Maternal Mortality and Obstetrics Deserts

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Learning Objectives

After participating in this session, attendees should be able to:

1. Describe the worsening maternal morbidity and mortality crisis in rural America
2. Identify barriers to achieving maternal health equity in rural communities
3. Discuss Family Medicine's importance in achieving birth equity for families residing in rural areas

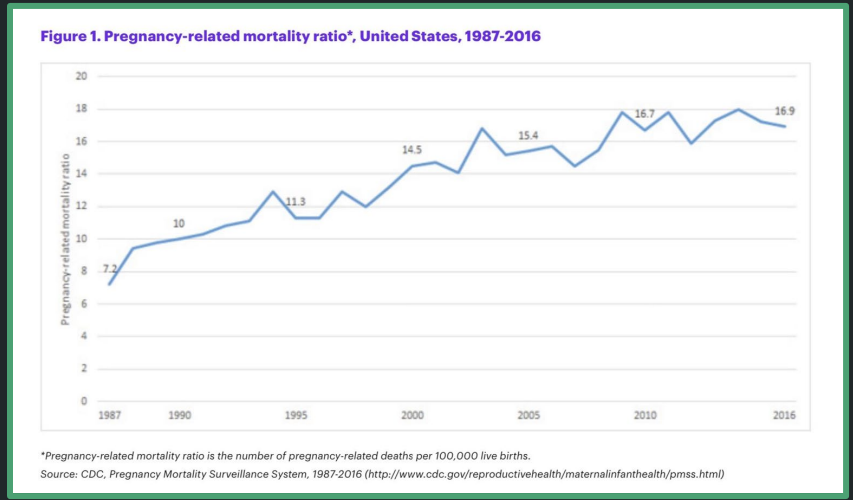
Disclosures

None

My Story

- Nearly **four million** births in the United States each year
- Annually, about **700 women** die of complications related to pregnancy and childbirth and more than **50,000 women** experience severe maternal morbidity
- An estimated that **60 percent** of maternal deaths are **preventable**

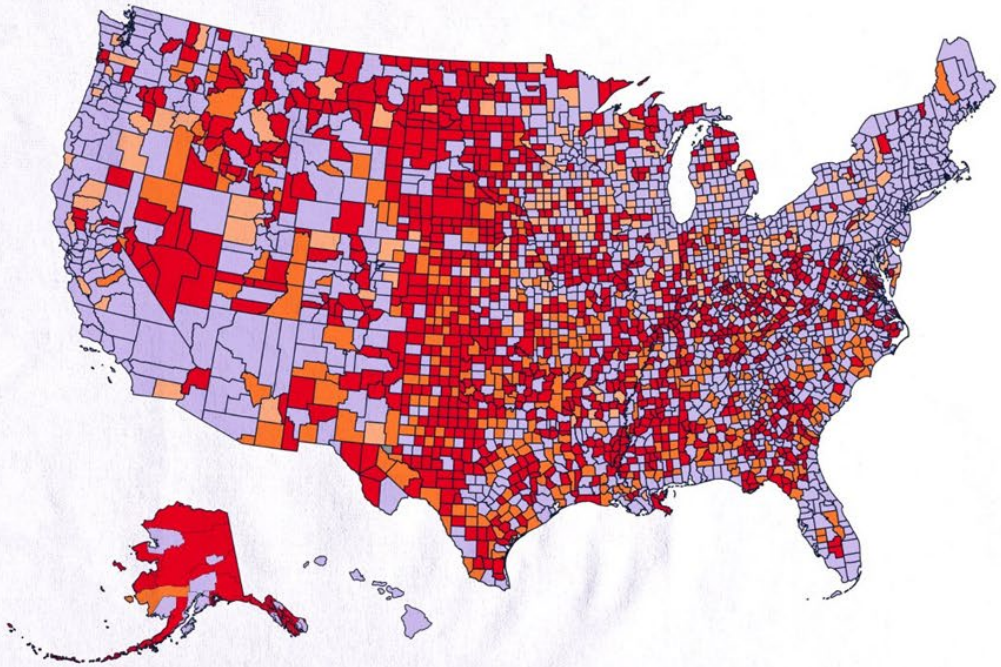
- US maternal mortality rate increasing for the **past three decades**
- Significant racial and ethnic disparities
  - Non-Hispanic Black women and American Indian/Alaskan Native women have higher rates of maternal mortality (3 and 2.5 times, respectively)
- Lack of access to maternity care services in rural communities
- Many disparities can be addressed through initiatives to ensure equal access to quality health care



In the United States, **7 million women** of childbearing age live where there is no or limited access to maternity care

35%

OF U.S. COUNTIES LACK ACCESS TO MATERNITY CARE



MARCH OF DIMES

Maternity Care Deserts

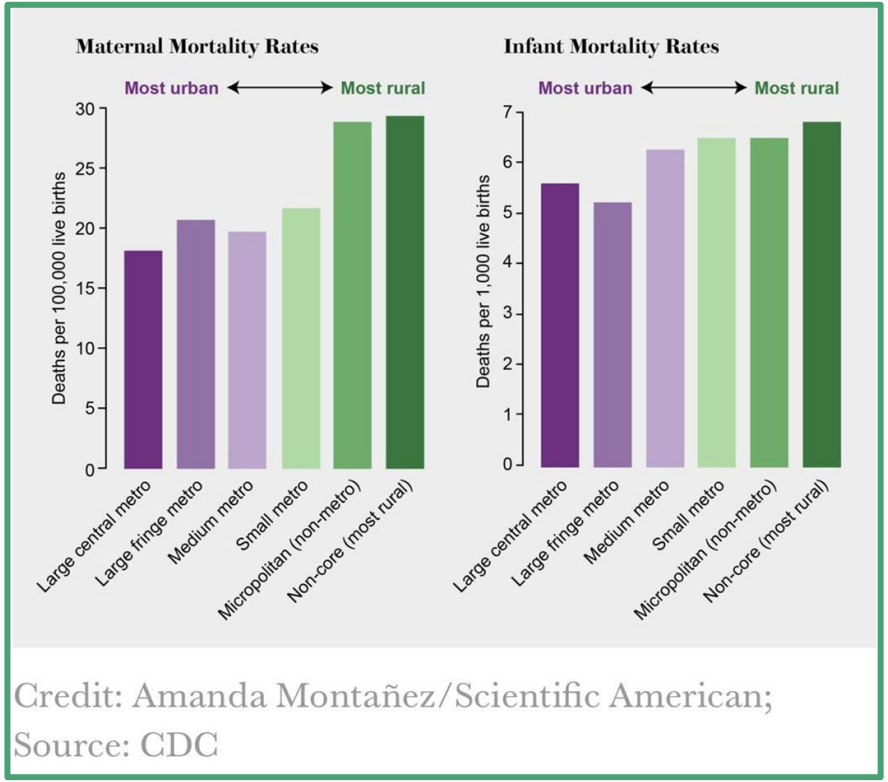
- More than **2.2 million women** of childbearing age live in **maternity care deserts** (1,095 counties)
  - No hospital offering obstetric care, no birth center, and no provider
  - No provider implies no OB/GYN and no CNM
- In 2017, **almost 150,000 babies** were born to women living in maternity care deserts
- Maternity care deserts have a higher poverty rate and lower median household income than counties with access to maternity care

Limited Access To Maternity Care

- **4.8 million women** of childbearing age live in counties with **limited access to maternity care**
  - Less than 2 hospitals and birth centers offering OB care
  - Less than 60 OB/GYN and/or CNM providers per 10,000 births
- In 2017, approximately **514,000 babies** were born to women living in rural areas
  - Only 8 percent of OB/GYN and CNM providers report practicing in rural areas
  - Midwives attend over 30% of deliveries in rural hospitals (compared to 10% nationally)
  - Majority of rural maternity care providers are family physicians (about two thirds)

CDC Data

- Rural pregnancy-related **mortality ratio of 29.4 per 100,000 live births** versus 18.2 in urban areas
- Infants more likely to die before their first birthday
- In Georgia, rural black women have a **30% higher maternal mortality rate** than urban black women
    - Rural white women have a **50% higher risk**
- When controlled for sociodemographic factors and clinical conditions, rural residents had **9% greater probability** of severe maternal morbidity/mortality compared to urban

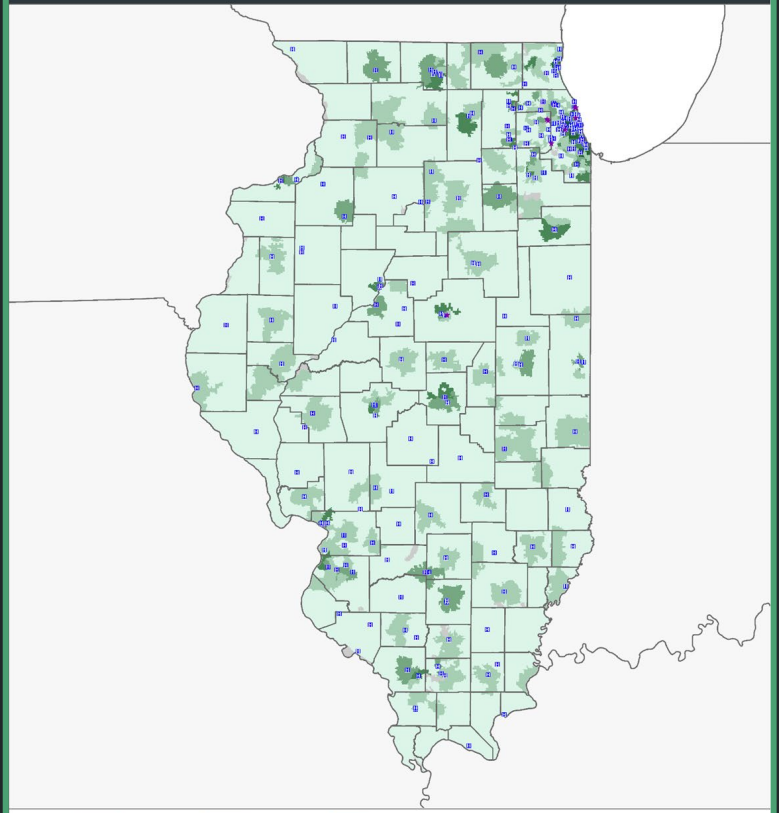


Credit: Amanda Montañez/Scientific American; Source: CDC

NUMBER OF WOMEN (15 TO 50), IN POVERTY, WHO HAD A BIRTH IN PAST 12 MONTHS, WITH BIRTH CENTERS AND HOSPITALS

HealthLandscape™

ILLINOIS



Source: ACS, 2015-2019; HRSA, 2021; NPPES NPI file, 2021

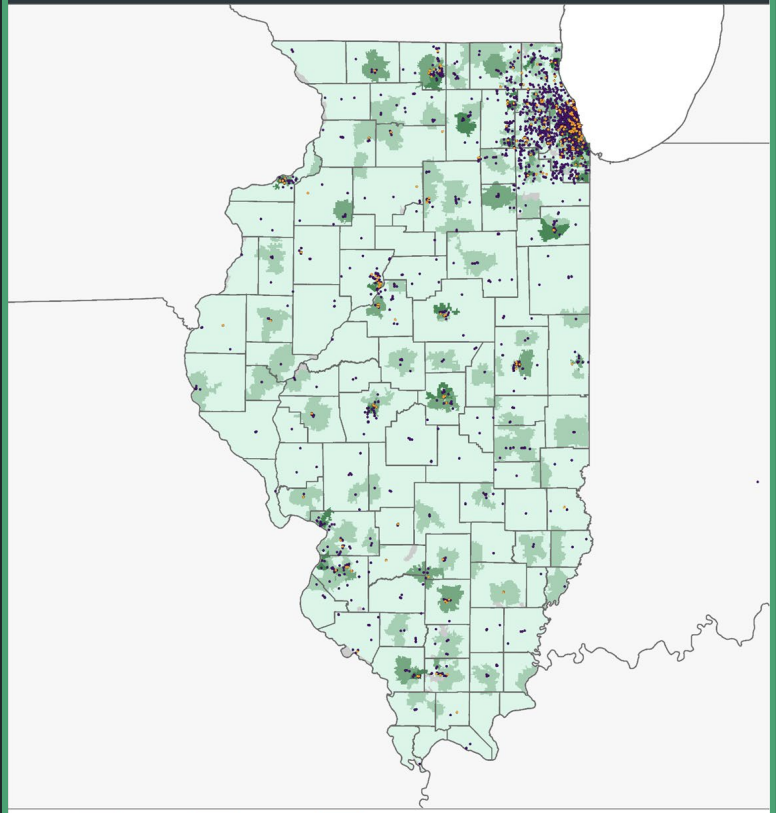
Created for: the American Academy of Family Physicians

Created on: Wednesday, September 8, 2021

NUMBER OF WOMEN (15 TO 50), IN POVERTY, WHO HAD A BIRTH IN PAST 12 MONTHS, WITH FAMILY MEDICINE AND OBGYN PROVIDERS

HealthLandscape™

ILLINOIS



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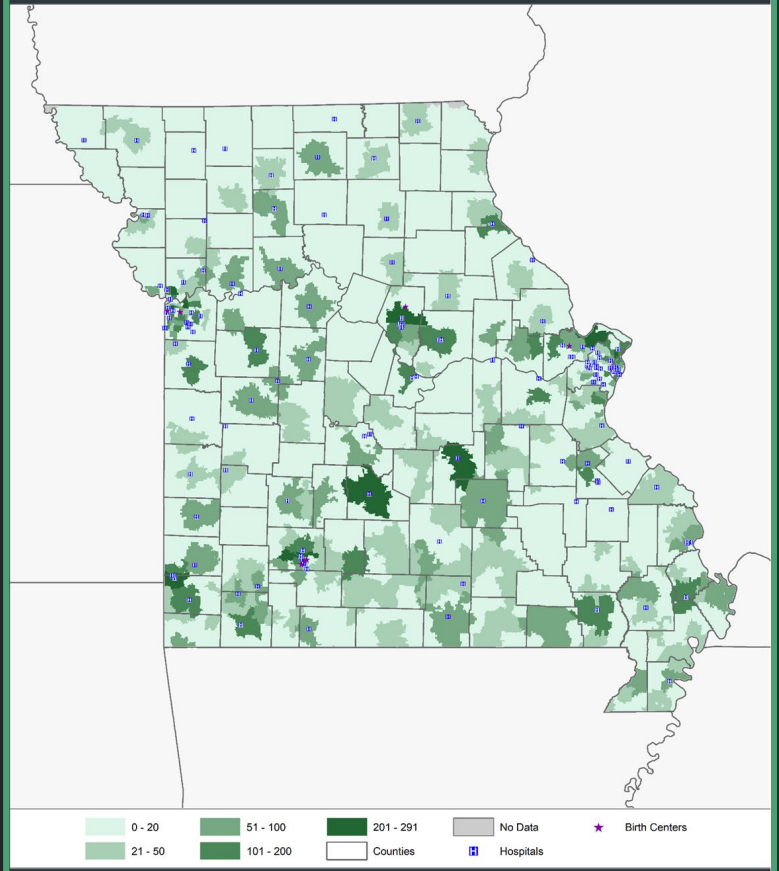
MISSOURI



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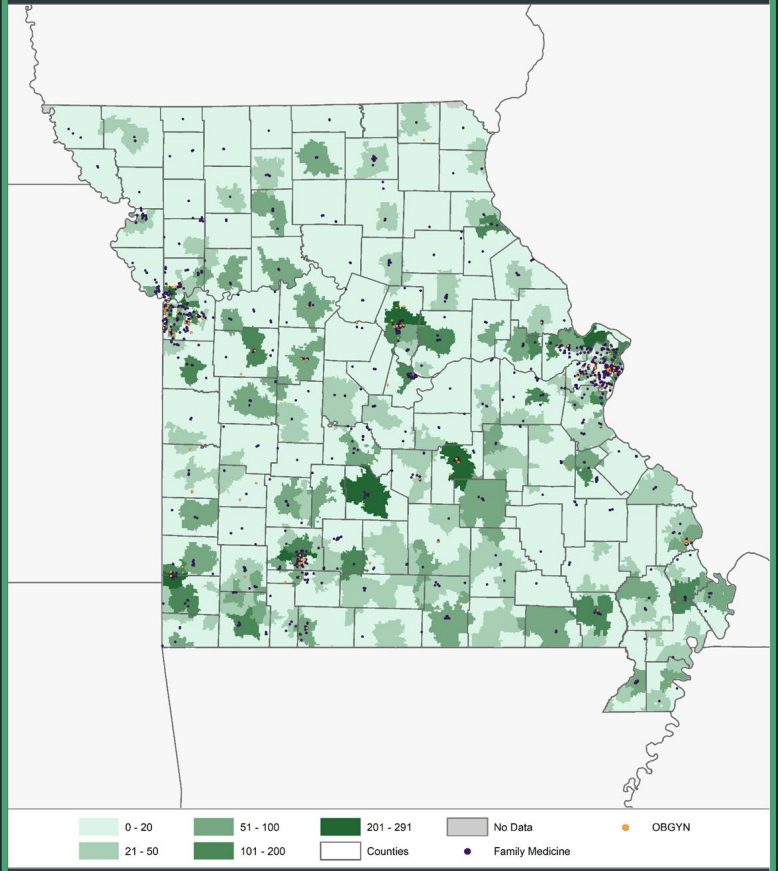

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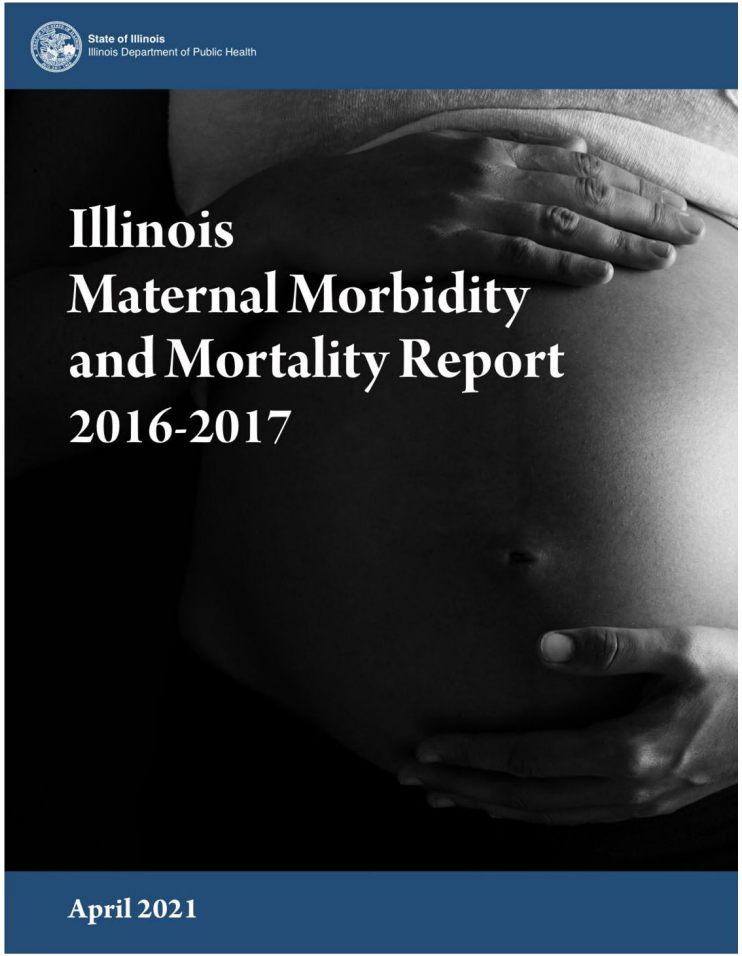
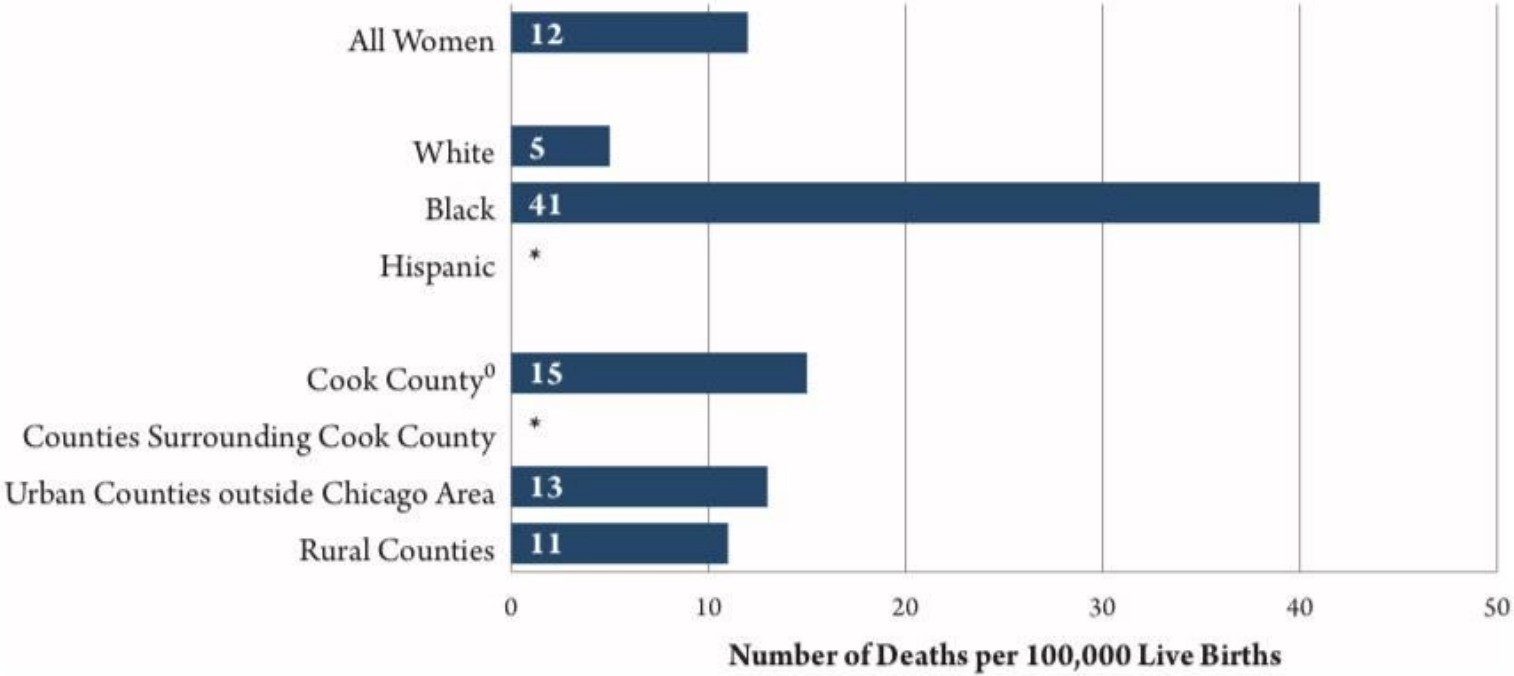


- PRMR (Pregnancy Related Mortality Ratio) **highest for residents of rural counties** and lowest for residents of counties surrounding Cook County
- Women on Medicaid during pregnancy **twice as likely to die** from a pregnancy-related cause as women with private insurance
- Obese women had slightly higher PRMR than normal weight and overweight women
- Black women were **three times as likely as White women to die from a pregnancy-related cause**

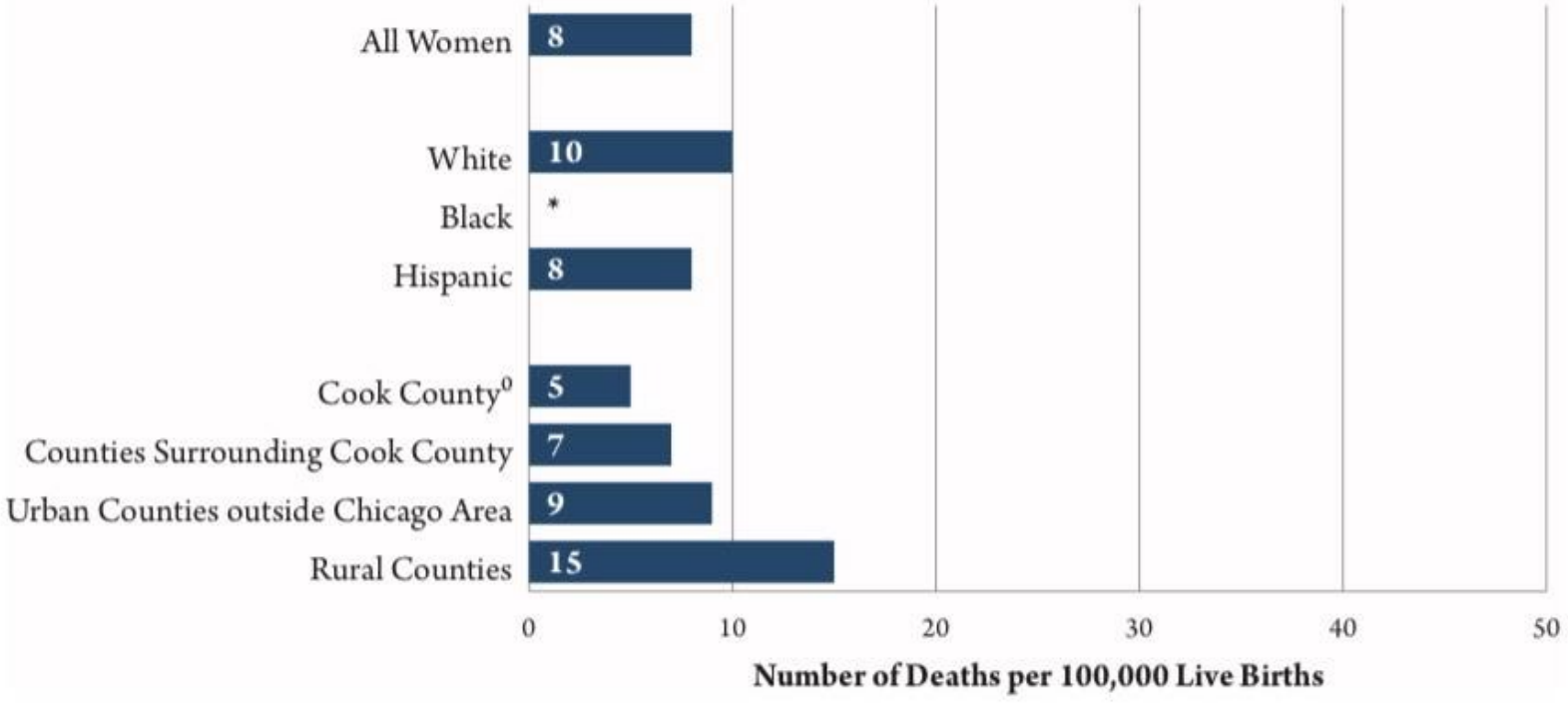
Figure 19. Pregnancy-Related Mortality Ratio (PRMR) Due to Medical Conditions, By Demographics, Illinois 2016-2017



** Not reported due to small sample size (fewer than 5 deaths for group)*

[0] Due to small case counts, Chicago and suburban Cook County have been combined for this chart to enable the estimate to be displayed.

Figure 20. Pregnancy-Related Mortality Ratio (PRMR) Due to Mental Health Conditions, By Demographics, Illinois 2016-2017



** Not reported due to small sample size (fewer than 5 deaths for group)*

[0] Due to small case counts, Chicago and suburban Cook County have been combined for this chart to enable the estimate to be displayed.

How did we get here?

Loss of Obstetric Services

- United States saw a **7.2 percent decline** in the percentage of rural counties with hospital-based obstetric services between 2004 and 2014
- 179 rural counties (**about one in ten**) lost obstetric services during those ten years
- 150 of these counties in areas with less than 10,000 residents
- Black communities had higher odds of hospital closures

- **30.2%** of the nation's most rural counties have continual access to obstetrics care
- Urban counties are **more likely to have a hospital providing obstetric care** than rural counties (58.0 percent and 37.6 percent, respectively)

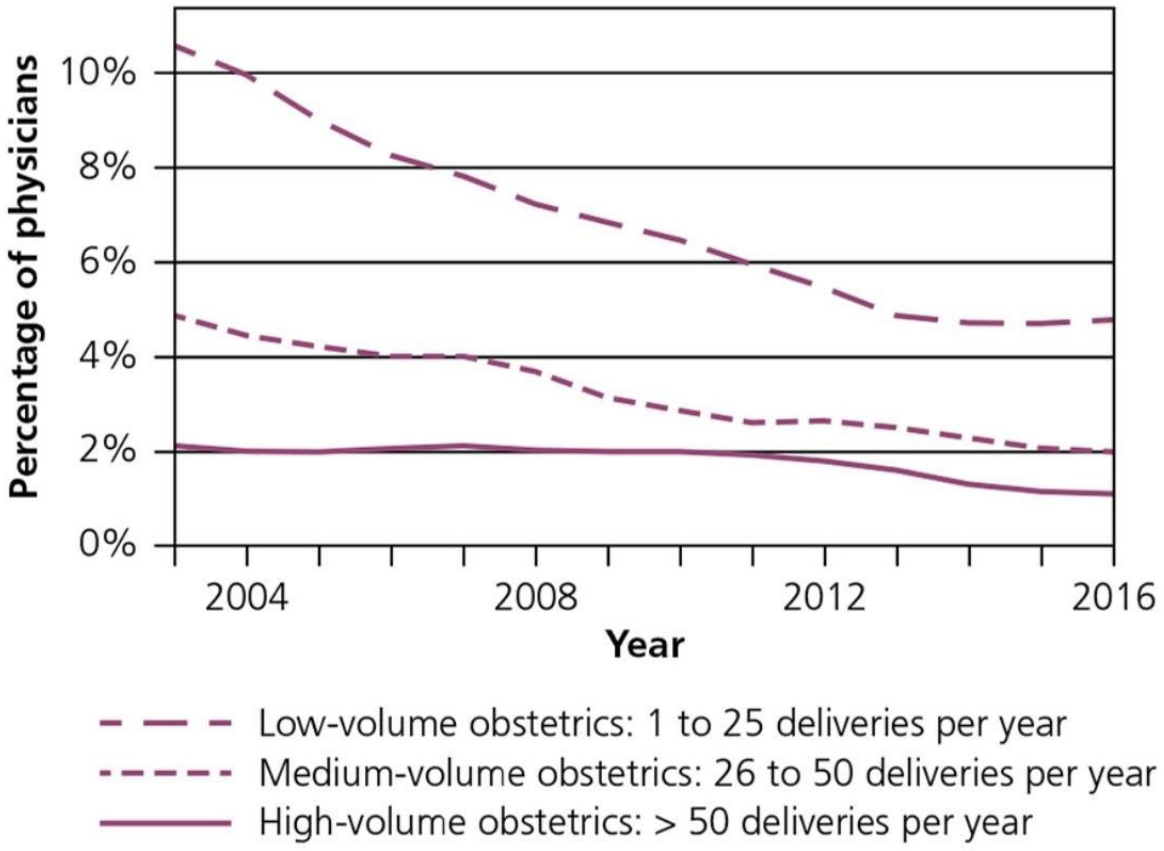
Loss of Obstetrics Services

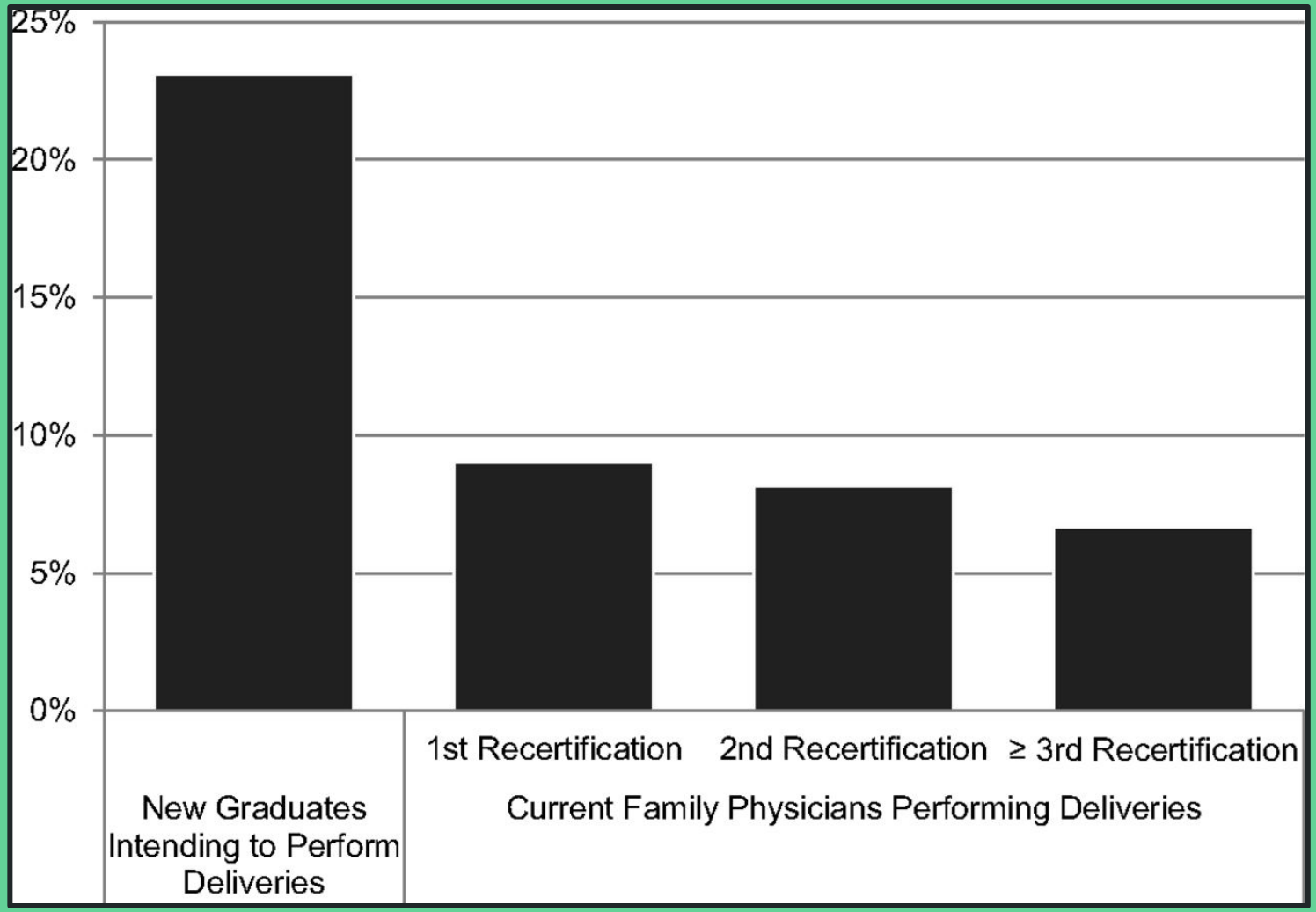
- Difficulties with staffing (recruiting and retaining providers, nurses, surgical and anesthesia coverage)
- Financial barriers
  - Rural Americans less likely to be insured, more likely to utilize Medicaid
    - In 2010, Medicaid covered 45% of babies born in the US and 50 - 60% in rural areas
  - Medicaid reimburses at lower rates than private insurance
- Lower birth volumes
- Local socioeconomic factors

Recruitment of Maternity Care Providers

- American College of Obstetrics and Gynecology (ACOG) projects nationwide shortage of 9,000 OB/GYNs by 2030
- More OB/GYN physicians moving from rural and impoverished areas to urban, wealthier areas
- Less than 200 new OB/GYN residency positions between 1992 and 2016
- Amount of OB/GYNs specializing has almost tripled
- More OB/GYN physicians moving from rural and impoverished areas to urban, wealthier areas

- Continuous declines in the percentage of family physicians providing maternity care since 2000
- **21% of new family medicine graduates** report an intention to include obstetrics in their scope of practice, yet **only 7% of family physicians** currently do so
    - Malpractice costs, lifestyle concerns, difficulty obtaining hospital privileges, hospital closures, volume issues
- Recent changes in ACGME requirements loosen emphasis on maternity care


Percentage of physicians
10%
8%
6%
4%
2%
0%
2004
2008
2012
2016
Year
Low-volume obstetrics: 1 to 25 deliveries per year
Medium-volume obstetrics: 26 to 50 deliveries per year
High-volume obstetrics: > 50 deliveries per year


25%
20%
15%
10%
5%
0%
New Graduates Intending to Perform Deliveries
1st Recertification
2nd Recertification
≥ 3rd Recertification
Current Family Physicians Performing Deliveries

Policy Issues

- Medicaid coverage for 60 versus 365 days postpartum
- Medicaid reimbursement for maternity care services
- Cost of malpractice insurance
- Loan repayment for rural maternity care providers

Figure 2 Percentage of maternal deaths before, during, and after childbirth in the United States from 2011-2013 [16]

- Women are more likely to die of pregnancy-related conditions following birth than during pregnancy/delivery
- Per study by Georgetown University Health Policy Institute, expanded access to Medicaid for 365 days postpartum was associated with 1.6 fewer maternal deaths per 100,000 live births

Social Determinants of Health

- Fewer hospitals
- Transportation challenges
- Lack of education
- Scarce employment opportunities
- Housing and food insecurity
- Poverty
- Substance use disorders
- Less access to primary and specialty care

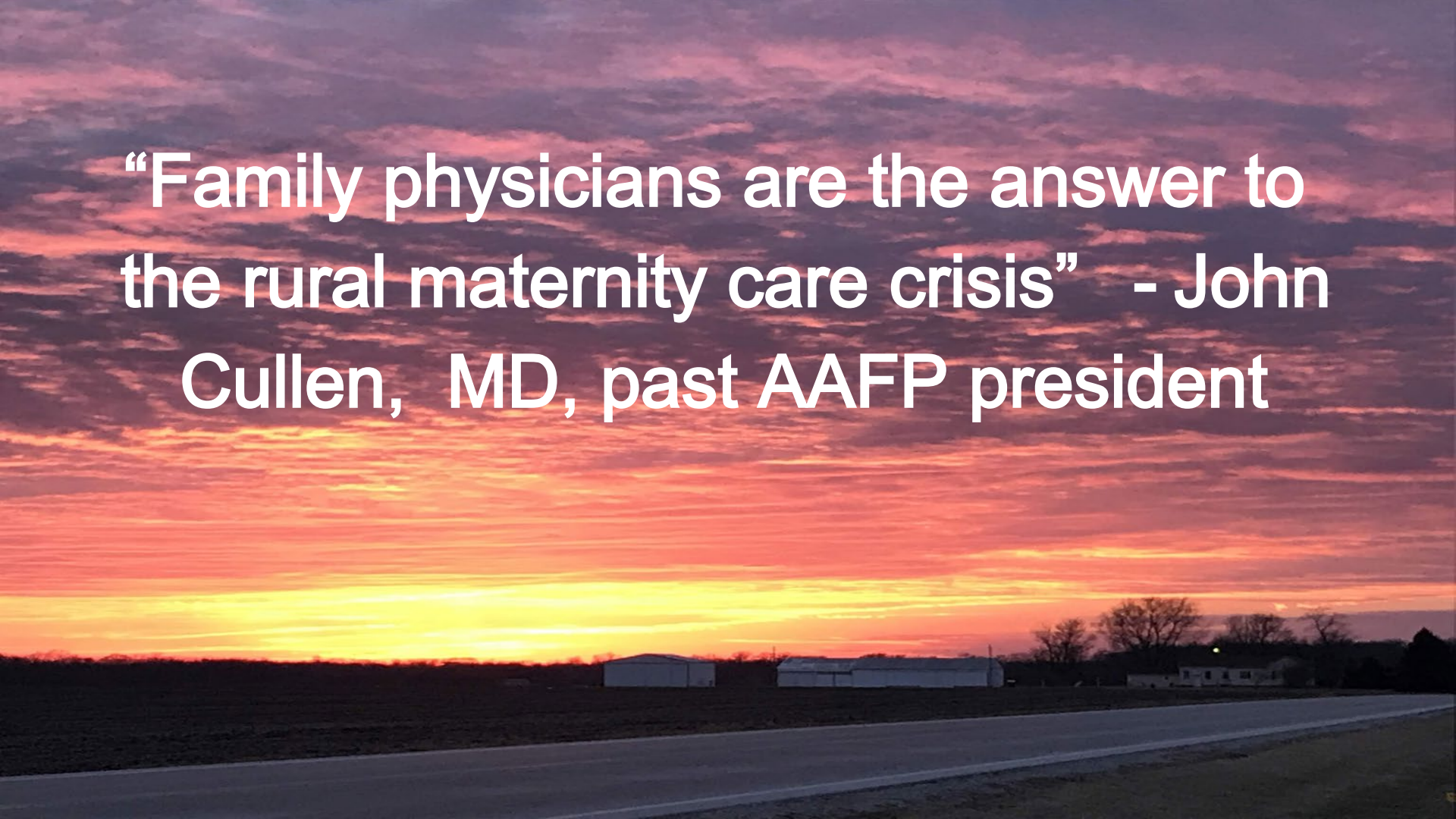
Chronic Disease Burden

- Obesity prevalence significantly higher among rural adults compared to urban
- Tobacco use highest in rural areas
- Rural residents more likely than urban residents to die prematurely from heart disease, cancer, unintentional injury, chronic lower respiratory disease, stroke
- Higher incidence of mental health and substance use disorders

Between 1999 and 2015,opioid death rates in rural areas have quadrupled among those 18-to-25-year-olds and tripled for females

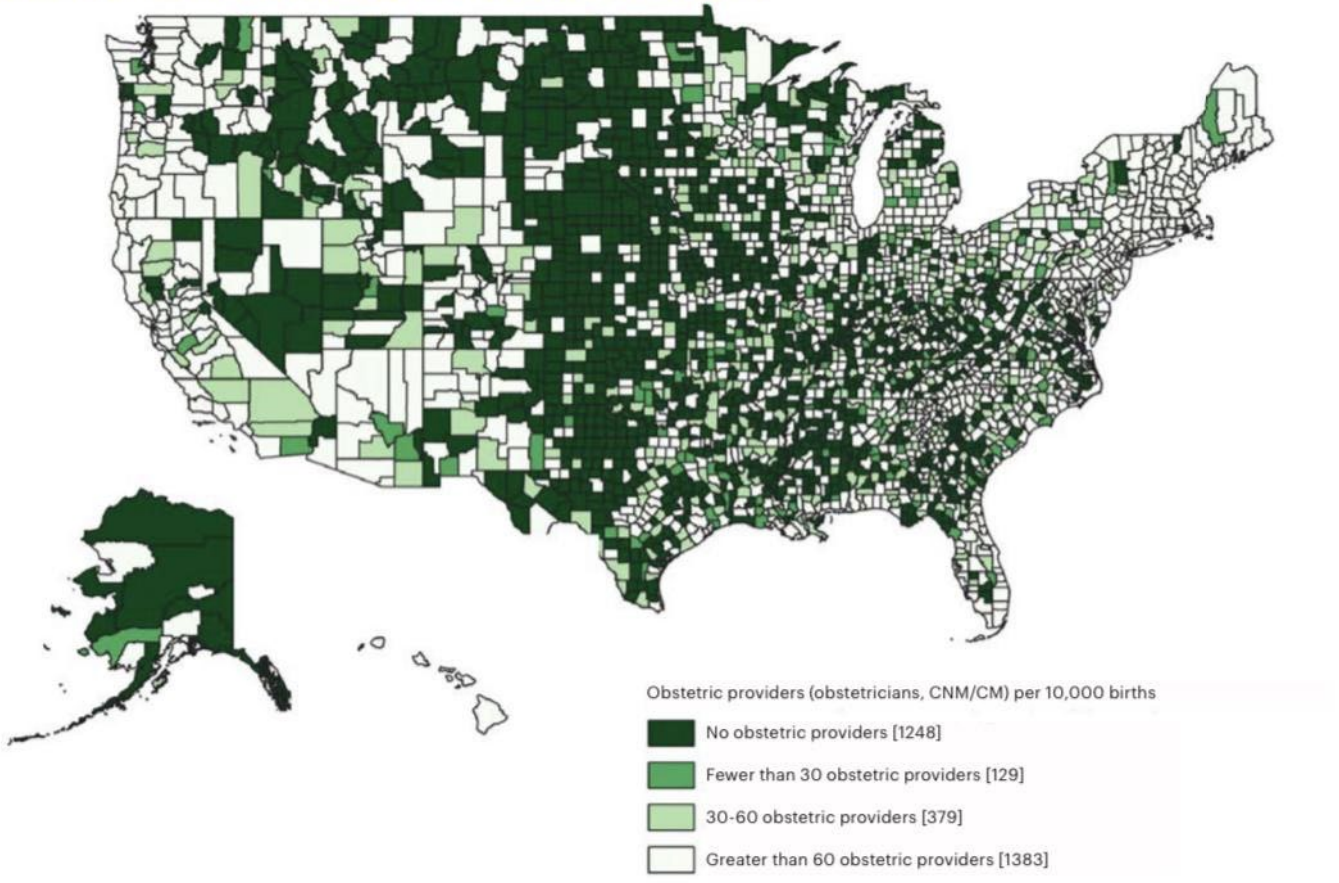
Drug overdose death rates are higher in rural areas than in urban areas

What can Family Physicians do?


“Family physicians are the answer to the rural maternity care crisis” - John Cullen, MD, past AAFP president

Secure a Seat At The Table

Figure 5: Distribution of obstetric providers by U.S. county, 2017



Source: U.S. Health Resources and Services Administration (HRSA), Area Health Resources Files, 2019

We can’t let ourselves be erased from the conversation...

JABFM
JOURNAL OF THE AMERICAN BOARD OF FAMILY MEDICINE

Article Commentary | Commentary

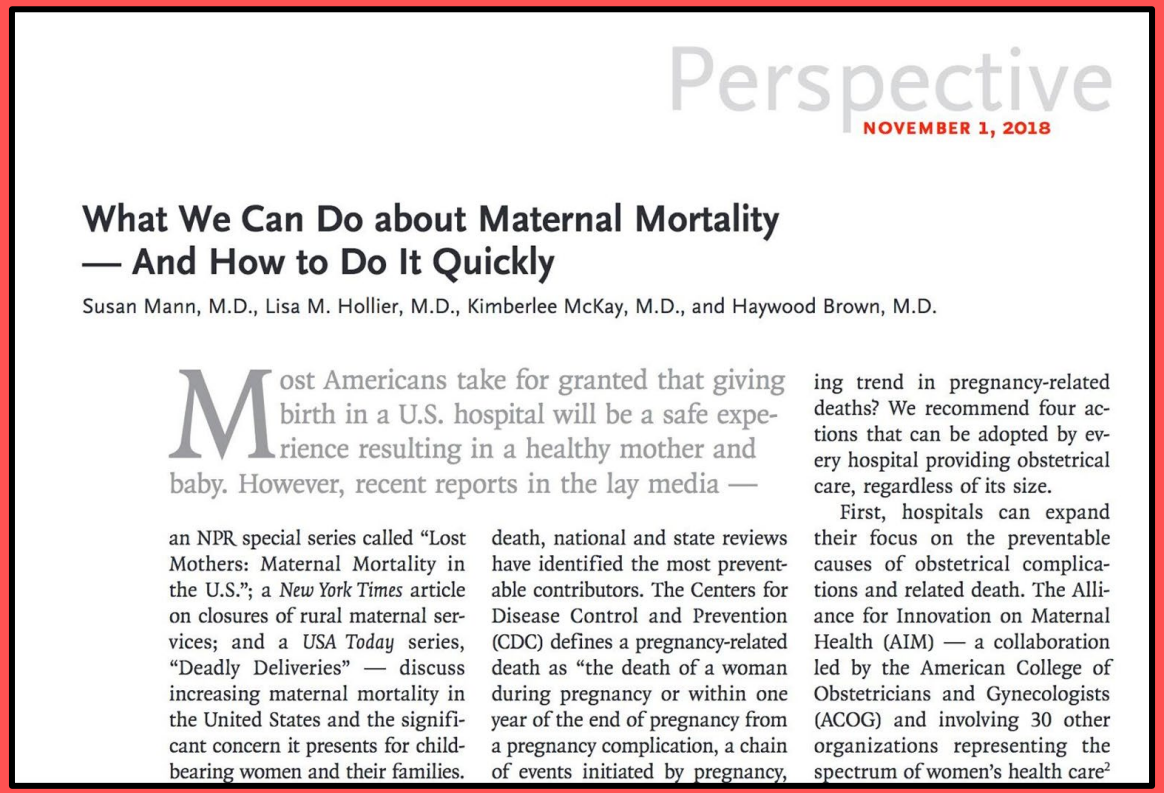
Family Medicine and Obstetrics: Let's Stop Pretending

Richard A. Young and R. Levi Sundermeyer

The Journal of the American Board of Family Medicine May 2018, 31 (3) 328-331; DOI: https://doi.org/10.3122/jabfm.2018.03.180087

"It's time to stop pretending that delivering babies is one of the core activities of family medicine."

"We are at a **crossroads as a specialty** as to whether maternity care continues to be part of the services that patients can expect from their family physician" - Wendy Barr, MD



Perspective

NOVEMBER 1, 2018

What We Can Do about Maternal Mortality — And How to Do It Quickly

Susan Mann, M.D., Lisa M. Hollier, M.D., Kimberlee McKay, M.D., and Haywood Brown, M.D.

Most Americans take for granted that giving birth in a U.S. hospital will be a safe experience resulting in a healthy mother and baby. However, recent reports in the lay media — an NPR special series called "Lost Mothers: Maternal Mortality in the U.S."; a *New York Times* article on closures of rural maternal services; and a *USA Today* series, "Deadly Deliveries" — discuss increasing maternal mortality in the United States and the significant concern it presents for childbearing women and their families. death, national and state reviews have identified the most preventable contributors. The Centers for Disease Control and Prevention (CDC) defines a pregnancy-related death as "the death of a woman during pregnancy or within one year of the end of pregnancy from a pregnancy complication, a chain of events initiated by pregnancy, ing trend in pregnancy-related deaths? We recommend four actions that can be adopted by every hospital providing obstetrical care, regardless of its size.

First, hospitals can expand their focus on the preventable causes of obstetrical complications and related death. The Alliance for Innovation on Maternal Health (AIM) — a collaboration led by the American College of Obstetricians and Gynecologists (ACOG) and involving 30 other organizations representing the spectrum of women's health care[2]

"We recommend that ACOG and the American Academy of Family Physicians collaborate on an additional year of comprehensive training for family medicine physicians who are considering practicing obstetrics in rural areas"

"The American College of Obstetricians and Gynecologists encourages obstetrician–gynecologists to do the following:

-**Partner with family physicians and other women's primary care providers** to ensure that appropriate consultation and training are available for practitioners in rural areas."

Address Workforce Shortages

Training The Next Generation

- There are approximately **48 family medicine fellowships** in obstetrics in the United States
- Many graduates practice in rural and/or underserved areas with cesarean delivery privileges
- 57.3% of family physicians who perform cesarean deliveries do so in rural counties and 38.6% do so in counties that have no obstetrician/gynecologists

Delivery Outcomes and Scope of Practice

- 2013 study showed patients who had a cesarean delivery performed by a family physician **did not face increased overall risk**
- Maternal and infant outcomes of cesarean deliveries performed by family physicians **can meet or exceed national standards**
- Some evidence that individuals who receive perinatal care from family physicians have **lower cesarean delivery rates**

Recruitment

- Scholarships and Medical School Recruiting
- Loan Repayment Opportunities
- Medical Student Immersion Rotations
- Rural Residency Training Programs

THE JOURNAL OF RURAL HEALTH

NRHA

ORIGINAL ARTICLE

Rural Medicine Realities: The Impact of Immersion on Urban-Based Medical Students

Allison M. Crump MD, Karie Jeter BS, Samantha Mullins BS, Amber Shadoan BS, Craig Ziegler PhD, William J. Crump MD ✉,

Burnout Prevention

- Annals of Family Medicine Study 2018: Early career family physicians with broader scope of practice (including obstetrics) reported significantly lower rates of burnout
- Burnout rate for FP docs in rural areas less than half of FP docs in urban areas

Leverage our Strengths

Financial Impact

- In 2014, it was estimated that the additional service of maternity care contributed **approximately $489,000 per family physician** in additional economic benefit to a rural community

A visitor enters Kearny County Hospital in Lakin, Kan., Friday, Feb. 3, 2017. | AP Photo/Orlin Wagner

LETTER FROM KANSAS

How a Tiny Kansas Town Rebooted Its Struggling Hospital into a Health Care Jewel

An innovative exec found a way to recruit doctors, help refugees and make money delivering babies.

By LISA RAB | May 26, 2018

"He **was especially interested in family medicine doctors** who were trained in obstetrics, because in rural America, it's **more affordable to hire someone who can treat all patients** than to hire specialists."

New maternity unit will put family docs at the helm

Leverage Our Strengths… in the exam room

- Increase access to preventive services
- Preconception counseling
- Family planning
- Incorporate medication assisted treatment into family practice setting
- Navigation of insurance barriers
- Treatment of obesity, tobacco use disorder, chronic diseases
- Address untreated mental health conditions long before pregnancy
- Ensure adequate postpartum follow up
- Screen for mental health, suicidal ideation, substance use, and intimate partner violence

"No other specialty in medicine cares for all of a woman's most common health care needs, which include care for common acute and chronic illnesses, and her reproductive health, including pregnancy."

Leveraging Our Strengths… as healthcare leaders

- Dismantle systemic racism
- Implicit bias workshops
- Community organizing and advocacy efforts
- Collaboration with academic hospitals, nearby tertiary centers, maternal fetal medicine colleagues
- Facility-led interdisciplinary morbidity and mortality reviews
- Patient safety bundles
- Participation in statewide quality improvement initiatives
- Explore innovative healthcare delivery models including telehealth

Advocate For Policy Changes

Some Successes in Illinois

1. Expansion of Medicaid to One-Year Postpartum
2. Illinois Perinatal Quality Collaborative (ILPQC) implementing a Birth Equity Initiative
3. Statewide programs to address maternal mental health and substance use
4. Coordination of state workgroups and advisory committee (Perinatal Advisory Committee, Statewide Quality Council, Severe Maternal Mortality Sub-Committee, Maternal Mortality Review Committee)
5. State-funded loan-repayment scholarships for rural physicians and providers

Policy Changes

- HRSA Programming
- Legislation
- Malpractice Reform
- Loan Repayment Programs
- More Financial Support For Rural Hospitals
- Increased Reimbursement for Labor and Delivery Services

Credentialing

- *AAFP/ACOG:*
  - The standard of training should allow any physician who receives training in a cognitive or surgical skill to meet the criteria for privileges in that area of practice. Provisional privileges in primary care, obstetric care, and cesarean delivery should be granted **regardless of specialty** as long as **training criteria and experience are documented**. All physicians should be subject to a proctorship period to allow demonstration of ability and current competence. These principles should apply to all health care systems."
- *American Medical Association:*
  - "Concerning the granting of staff and clinical privileges...the AMA believes: (1) the best interests of patients should be the predominant consideration; (2) the accordance and delineation of privileges should be determined on an individual basis, commensurate with an applicant's education, training, experience, and demonstrated current competence...each facility should formulate and apply reasonable, nondiscriminatory standards for the evaluation of an applicant's credentials, **free of anti-competitive intent or purpose**."
- *Joint Commission:*
  - "Credentialing involves the collection, verification, and assessment of information regarding three critical parameters: **current licensure**; education and **relevant training**; and **experience, ability, and current competence** to perform the requested privilege"

Conclusions

- Rural health disparities in maternal mortality and morbidity are worsening around the country including rural communities in Illinois and Missouri
- Family physicians are key in reversing trends and ensuring safety of mothers and babies who reside in rural areas

Questions?