## Framing Maternal Health in Rural America



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## **Overall Meeting Objectives**

- 1. Provide an overview of the state of maternal healthcare in rural communities, with a focus on access to maternal health services before, during, and after pregnancy; and disparities in maternal health outcomes.
- 2. Share existing promising practices and areas of opportunity to improve access to maternal health services and achieve health equity within rural communities.
- 3. Develop priorities and next steps for a plan of action to improve access to maternal health services, the quality of care provided, and maternal health outcomes in rural communities as well as reduce disparities.

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#### **Session Overview**

- Introduction: Who gives birth in rural communities, and who takes care of rural moms?
- Panelists
  - Wanda Barfield, MD, MPH, RADM USPHS
  - Peiyin Hung, PhD
  - Alina Salganicoff, PhD
- Discussion: What do we know, what don't we know, and what should we do?



# Rural demographics: Who lives and gives birth in rural communities?



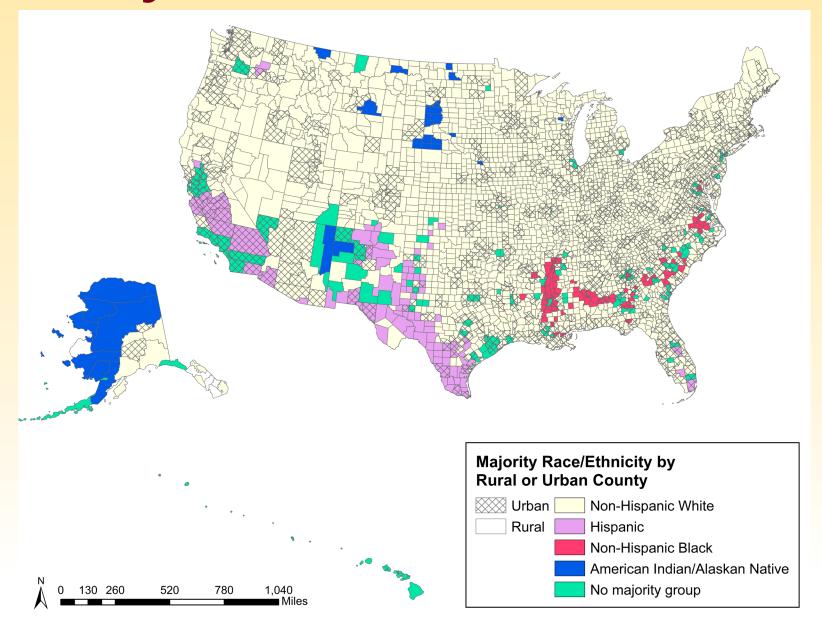
## Rural America is older, poorer, whiter, sicker...But not everyone in rural America is old, poor, white and sick.

Rural America is diverse, especially those that give birth.

 Rural America is not a monolith, but there are some similarities in the challenges faced by rural residents.

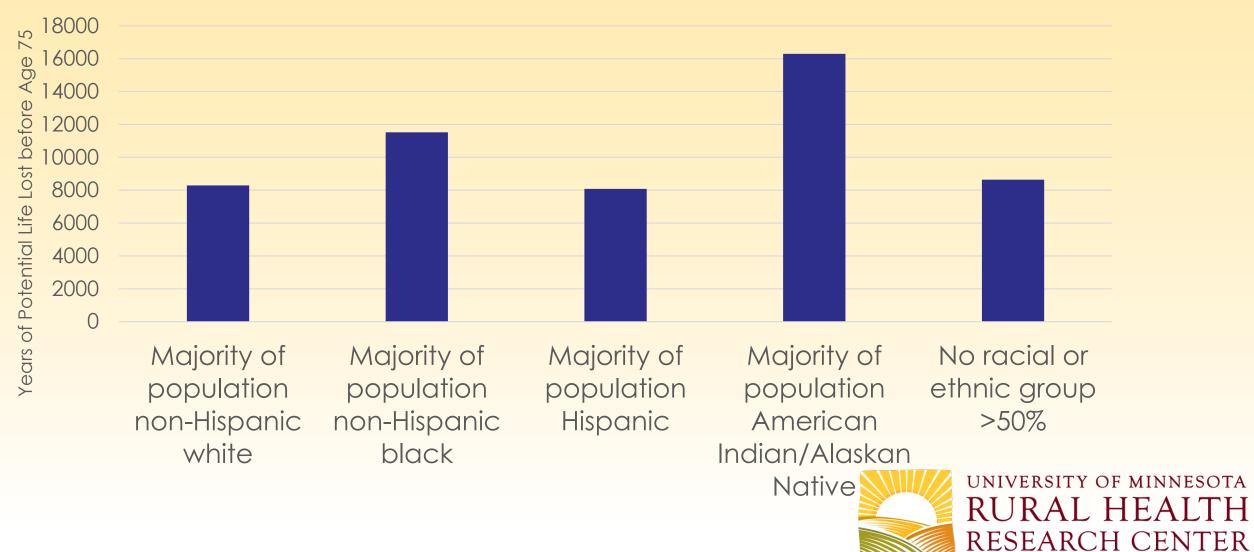


## **County-Level Racial and Ethnic Composition**





## Among rural counties, the highest rates of premature death occur in counties with a majority non-Hispanic black or American Indian/Alaska Native residents



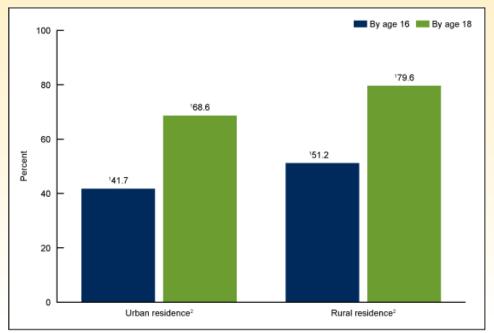
#### Rural women

- 18 million women ages 18-44 live in non-metropolitan US counties
  - 84.2% white, 6.2% black, 4.1% Al/AN, 1.5% Asian, 2.6% multiple races; 92.7% non-Hispanic, 7.3% Hispanic
  - 52.1% have a high school education or less, 19.5% have 4 or more years of college
  - 12.1% have no health insurance coverage
  - 18.9% are at or below FPL, 7.9% are 100-138% FPL
  - 5.2% have family income <\$10K, 37.6% are <\$40K, 6.5% are >\$150K



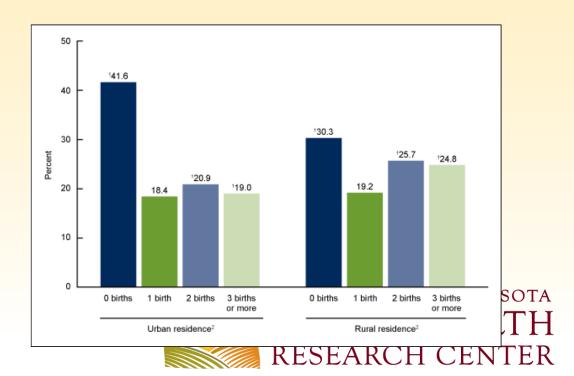
- Among women aged 18–44, the average age at first sex was younger for women living in rural areas (16.6) compared with women living in urban areas (17.4)
- A higher percentage of women living in rural areas had at least one birth compared with women in urban areas

Percentage of women who had their first sexual intercourse by age 16 and by age 18 among women aged 18–44, by urban and rural residence: United States, 2011–2015



Data from National Survey of Family Growth

Percent distribution of number of births to women aged 18–44, by urban and rural residence: United States, 2011–2015



### **Rural births**

- Nearly half a million rural residents give birth each year
  - Approximately 15% of all births occur in rural hospitals
  - Approximately 75% of rural residents give birth at rural hospitals; 25% give birth at urban hospitals
    - Variation by payer (Medicaid beneficiaries more likely to give birth at rural hospitals, even with clinical complications)
  - Approximately 6% of rural births are preterm, should deliver at a hospital with a NICU
    - Of these, only 40% occurred in a hospital with a NICU
  - Approximately 7.5/1000 rural infants were diagnosed with NAS in 2013
    - Of these, over 60% give birth at rural hospitals, and 50% of those with opioid-affected preterm births gave birth at rural hospitals

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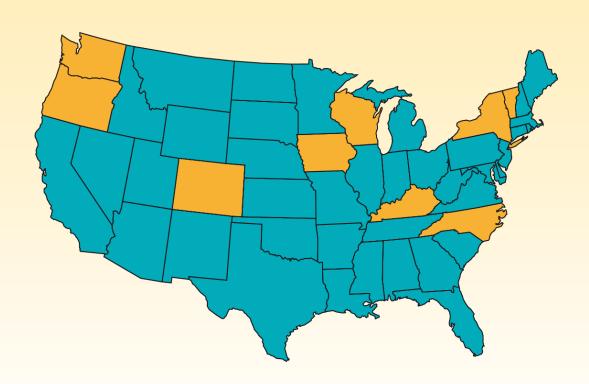
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# Rural obstetric workforce: Who takes care of rural moms?



## Data: hospital discharge data and survey

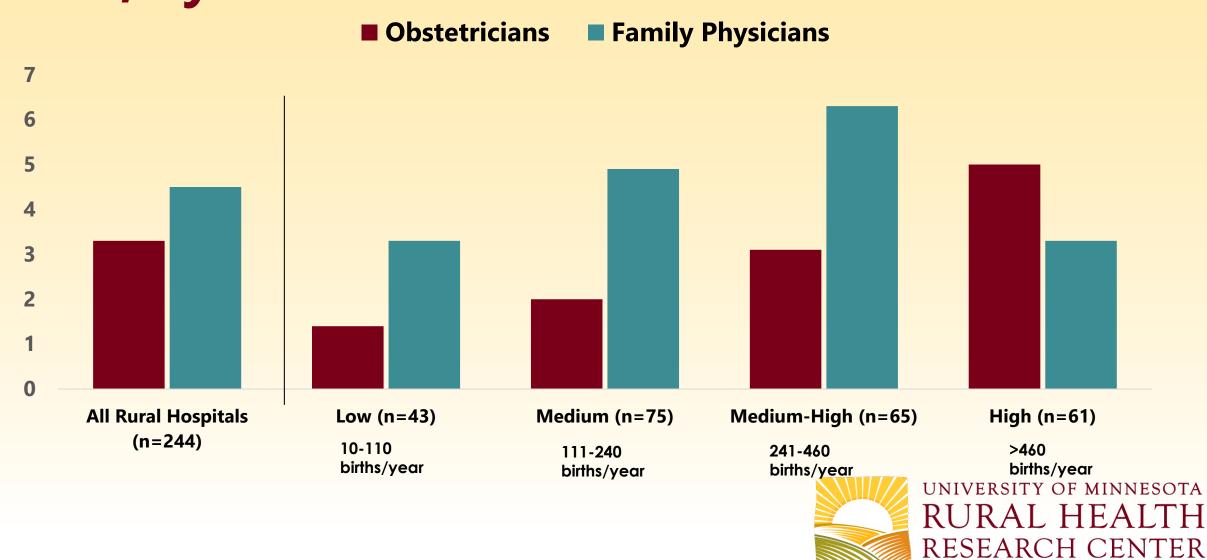
- HCUP SID data included all hospital births to rural residents in nine states
- Telephone survey of all 306 rural hospitals in these 9 states with at least ten births in 2010 conducted Nov 2013–Mar 2014



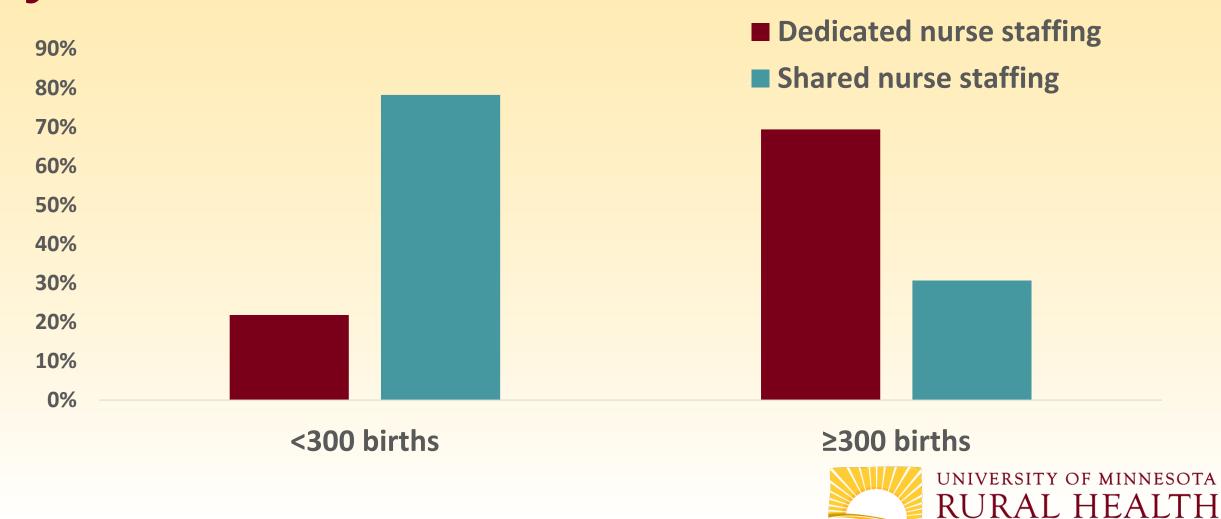
- Advisory Committee of rural obstetric nurse managers
- Content: closed and open-ended questions on delivery volume, types & numbers of attending clinicians, staffing challenges & changes
- Response rate 86% (n=263)



## Results: Average Number of OBs/FPs Attending Births, by Birth Volume



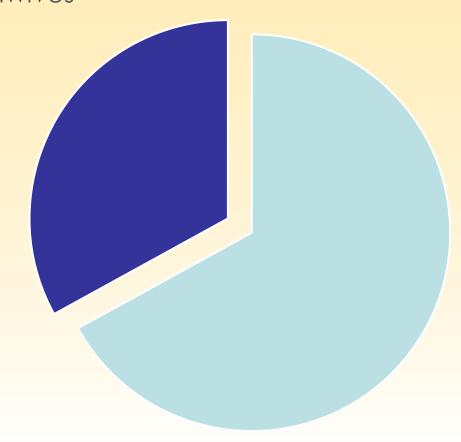
## Results: Dedicated and Shared Nurses, by Birth Volume



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## **Results: Midwifery in Rural Hospitals**

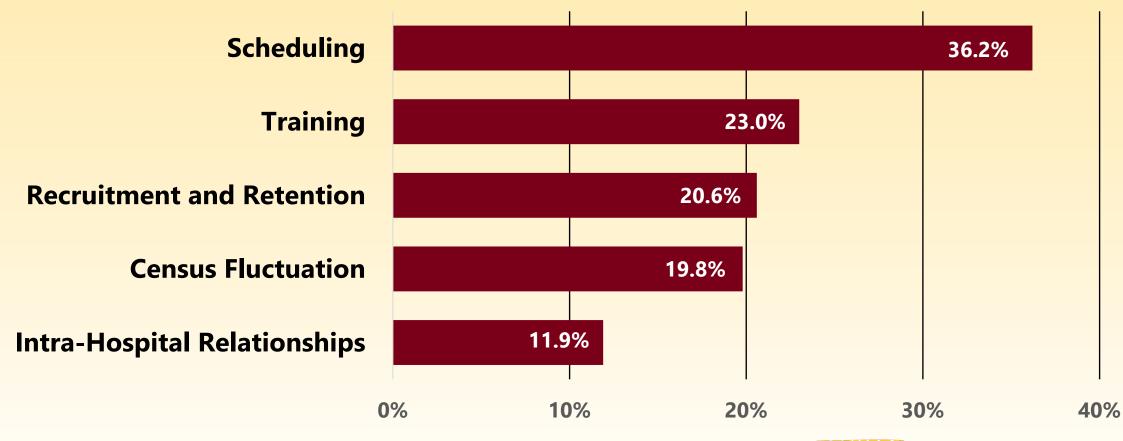
Rural hospitals without midwives



- Larger volume rural hospitals (>240 births) were more likely to have CNMs attending births
- In rural maternity hospitals with CNMs, midwives practice alongside obstetricians in 86% of hospitals and with family physicians in 44% of hospitals



## Results: Percent of Surveyed Rural Hospitals Citing Particular Staffing Challenges (n=244)





#### **Summary of Findings on Workforce**

- Hospitals with lower birth volume (<240 births per year) are more likely to have family physicians and general surgeons attending deliveries
- Hospitals with a higher birth volume more frequently have obstetricians and midwives attending deliveries
- Employment of physicians decreases as birth volume increases
- 3/4 of rural hospitals with <300 births a year have shared nurse staff
- Midwives attend deliveries in 1/3 of rural hospitals
- Workforce challenges reported by surveyed hospitals are related to their rural location and low birth volume.



#### The Goal for Rural Communities

 Workable solutions to the challenges that rural communities face to ensure maternity care access and quality





## Acknowledgement



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## Presentations



## Discussion



## Maternal health is in crisis in communities across the US.

- It is a local problem
- It is a global problem
- There are profound racial disparities
- There is unequal access to care
- There is variability across regions, states, & counties
- There is more we can do



## Story map: Maternal mortality in the US

#### **Maternal Mortality in the United States**

collection methods, and alarming statistics, maternal maternity has recently emerged as a worldwide policy priority.

Image: Boakai Fofana. http://allafrica.com/view/group/main/main/id/00017091.html

A Worldwide Problem

3 A Local Problem

Why? Racial Disparities in the U.S.

Why? Health Care Inequality in the U.S.

U.S. Geographic Distribution: State





# It is not just about how mothers die, but how women live and access care in rural America.



## **Key questions**

- How do these data illuminate:
  - Particular clinical and structural facets of maternal health in rural areas
  - Health care access and health across the lifespan
  - Health equity challenges in rural communities
- What don't we know that we need to know?
- What policy changes would improve maternal health and ensure greater equity?

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## Thank you so much

