



## Loss of Hospital-Based Obstetric Services in Rural Counties in the United States, 2010-2022

Katy B. Kozhimannil, PhD, MPA

Julia D. Interrante, PhD, MPH

Alyssa H. Fritz, MPH, RD, CLC

Emily C. Sheffield, MPH

### Key Findings

- In the United States (US), access to maternity care in rural counties continues to decline. Overall, 49.0% of rural counties (969/1976) had hospital-based obstetrics in 2010, and 41.2% of rural counties (814/1976) had hospital-based obstetrics in 2022. By 2022, 58.8% (1162/1976) of rural counties had no hospital-based obstetric services. (Figure 1)
- Among rural counties, we distinguished micropolitan and non-core rural counties. In 2010, 80.7% of micropolitan counties (517/641) had hospital-based obstetric care, declining to 73.9% (474/641) in 2022. Among noncore counties, the percentage with hospital-based obstetric services declined from 33.9% (452/1335) in 2010 to 25.5% (340/1335) in 2022. (Figure 2)
- While rare, 3 (0.5%) of micropolitan and 13 (1.0%) of rural noncore counties gained hospital-based obstetric services. (Figure 3)
- Rural noncore counties continue to be much less likely to have – and more likely to lose – hospital-based obstetric services than rural micropolitan counties. In rural noncore counties, there was an overall 9.4% (125/1335) decline in availability of hospital-based obstetric services vs. a 7.2% (46/641) decline in rural micropolitan areas. However, among counties that had hospital-based obstetric services in 2010, there was a 27.7% (125/452) decline in availability in rural noncore counties vs. a 8.9% (46/517) decline in rural micropolitan areas. (Figure 3)

### Purpose

Access to maternity care in rural United States (US) counties has been on the decline in recent years. The purpose of this infographic is to show the loss of hospital-based obstetric services in rural counties from 2010 to 2022, and how this differs by rural county type (micropolitan vs. noncore).

### Methods

Data came from the 2010-2022 American Hospital Association (AHA) Annual Surveys, the Centers for Medicare & Medicaid Services (CMS) Provider of Services File, and the Health Resources and Services Administration (HRSA) Area Health Resources File. Identification of hospitals providing obstetric care follows an enhanced algorithm using these data sources and multiple validation checks.<sup>1</sup> Rural (non-metropolitan) counties were categorized based on population (micropolitan, with a town of 10,000-50,000 residents, and noncore, without a town of at least 10,000 residents). The figures below show annual percentage of all rural, as well as rural micropolitan and rural noncore counties, with at least one hospital providing obstetric care in-county between 2010 and 2022, and changes from 2010 to 2022 in counties with at least one hospital providing obstetric care by obstetric care provision status in 2010 and by rural county type.

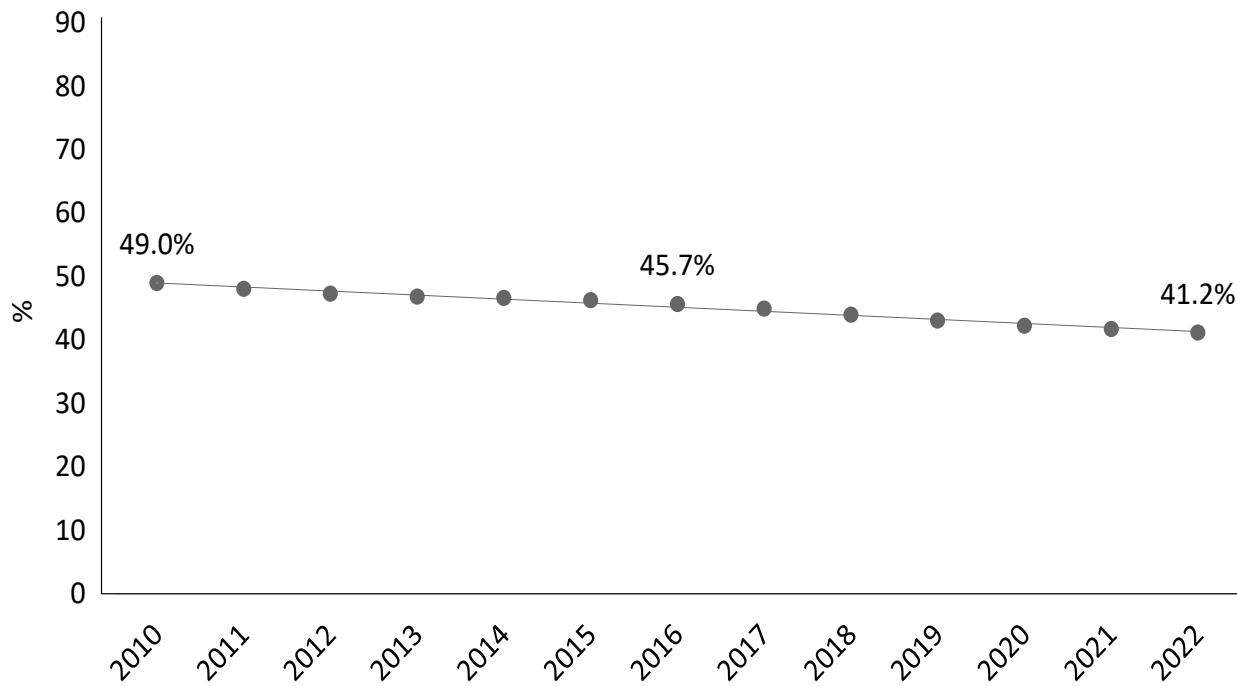
### References

1. Interrante JD, Carroll C, Handley SC, and Kozhimannil KB. An Enhanced Method for Identifying Hospital-Based Obstetric Unit Status. University of Minnesota Rural Health Research Center Methodology Brief. Published online January 2022. <https://rhrc.umn.edu/publication/an-enhanced-method-for-identifying-hospital-based-obstetric-unit-status/>

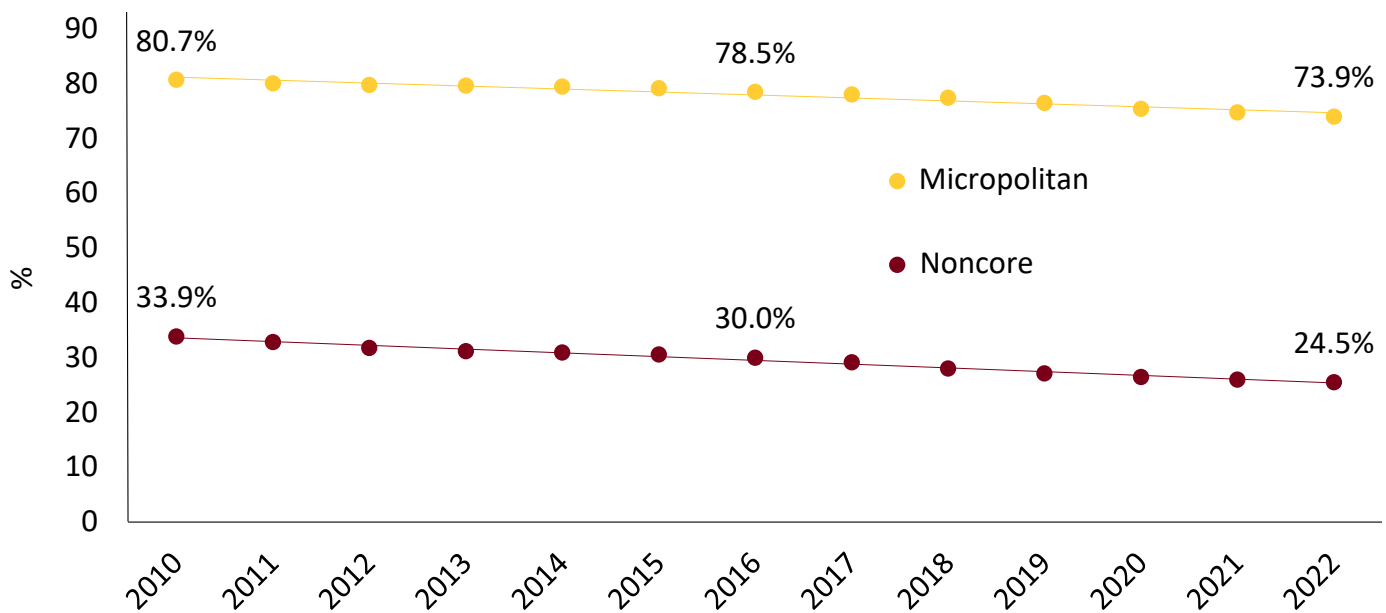
### Suggested Citation

Kozhimannil KB, Interrante JD, Fritz AH, and Sheffield EC. “Loss of Hospital-Based Obstetric Services in Rural Counties in the United States, 2010-2022,” *UMN Rural Health Research Center Infographic*. July 2024. <https://rhrc.umn.edu/publication/loss-of-hospital-based-obstetric-services-in-rural-counties-in-the-united-states-2010-2022>

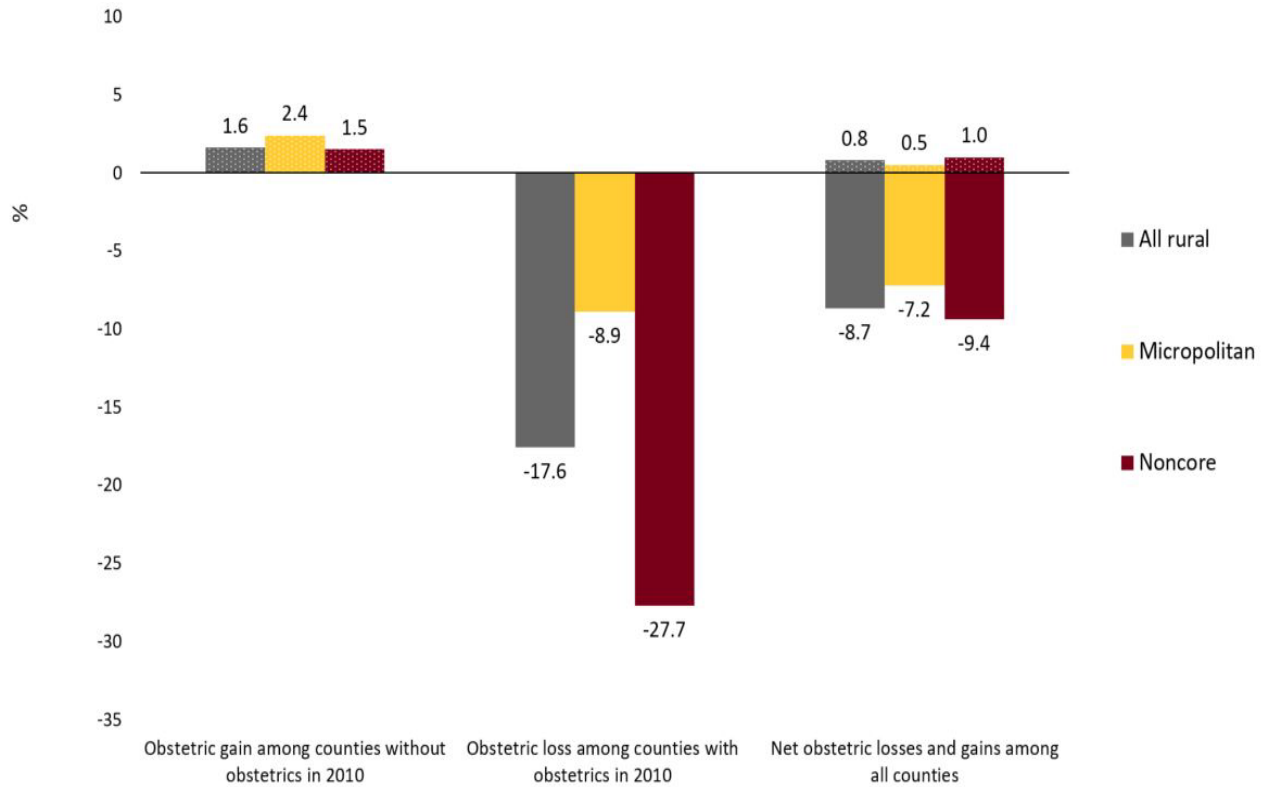
**Figure 1. Percentage of all rural counties with in-county hospital-based obstetric care, 2010-2022 (N=1,976)**



**Figure 2. Percentage of rural micropolitan (N=641) and rural noncore (N=1,335) counties with in-county hospital-based obstetric care, 2010-2022**



**Figure 3. Changes in county-level hospital-based obstetric care by rural county type (all rural, micropolitan, and noncore), 2010-2022**



Support for this study was provided by the Federal Office of Rural Health Policy, Health Resources and Services Administration, Cooperative Agreement U1CRH03717-13-00. The information, conclusions, and opinions expressed are those of the authors and no endorsement by FORHP, HRSA, or HHS is intended or should be inferred.