply of obstetricians and family physicians[22]
- Face challenges with recruitment and retention of skilled maternal care providers[8]

This brief focuses on the drivers, impacts, and potential means of addressing rural OB closures. There are other policy considerations for how to serve rural communities after an OB unit has closed that are not addressed in this brief.

II. Background

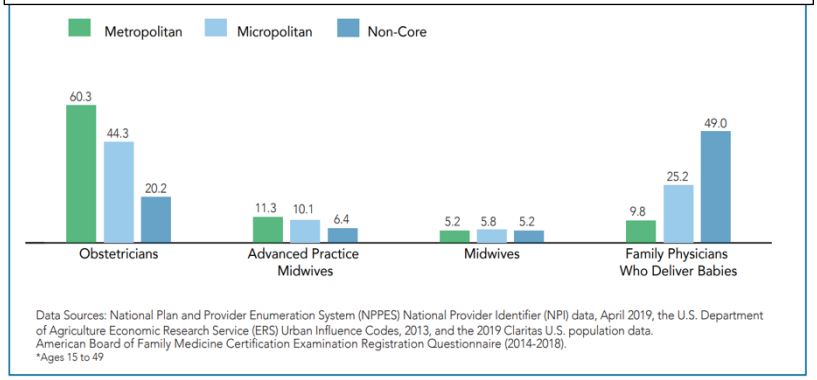
Financial Constraints. When hospitals face financial difficulties, OB units are often among the first to be closed.[7] Various financial constraints affect rural OB units, including low birth volume, higher malpractice costs, high costs of anesthesia coverage, and higher dependence on Medicaid.[7] When birth volumes are low, clinicians and

nurses have difficulty maintaining skill level, which may increase liability concerns for the hospital. Furthermore, low volumes influence revenue, and rural hospitals may find that they cannot cover the fixed capital and labor costs for obstetrics units.[9]

Medicaid. Medicaid plays an important role in maternal and child health for mothers and babies in rural areas. As the single largest payer of perinatal care in the United States, Medicaid is the primary insurer of 50-60% of rural newborns.[10,11] Medicaid expansion has increased coverage for pregnant women; however, in non-expansion states, rural residents were twice as likely to be uninsured as those living in expansion states.[12] States with Medicaid expansion have seen fewer rural hospital closures and fewer rural hospital-based OB unit closures.[13,3] While Medicaid coverage is better than no payment, it is important to note that many rural hospitals, already struggling to keep their doors open, are losing money on Medicaid births. In 2010, average total Commercial payments for all maternal and newborn care with vaginal and cesarean births were $18,329 and $27,866, respectively, while Medicaid payments for the same services were $9,131 and $13,590, respectively.[14] Additionally, many rural areas lack prenatal or postnatal primary care, specialty care, or support services, which may increase the risk or morbidity and mortality for both mother and child.[10]

Rural Maternal Care Workforce. A diversified mix of providers deliver maternal care, including obstetricians, family practice providers, and midwives (both advanced and non-advanced practice). Even with the mix of providers, however, workforce shortages remain in rural areas. In 2019, it is estimated that 58.7% of rural counties do not have an obstetrician, 81.7% have no advanced practice midwives, and 56.9% have no family physicians who deliver babies.[15]

Figure 1. Obstetrical Service Clinicians per 100,000 Women of Childbearing Age* in U.S. Counties by Urban Influence Category, 2019[15]



Obstetricians are more prevalent in urban (metropolitan) counties than in rural counties (micropolitan and non-core), while the distribution of family physicians who deliver babies is the opposite, with the highest numbers in nonmetropolitan, particularly non-core, counties (Figure 1).[15] However, the rates of family physicians who practice obstetric care have been in decline, especially for high-volume obstetrics practice (defined as more than 50 annual deliveries). Between 2009 and 2016, the proportion of family physicians that had high-volume obstetric practice decreased by 50%.[16] Midwives and advance practice midwives provide a smaller proportion of OB services across all geographic categories, and fewer in rural counties.[15] Regional distribution of

obstetricians is greater in the Northeast compared to the West, South, and Midwest, which correlates with limited access to hospital-based OB services in these regions.[17]

Workforce Supply and Demand. Based on utilization patterns, which includes the number of pregnant women who bypass a local rural hospital for urban OB services[18], the demand for obstetricians is projected to exceed supply, resulting in a national shortage of approximately 5,000 FTEs by 2025.[17] The supply of obstetricians is expected to decline 4% while the demand is expected to increase 8% in 2025.[17] The supply of certified nurse midwives (CNMs) is expected to grow by 27%, while the demand is expected to increase by 8% by 2025, resulting in a surplus of certified nurse midwives.[17] Nationally, 1 in 10 births are attended by a CNM, but the practice provisions of a CNM vary state to state.[19] Twenty-five states require CNMs to practice under the supervision of or in a collaborative relationship with a physician; a survey in nine states found that CNMs performed deliveries in 31.6% of rural hospitals offering obstetric services, suggesting that their potential role in OB care systems has not been fully maximized.[14] Pregnant women in states that have expanded scope of practice for nurses and midwives have seen better outcomes than in those that have not, including fewer preterm births and fewer neonatal deaths.[14] In addition, the supply of general surgeons has not been able to meet the demand of a growing population, which is problematic for small rural hospitals that may rely on general surgeons to provide cesarean deliveries.[20, 8, 21] Rural hospitals are also facing concerns related to the availability of clinicians who provide obstetric anesthesia services and skilled nursing staff with expertise in labor and delivery, postpartum, and neonatal care.

Recruitment and Retention. Recruiting and retaining OB care clinicians is especially challenging in rural communities, with decreases in the percentage of family physicians attending deliveries, predicted shortages in the overall supply of obstetricians, and the workload and on-call requirements inherent in obstetric practice.[8] Many rural hospitals find it difficult to access training opportunities and maintain staff competencies in low-birth-volume settings.[8] The recruitment and retention of one obstetrician can be the deciding factor as to whether to maintain or discontinue a hospital's OB services.[8]

III. Policy Implications

The closure of rural OB programs is a multi-faceted problem that requires various approaches and potential solutions. The following policy suggestions should be considered as a means for preventing further OB unit closures.

Financial constraints & Medicaid expansion

- Incentivize the expansion of Medicaid eligibility for pregnant women

- Incentivize the integration of rural EMS programs, community health workers, other non-traditional providers specializing in maternal care (e.g. doulas), and hospitals to support maternity care in maternal health professional shortage areas

- Provide malpractice insurance supplements to rural providers, inclusive of family practice physicians

- Incentivize local perinatal regionalization, with focus on the level 0 hospitals that do not typically provide OB services

- Establish alternative payment models for obstetrics and delivery similar to the NC Pregnancy Medical Home

Rural maternal care workforce/supply and demand

- Expand telehealth access and reimbursement to help connect specialty OB providers with rural practitioners

- Expand the Improving Access to Maternity Care Act to designate health professional shortage areas for maternity care and extend some of the benefits to address provider shortages in rural areas

- Leverage the National Health Service Corps Loan Repayment program to fill workforce shortage areas

- Develop and support rural-specific obstetrics-focused residency programs

- Expand scope of practice and reimbursement for advanced practice providers (e.g. family physicians, nurse practitioners, physician assistants, nurse midwives, certified midwives) and non-traditional providers (e.g. doulas, community health workers) subject to state regulations for professional practice

- Support rural training programs, including interprofessional team building, such as TeamSTEPPS, and simulation training, such as the American Academy of Family Physicians' Advanced Life Support in Obstetrics course (ALSO) and the Centers for Disease Control and Prevention's Hear Her campaign

- Incentivize clinicians to practice in rural communities by expanding rural-focused family physician and general surgeon programs with OB fellowship training

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