

# National Rural Health Association Policy Brief



## *NRHA Policy Paper: Access to Rural Maternity Care*

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### Introduction

Childbirth is the most common reason for hospitalization in the US<sup>i</sup>. An estimated half a million rural women give birth in US hospitals each year. The majority of rural women give birth at their local hospitals and therefore rely on local maternity services.<sup>ii</sup> However, women have lost access to local services with over 10% of rural counties losing these services in the past fifteen years [Hung 2017]. **Initial studies show a doubling of infant mortality rate where counties have lost OB services, compared with a decrease in infant mortality rate where services are available.**<sup>39</sup> **Additionally, out of hospital birth, preterm birth and deliveries in hospitals lacking OB units increased.**<sup>40</sup> Current workforce and hospital closure trends suggest that disparities in access to maternity care will only increase in upcoming years if no action is taken.

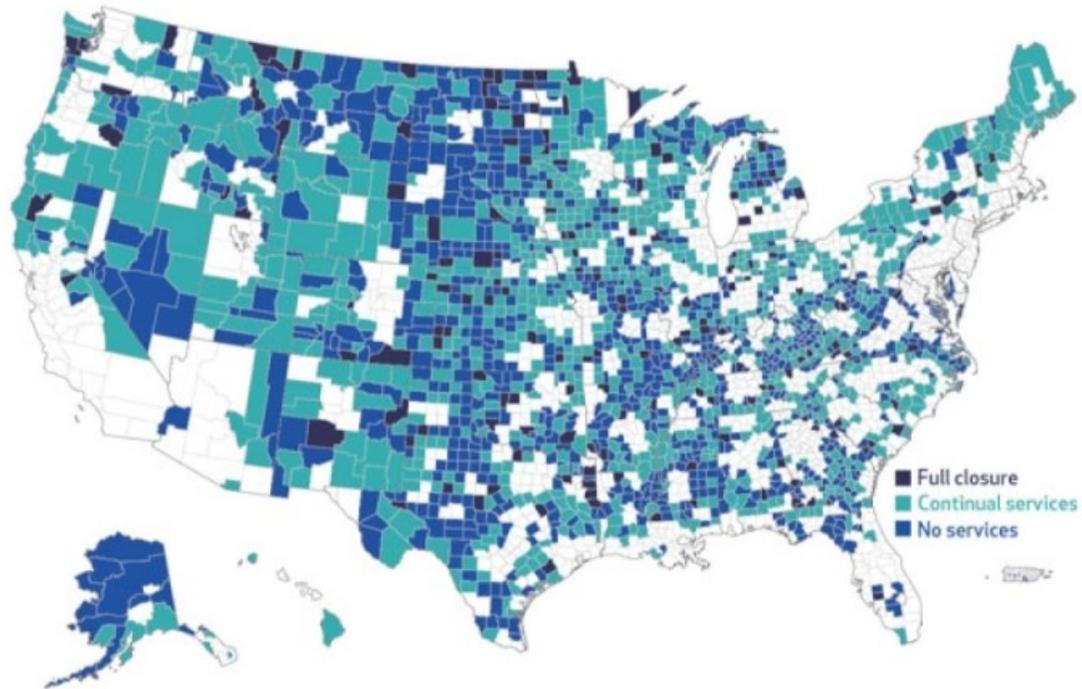
### Background

#### *Decline of Services*

It is estimated that three out of four rural women give birth at local hospitals.<sup>iii</sup> As of 2014, only 45% of rural counties had OB services, down from 54% in 2004 showing a rapid decline. In 1985, 24% of non-metropolitan counties lacked hospital-based obstetric services. In the most recent study available of rural obstetrics unit closures found that 7.2% of rural hospitals had closed their obstetrics units between 2010 and 2014.<sup>iv</sup> The hospitals that discontinued OB services were more likely to be smaller in size, privately owned, and in communities with fewer obstetricians and family physicians. The hospitals that closed were also more likely to be in communities where families have lower income and have fewer resources to overcome barriers to care. In communities that lost access, travel to intrapartum care increased by an average of 29 miles.<sup>v</sup>

In addition to rural OB Unit closures, rural hospitals closures at large have contributed to this decline. Between 2010 and 2016, 80 rural hospitals have closed their doors, with 17 occurring in 2016 alone. Currently, 673 (or roughly 1/3 of rural hospitals) are susceptible to closure. If all of these vulnerable hospitals closed, 11.7 million individuals would lose access to health care.<sup>vi</sup>

## Hospital obstetric services in US counties, 2004–14



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### *Barriers to Providing OB Services*

Financial challenges, such as the low Medicaid reimbursement and the high cost of malpractice insurance, are significant barriers to keeping financially stressed obstetrics units open in rural hospitals.<sup>vii</sup> In 2010, Medicaid funded 45% of all births nationally,<sup>viii</sup> and women giving birth in rural hospitals were more likely than urban women to be covered by Medicaid (51% of rural women compared to 39% of urban).<sup>ix</sup> The high rate of births covered by Medicaid poses a financial challenge for rural hospitals as Medicaid's reimbursement for childbirth is about half that of private insurers. Malpractice premiums to cost as much as \$85,000 to \$200,000 varying by state for physicians who are delivering babies.<sup>x</sup>

### *Quality of Care and Birth Outcomes*

Local hospitals not only make services more convenient to access, but they also allow women to give birth in their local community near family and friends. When women receive maternity services in rural facilities, the quality of care has been found to be comparable to urban and large-volume facilities on a variety of metrics.<sup>xi</sup> More research is needed to inform evidenced-based recommendations regarding the minimum number of annual births associated with high-quality care.

Lack of access to care is clearly associated with adverse outcomes. Out of hospital birth, birth in non-OB unit hospital settings and preterm birth had increased in counties where OB units closed.<sup>40</sup> Moreover, studies have also found an increase in infant mortality rate where OB services are not provided.<sup>39</sup>

### *Workforce Shortages*

Maternity care services are provided by family practice physicians, obstetricians, certified nurse midwives, and general surgeons. Staffing for maternity care varies significantly among states.<sup>xii</sup> Many rural areas have a shortage of providers with advanced training in maternity care. There also has been a declining number of family physicians providing obstetric services in both urban and rural areas across the country.<sup>xiii</sup> Reasons for this decline among family physicians include changes in the hospitals, fear of a malpractice lawsuit, and inability to keep up training, among others.<sup>xiv</sup> Recent interviews with rural hospitals in nine states revealed that hospitals with lower birth volume were more likely to have family physicians and general surgeons attending deliveries compared with hospitals with high birth volume, that more frequently had obstetricians and midwives attending deliveries.<sup>xv</sup>

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*A rural hospital in Midwestern state performed a service line analysis on profitability of obstetrical care which concluded the net financial loss for providing OB care was over \$800,000 per year. They delivered 120 babies in the year that was studied, which then averages a financial loss of over \$6,800 per birth. Two things stand out in this analysis. Being a rural hospital, patient volume is not sufficient to offset the large stream of overhead costs associated with the OB's practice. Secondly, though the physicians would be unable to produce tangible metrics like relative value units, gross charges, and/or collections relative to their urban peers, the thought of incentive-based compensation is not typically a consideration in their contracts. Thus, to be able to be market competitive for wages, guarantees that approach or even exceed median compensation targets are granted. In addition, rather than lose an OB provider retention bonuses are given as they are much less expensive than the associated costs for recruiting and employing a new provider.*

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There are a variety of personal and professional factors that contribute to the shortage of obstetricians and family practice physicians who provide obstetrics in rural areas.<sup>xvi</sup> Many obstetricians prefer to work in urban centers where they are not isolated from other specialty or obstetrics providers. Rural obstetricians and family practice physicians who provide obstetric services may not have nearby colleagues who are also providing obstetrics services with whom they can consult or share responsibility. This isolation can result in working long and unpredictable work hours. This lack of control and predictability in work schedule has been found to be associated with reduced career satisfaction and increased burnout among physicians, including obstetrician-gynecologists.<sup>xvii</sup>

Compensation for providers is another barrier. According to the American Medical Group Association (AMGA) survey, over the course of the past 5 years, the average compensation for obstetrician-gynecologists physicians has grown 10%, with a steep increase of 4% seen in the last year alone. For a CAH to provide 24/7 obstetrician-gynecologists support coverage cost for three full-time providers to share on-call coverage has increased nearly \$92,000 in the past five years.

In order to provide obstetrics services, physicians need to have another physician and/or surgeon provide backup C-section coverage and there must be anesthesia services available within 30 minutes from decision to incision. <sup>xviii</sup> Certified registered nurse anesthetists (CRNA) provide the vast majority of anesthesia services in rural facilities, but again there is significant variation among states. In 2001, states were allowed to opt-out of the reimbursement requirements that CRNA must have physician supervision. At this time, 17 states have opted-out. For example, where 44% of facilities in VT had an anesthesiologist, none of the facilities in Iowa had an anesthesiologist. In Iowa (the first state to opt-out of the physician supervision reimbursement requirement in 2001), 87% of the hospitals employed CRNAs only.<sup>7</sup>

The small number of births in rural hospitals makes employing specialty providers, including obstetricians and anesthesiologists challenging.

### Policy Alternatives

Taking no action is likely to result in further OB unit closures, increase travel distance for mothers and adverse outcomes for mothers and babies.

#### *Long travel distances for obstetrics services and delivery*

In a study by Hung et al published in 2016 in Health Services Research, researchers found that the average travel distance to obstetrics services was 9-65 miles for rural women.<sup>xix</sup> Drive-times to maternity care have been found to vary significantly with some states having as few as 56% of their reproductive-aged women within a 30 minute drive to the hospital with maternity care.<sup>xx</sup> A few state-level studies have linked distance to care with negative health outcomes. Drive time was associated with premature delivery in a study of women in Georgia. Those who are required to drive 45 minutes or more to their delivery hospital were 1.53 times more likely to have a premature delivery than women who have to drive less than 15 min.<sup>xxi</sup> Where OB units have closed, the average travel distance to the nearest hospital has increased to 29 miles.

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Some women choose to temporarily relocate to the city where they can deliver in a larger facility. However, in order to relocate, women must have the social and/or financial resources to be able to afford a place to stay and time away from work. Relocating also requires that women must deliver away from their community of friends and family that would otherwise be around to support them during this important time.

#### *Long travel distances for prenatal care*

Not only are long travel distances challenges around the time of delivery, but traveling long distances for routine prenatal care visits throughout pregnancy can be a significant burden. The extra time and planning required are especially difficult for the already vulnerable rural populations who may have financial constraints or transportation barriers. The Hung et al 2016 study interviewed 306 rural obstetrics unit closures in nine states and reported that women still

had access to prenatal care in most communities when obstetrics units closed. However, when prenatal visits were no longer available, rural women had to travel 25- 41 miles to the nearest hospital for prenatal care. Cohen and Coco (2009) found that prenatal care was more than five times more likely to be provided by a family physician in non-Metropolitan Service Areas (MSAs) – more rural areas – compared with MSAs. While the total number of prenatal visits in non-MSAs remained stable in this study, there was a greater decline in prenatal services by family physicians in non-MSA areas compared with MSA areas. Further research is needed to better understand the impact of these trends.

Rural women have been found to initiate prenatal care later in pregnancy than non-rural women;<sup>xxii</sup> however, more recent research is needed to update these findings as these national studies are over a decade old. At least one more recent state-level study suggests that the initiation of prenatal care does not differ between rural and non-rural locations.<sup>xxiii</sup> Though distance to prenatal care is likely to be a factor, some research on the delays in prenatal services suggest that individual-level factors may be a cause. A recent interview study with 24 rural mothers explained their reasons for their delay in seeking prenatal care as being unaware that they were pregnant, being in denial or ashamed that they were pregnant, or being unaware of that prenatal care was important.<sup>xxiv</sup>

#### *Increasing rates of non-indicated induction and C-sections*

Between 2002 and 2010, the rates of non-indicated labor inductions in the United States rose faster in rural areas than urban areas.<sup>xxv</sup> A study of women in Canada found that women had to travel to a local health area for maternal care were 1.3 times more likely to undergo induction of labor than women who did not have to travel.<sup>xxvi</sup> More research is needed to investigate whether there is an association between distance to services and these trends in the United States. Women may elect to schedule a C-section or have a non-indicated induction (which is an induction that does not have a medical basis) when they are concerned about getting to the hospital in time for delivery from an isolated rural area.

#### Policy Considerations

Policies need to ensure that rural women continue to have access to maternity services. NRHA supports the following policy considerations:

- Additional research funding:
  - Do rural women who deliver in an urban location receive adequate follow-up care in their rural community?
  - Are rural women more likely to deliver in the emergency department than suburban or urban women? Has this rate changed with the increased closure of rural obstetric units?

- How significant are the financial or emotional burden on rural women who have to deliver in hospital outside of their community (relocate for delivery). How do they overcome these added burdens?
  - How do hospital closures impact the time to initiation of, quality of, or amount of prenatal care received by rural women?
  - Is there an association between distance to services and trends in non-indicated induction in the United States?
  - How will continued hospital closures and obstetrics unit closures affect the immediate and long-term health outcomes of rural women and children?
- Barriers to OB Rural Practice
    - Medicaid Reimbursement
    - Liability insurance costs and Tort Reform (ACOG influence)
      - Low volume provider protection
    - Decrease focus of OB care with primary care practice
    - C-Section Support – another OB physician/surgeon/anesthesia availability
- Workforce
    - Medical providers trained in OB Care – less number of primary care; use of midwives/GME
    - Maintaining skill sets for delivery
    - Birthing centers in rural areas
    - Family practice physicians play an essential role in keeping maternity care services in rural communities. NRHA supports rural family practice physicians in this important role, and encourages them to provide maternity services. NRHA supports policy changes that encourage and support family practice physicians in providing maternity care services in rural America.
    - NRHA views advance practice nurses and midwives as valuable providers or maternity care services and supports the expansion of the scope of practice among these providers in order to maintain or improve access to local maternity care for rural women.
    - Addressing the high costs of malpractice insurance may make it more economically viable for family practice physicians to continue providing obstetrics care in rural areas.
    - NRHA supports providing more rural residencies for family practice physicians that allow residents to perform more deliveries.
    - NRHA supports the Improving Access to Maternity Care Act (H.R. 1209) and other efforts to create a designation for areas that lack maternity providers – a professional shortage areas for maternity providers.

- Regionalization and Access to OB Care
  - NRHA supports policies that keeps struggling facilities open in order to keep maternity services local for rural women, such as the Save Rural Hospital Act.
  - Pre and postnatal care – getting rides to and from (uber?)
  - Housing for moms near delivery. In the Alaskan model, pregnant women stay at the hospital or neighboring area for the last 30 days before delivery as way to ensure best delivery care and maternal infant outcomes. There are many policy issues to consider – impact on short term disability, employer FMLA, societal norm, and overall cost to the system. Alaska went from having the second highest infant mortality rate in the 1980's to having the lowest infant mortality rate in US through regionalization of the perinatal care system<sup>42</sup>
  - Cost of re-starting OB services
  - Health Department – resurgence of Maternal Child Care and connect with WIC
    - Community health worker
    - Incentive programs
  
- OB Services – Quality Care
  - Golden Hour of OB Delivery/training for EMS/ED/other personnel (ALSO course (<https://www.aafp.org/cme/programs/also/faq/also-publications.html>))
  - Competency standards – rural hospitals
  - Telehealth – funding for pre and postnatal care. NRHA supports the use of telehealth and other technologies to facilitate the delivery of maternity and pediatric services so that women can receive care in facilities within their own community.
  - Best practice examples – GAHS; others
  - Development of measurable outcomes
  
- State and Federal Policy for Maternal Services in sync

### Summary

Many women living in rural America experience challenges accessing maternity services due to closing hospitals, closing obstetrics units, and provider shortages. An increasing number of rural women are experiencing long travel distances to service providers and increasing rates of non-indicated induction and C-sections. Research on the impacts of these trends suggest that the consequences of limited access to maternity care may lead to negative health outcomes for rural women or their infants.

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<sup>i</sup> <https://www.hcup-us.ahrq.gov/faststats/NationalDiagnosesServlet>

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