



Maternal Morbidity among Women in Medicaid

—
Medicaid and CHIP Payment and Access Commission

Martha Heberlein

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Risk of Severe Maternal Morbidity and Mortality among Medicaid Beneficiaries



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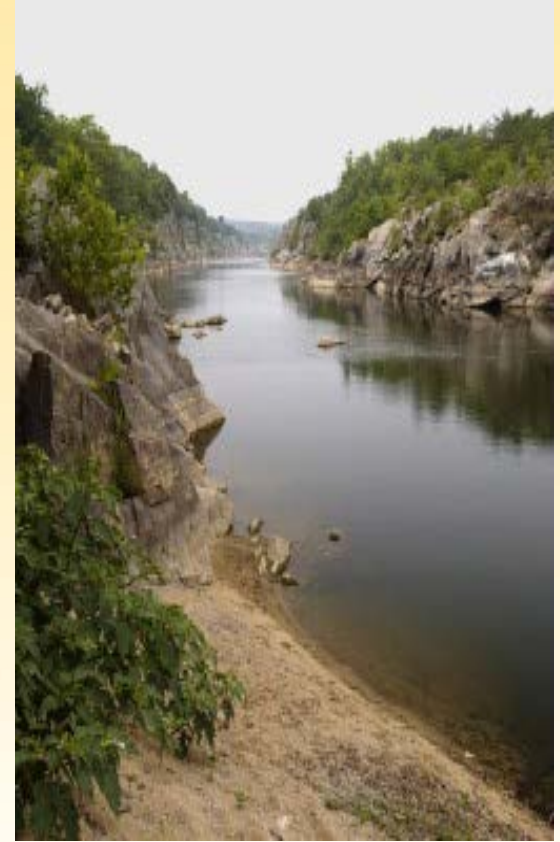
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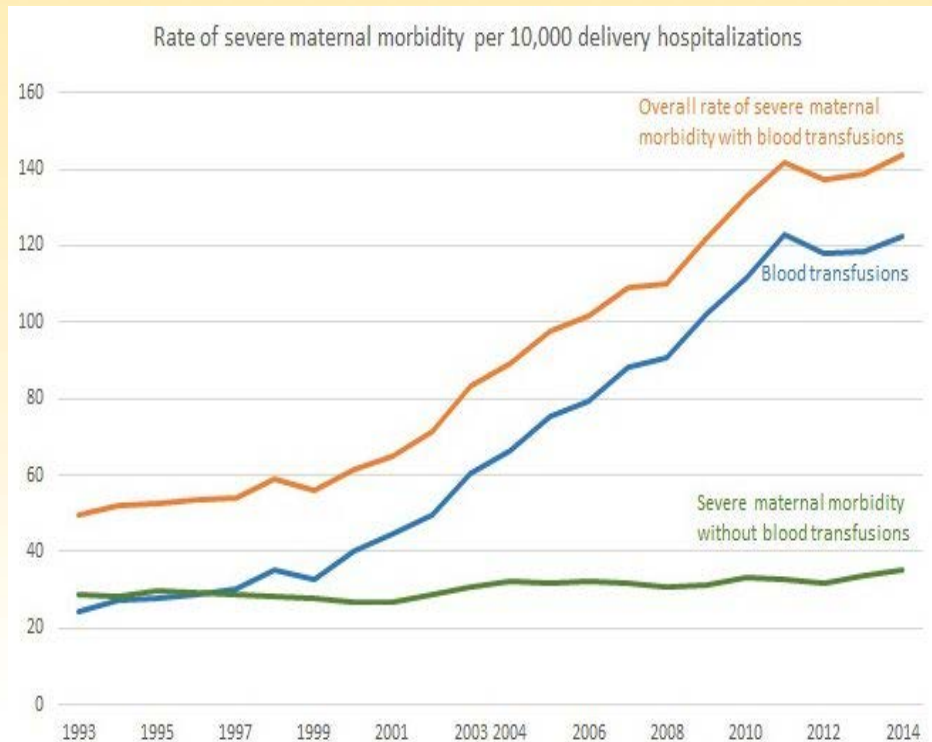
Land Acknowledgment

- As a visitor here, I acknowledge this land as the traditional, ancestral territories of the Nacotchtank and Piscataway tribes.
- I recognize the Indigenous knowledge that this land has seen, and encourage everyone to be respectful of the distinctive and permanent relationship that exists between Indigenous people and their traditional territories.



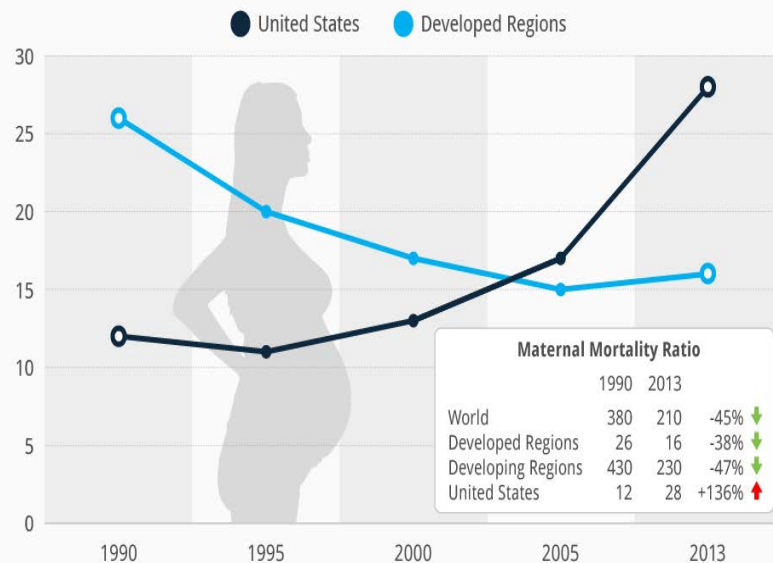
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Maternal morbidity and mortality in the US



Maternal Deaths in the U.S. Are on the Rise

Maternal mortality ratio (number of maternal deaths per 100,000 live births)



Source: World Health Organization

The role of Medicaid in SMMM

- SMMM=severe maternal morbidity and mortality
- Nearly half of US births are financed by Medicaid
- National and state efforts to address maternal health do not often address specific needs of Medicaid beneficiaries (one challenge=no data!)
- Higher risks for Black/Indigenous mothers and rural residents, who more commonly have Medicaid

Goals

- Describe differences in SMMM by payer and, among Medicaid beneficiaries, by race/ethnicity and geography
- Describe predictors of SMMM among Medicaid beneficiaries, by race/ethnicity and geography



Methods

- 2007-2015 data from HCUP National Inpatient Sample
 - 20% sample of U.S. hospitalizations, all payers (stratification by primary payer)
- Incidence of severe maternal morbidity (ICD-9 codes)
- Methods: weighted multivariable logistic regression, stratified analyses (payer, race/ethnicity, rural/urban)



Key finding: Medicaid beneficiaries have 82% greater chances of SMMM than privately insured

	SMMM composite	
	aOR	95% CI
By Payer		
<i>Insurance payer^b</i>		
Private (ref.)	1.00	
Medicaid	1.82	(1.65-2.00)
Medicare	1.30	(1.25-1.34)
Self-pay/other	1.31	(1.23-1.39)

Other key predictors:

Lowest income quartile

Cesarean birth

Substance use disorder

Depression

Chronic disease (HIV, lupus, hypertension, kidney disease, respiratory disease)



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Key finding: Among Medicaid beneficiaries, people of color & rural women are at greater risk

	SMMM composite	
	aOR	95% CI
Race/Ethnicity		
Non-Hispanic White (ref.)	1.00	
Non-Hispanic Black	1.76	(1.70-1.83)
Hispanic	1.41	(1.34-1.48)
Asian or Pacific Islander	1.38	(1.27-1.51)
American Indian/Alaska Native	1.65	(1.46-1.88)
Unknown or other	1.32	(1.23-1.40)
Rural Residence	1.08	(1.03-1.13)

Other key predictors:

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Why are these risks greater among Medicaid beneficiaries?

- Risks among Medicaid beneficiaries reflect national risks (race, rurality, clinical risk factors)
- Structural risk (race, geography, health) also affects income, thus Medicaid eligibility.
- Medicaid beneficiaries are more likely to be among high-risk groups, generally, and have fewer resource to ensure good health.

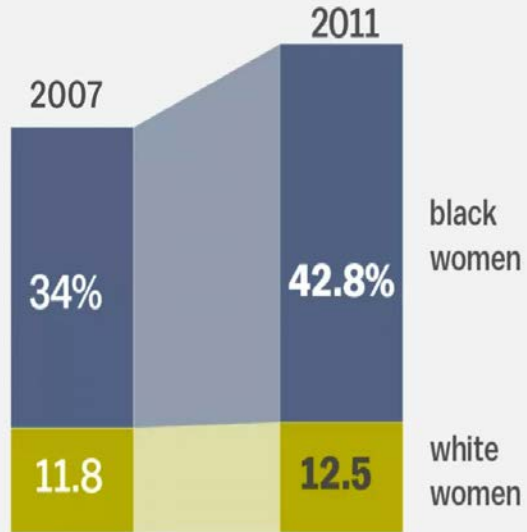
Implications for Medicaid policy

- Medicaid beneficiaries are almost twice as likely as privately insured patients to suffer SMMM during childbirth hospitalization.
- Racial and geographic disparities that exist in the general population are similar among Medicaid beneficiaries.
- Medicaid policy has potential to address maternal health generally, and equity concerns.

Racial equity context, nationally

America's black-white maternal mortality gap is widening

Percentage of pregnancy-related deaths by race



SOURCE: CDC Pregnancy Mortality Surveillance System
CREDIT: Sarah Frostenson

Vox

CDC data, released May 2019

For 2011-2015:

about 1/3 of deaths (31%)

happened **during pregnancy**;

about 1/3 (36%) happened **at delivery or in the week after**; and

about 1/3 (33%) happened **1 week to 1 year postpartum**.

Black and American Indian/Alaska Native women were about 3 times as likely to die from a pregnancy-related cause as White women.



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Geographic equity context, nationally

Maternal and Infant Mortality Rates Are Highest in Rural America

According to publicly available data from the U.S. Centers for Disease Control and Prevention analyzed by *Scientific American*, women living in rural areas of the U.S. have significantly higher chances of dying from causes related to pregnancy or childbirth compared with their city-dwelling counterparts. Likewise, babies are more likely to die before their first birthday if they live in rural locations. The graphs below reflect 2015 data.

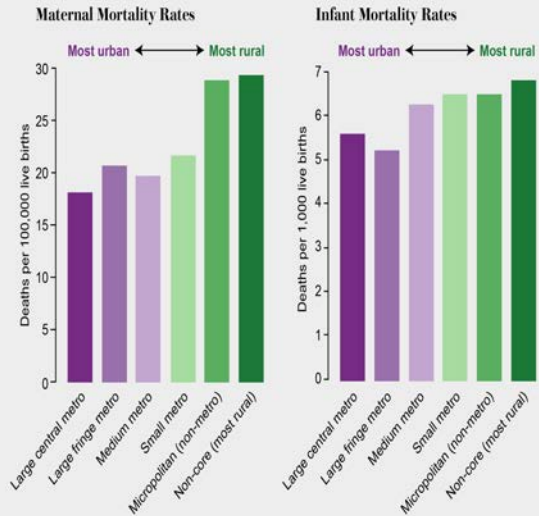
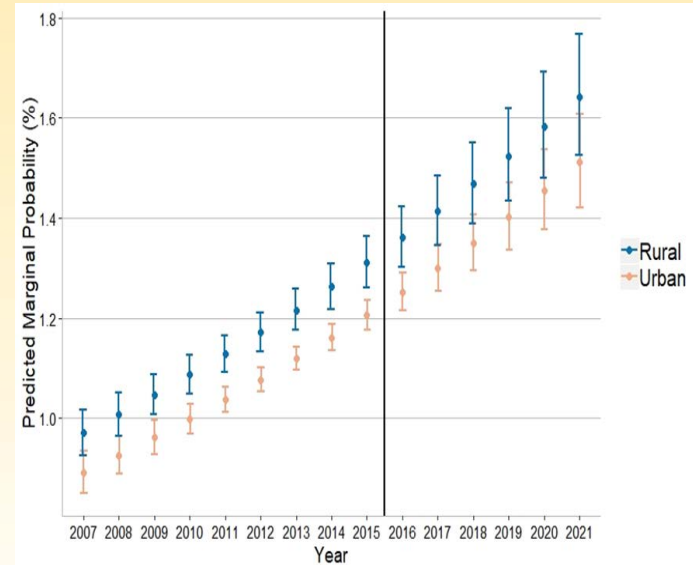


Exhibit 3. Predicted marginal probabilities of severe maternal morbidity and mortality among rural and urban residents, United States 2007-2015



Key take-aways

- Medicaid beneficiaries are at 82% greater risk of SMMM than privately insured people
 - Among Medicaid beneficiaries, people of color (especially Black and Indigenous people) and rural residents face highest risks
- These data are new, but not surprising based on existing evidence
- Medicaid policy has a disproportionate impact in rural areas and among racial groups most affected by SMMM. The potential for improvement is substantial.

Discussion points on Medicaid policy

- Reimbursement rates
 - Medicaid pays ~1/2 of what private plans pay, leading to financial challenges for hospitals and clinical practices, based on payer mix
- Postpartum Medicaid extension (1 year postpartum)
 - >50% of Medicaid beneficiaries have postpartum churn
 - ~1/3 of maternal mortality occurs in the postpartum year
- Coverage of non-clinical services
 - Doulas, community health workers, etc.
 - Transportation, housing, etc.



Discussion or questions?



Thank you so much

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