

Burden of Maternal Morbidity and Mortality

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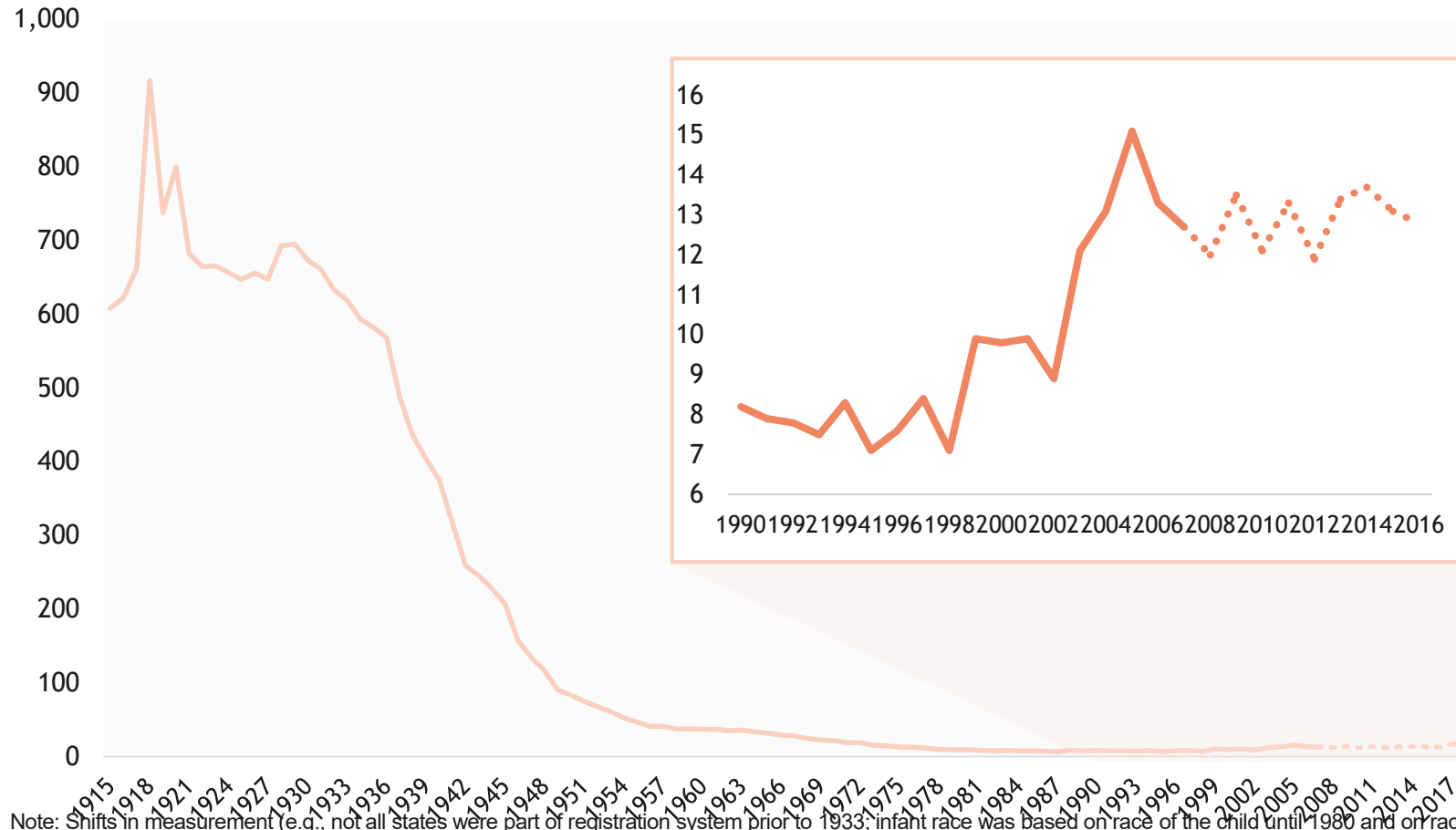
Advancing Maternal Health Equity and Reducing Maternal Mortality - A Virtual Workshop
The National Academies of Sciences, Engineering, Medicine
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Maternal mortality had been gradually declining before recently rising.

Deaths per 100,000 births



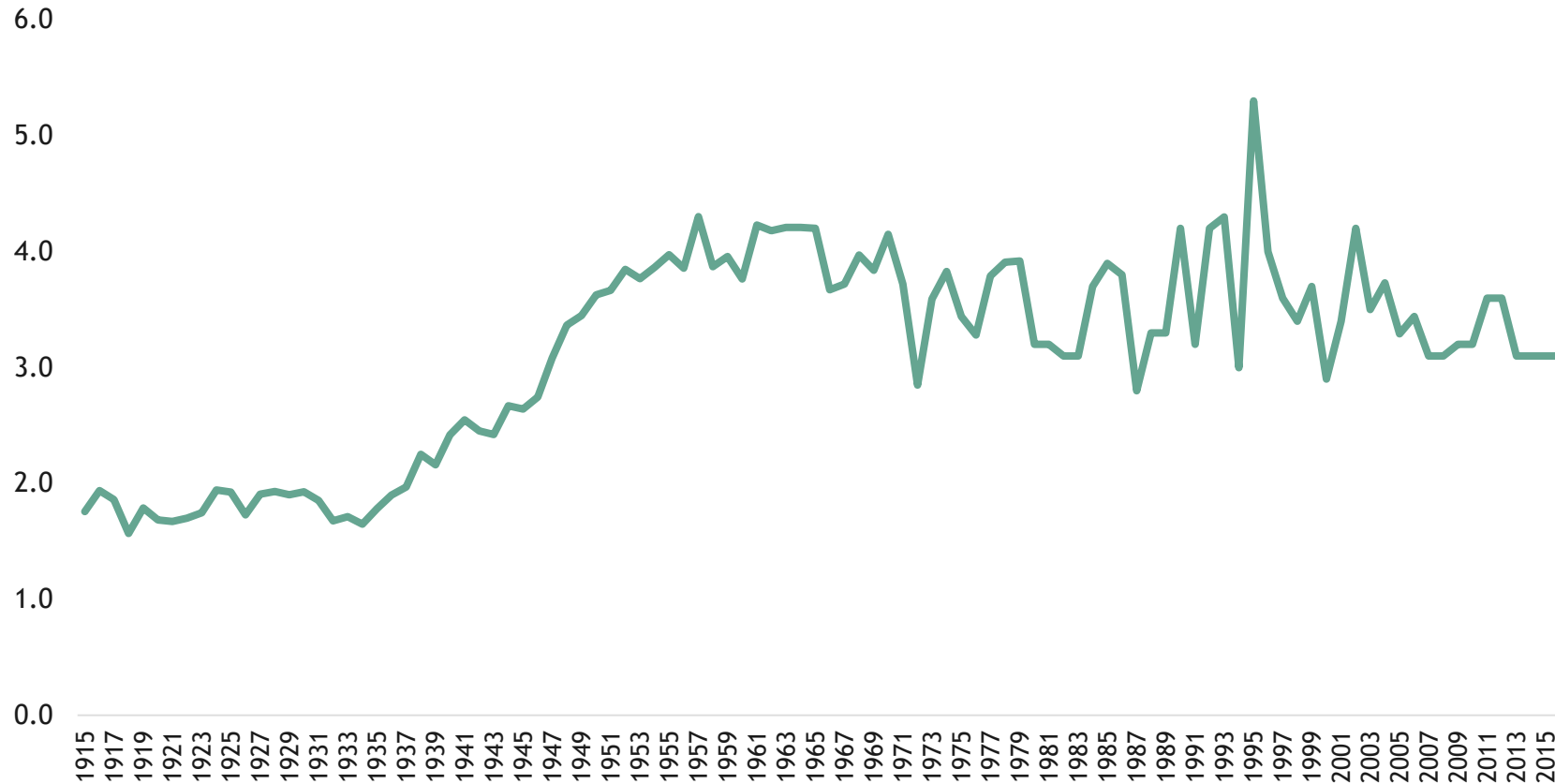
Note: Shifts in measurement (e.g., not all states were part of registration system prior to 1933; infant race was based on race of the child until 1980 and on race of the mother post-1980) account for some of the variation over time. Years 2007–2016 based on two-year estimates of the pregnancy-related mortality rate: Emily E. Petersen et al., "[Racial/Ethnic Disparities in Pregnancy-Related Deaths — United States, 2007–2016](#)," *Morbidity and Mortality Weekly Report* 68, no. 35 (Sept. 6, 2019): 762–65. Data for 2017 unavailable; data for 2018 based on official NVSS rate.

Data: NCHS, Maternal Mortality and Related Concepts, Vital & Health Statistics, Series 33, #3. & annual data reports. 1915–1960 data from NCHS, Vital Statistics Rates in the United States, 1940–1960.



Black birthing people have been more likely to die than white mothers for 100 years.

Ratio of Black to white maternal mortality

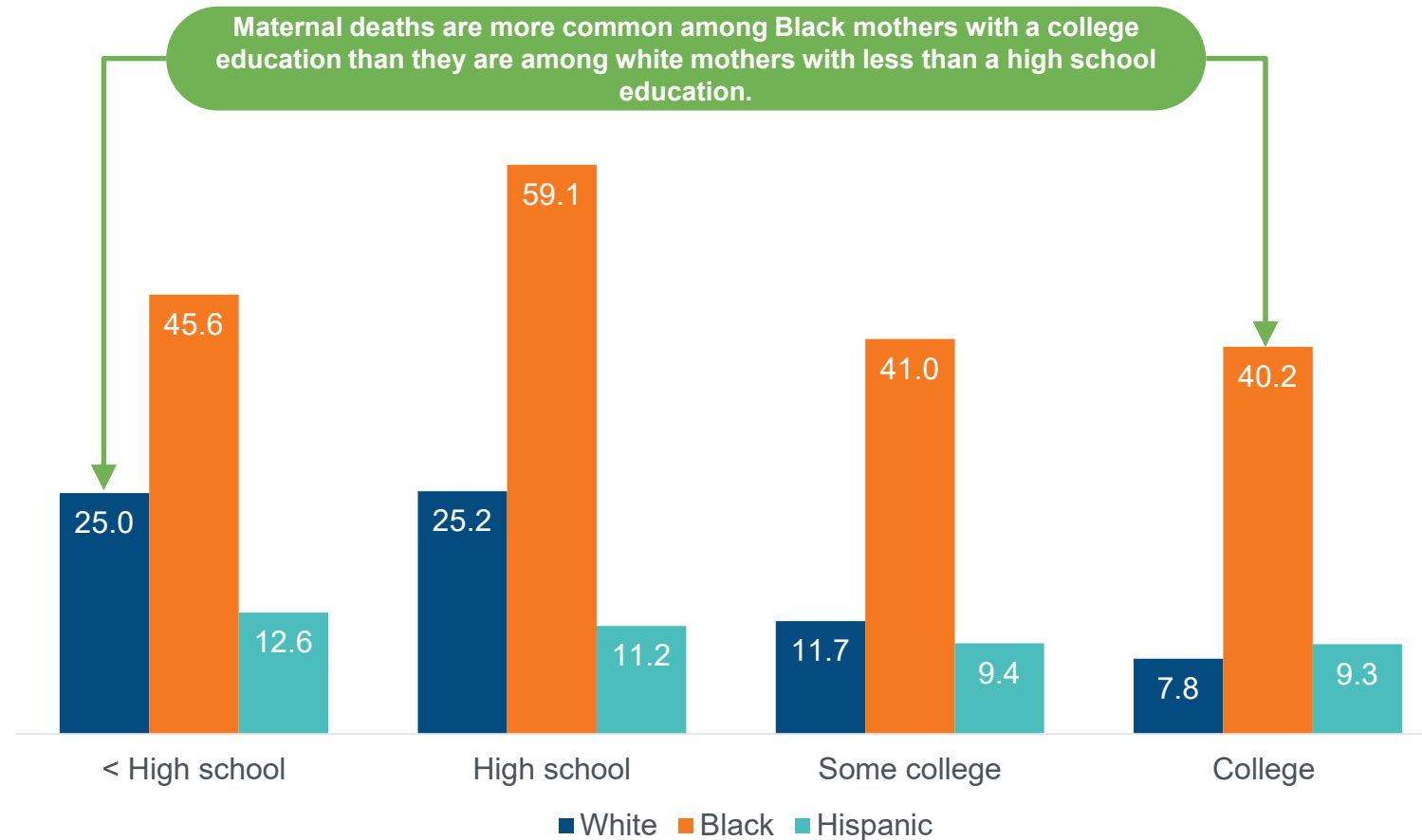


Notes: Shifts in measurement account for some of the variation over time. For example, not all states were part of registration system prior to 1933, and infant race was based on race of the child until 1980 and then race of the mother after 1980.

Data: National Center for Health Statistics (NCHS), "Maternal Mortality and Related Concepts," *Vital and Health Statistics*, series 33, no. 3 (Feb. 2007); and NCHS annual data reports. Data for 1915–1960 from NCHS, *Vital Statistics Rates in the United States 1940–1960*. Data for 2007–2016 based on two-year estimates of the pregnancy-related mortality rate, from Emily E. Petersen et al., "[Racial/Ethnic Disparities in Pregnancy-Related Deaths — United States, 2007–2016](#)," *Morbidity and Mortality Weekly Report* 68, no. 35 (Sept. 6, 2019): 762–65.

Even higher education does not protect Black mothers from pregnancy-related death (U.S., 2007–16).

Pregnancy-related mortality ratios per 100,000 births in the U.S., 2007–2016



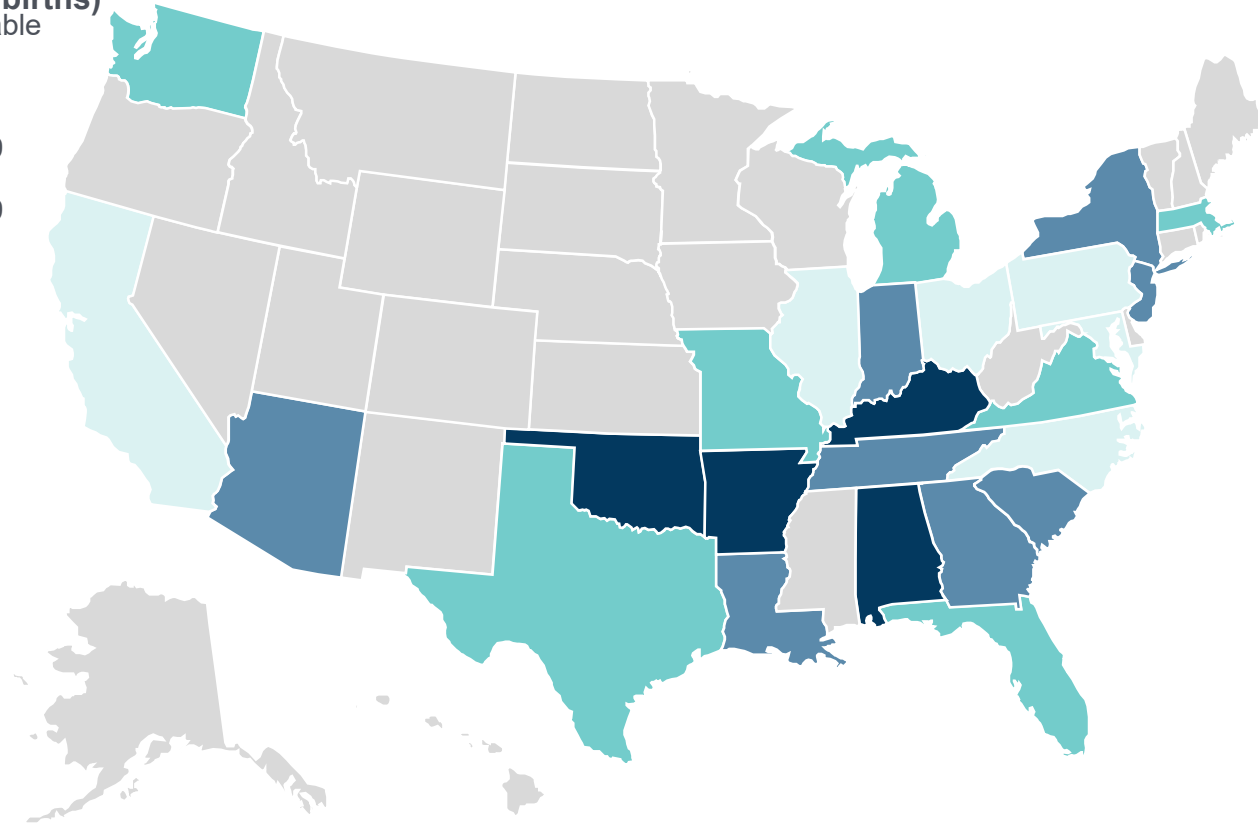
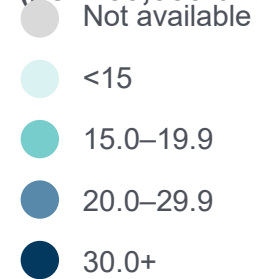
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A woman's chance of dying in childbirth is twice as high in some states than in others (maternal mortality by state, U.S., 2018).

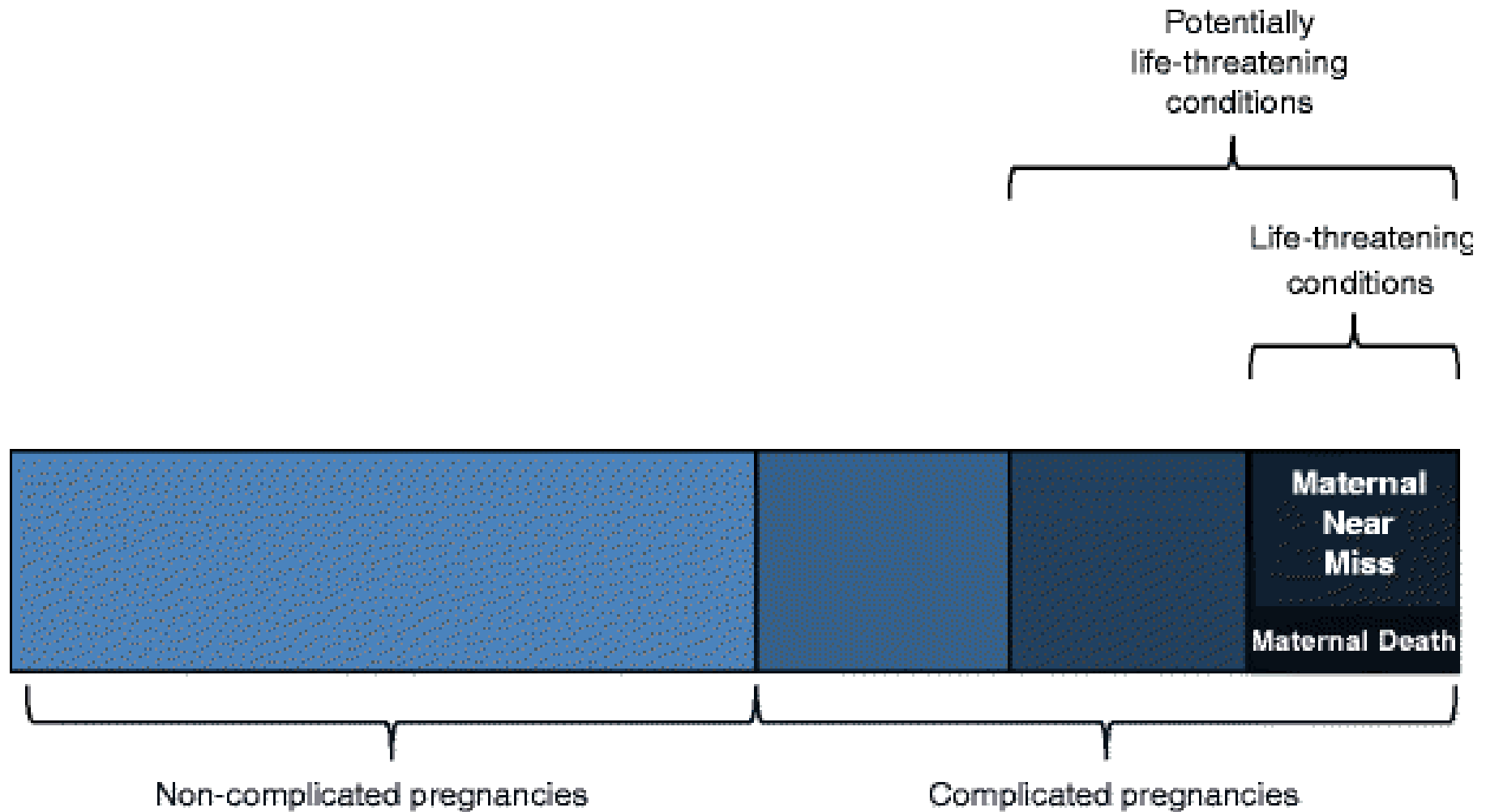
Variation in state maternal mortality rates, 2018

**Maternal mortality
ratio
(per 100,000 births)**

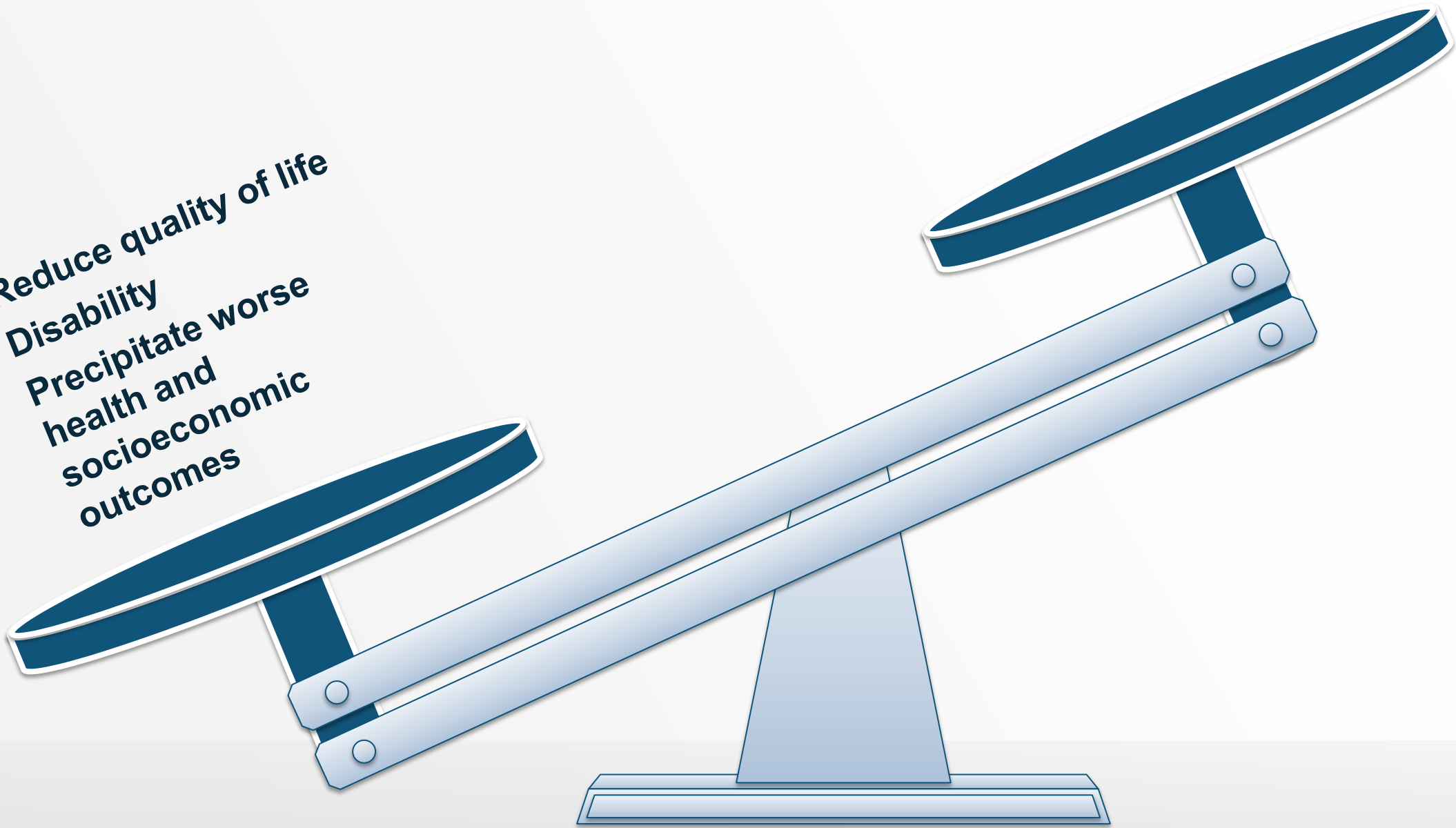


Data: National Center for Health Statistics, [Maternal Mortality by State, 2018](#).

Maternal Morbidity

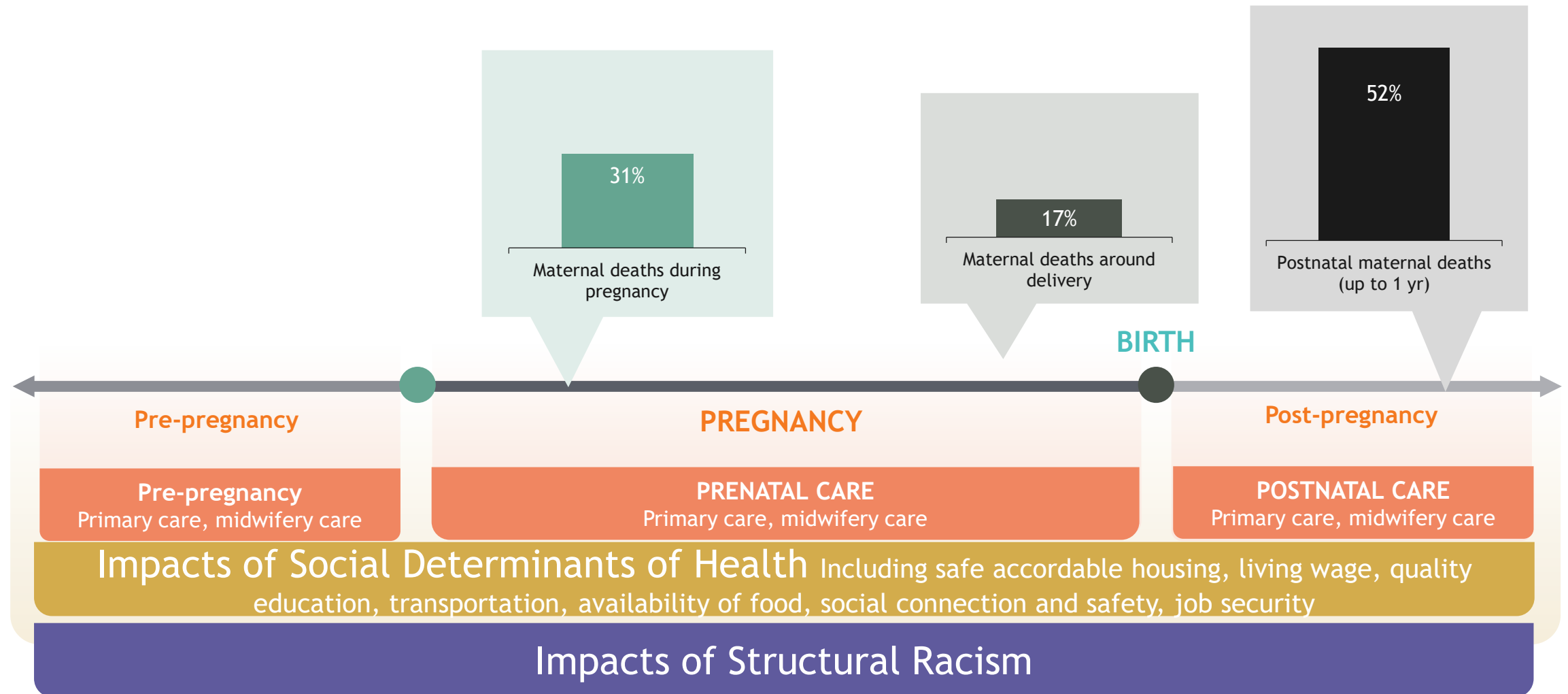


- Reduce quality of life
- Disability
- Precipitate worse health and socioeconomic outcomes



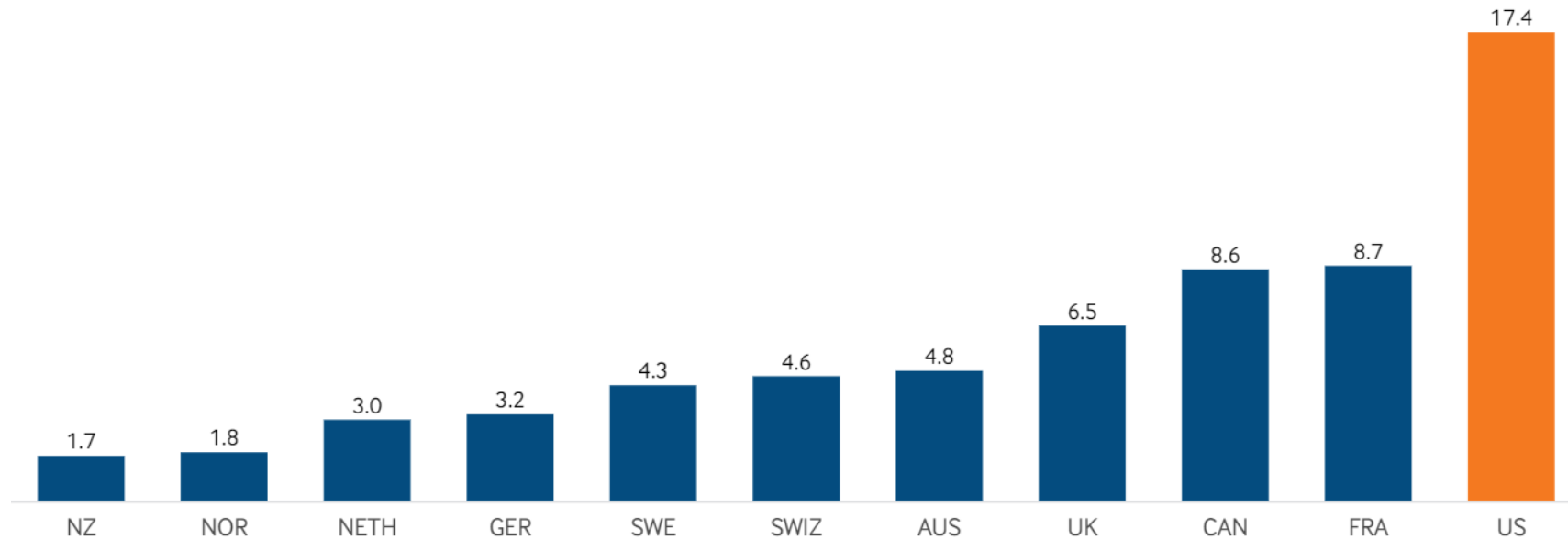
Burden of Maternal morbidity

Common Drivers of Maternal Mortality



Maternal Mortality Ratios in Selected Countries

Deaths per 100,000 live births



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Notes: The maternal mortality ratio is defined by the World Health Organization as the death of a woman while pregnant or within 42 days of termination of pregnancy, irrespective of the duration and site of the pregnancy, from any cause related to or aggravated by the pregnancy or its management but not from accidental or incidental causes.

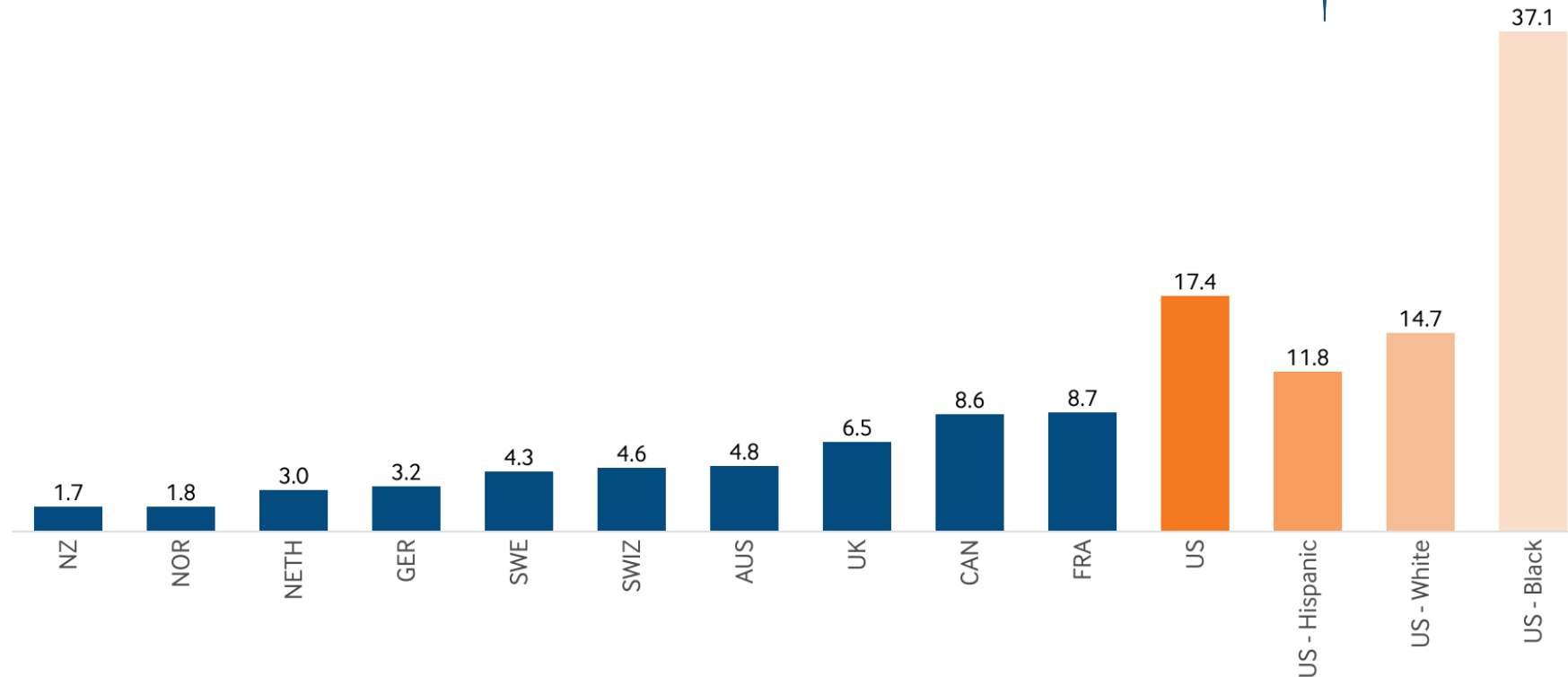
Data: OECD Health Data 2020, showing data for 2018 except 2017 for Switzerland and the UK; 2016 for New Zealand; 2012 for France.

Source: Roosa Tikkanen et al., *Maternal Mortality and Maternity Care in the United States Compared to 10 Other Developed Countries* (Commonwealth Fund, Nov. 2020).

<https://doi.org/10.26099/411v-9255>

The State of Maternal Health Care in the U.S.

Deaths per 100,000 live births



Notes: The maternal mortality ratio is defined by the World Health Organization as the death of a woman while pregnant or within 42 days of termination of pregnancy, irrespective of the duration and site of the pregnancy, from any cause related to or aggravated by the pregnancy or its management but not from accidental or incidental causes.

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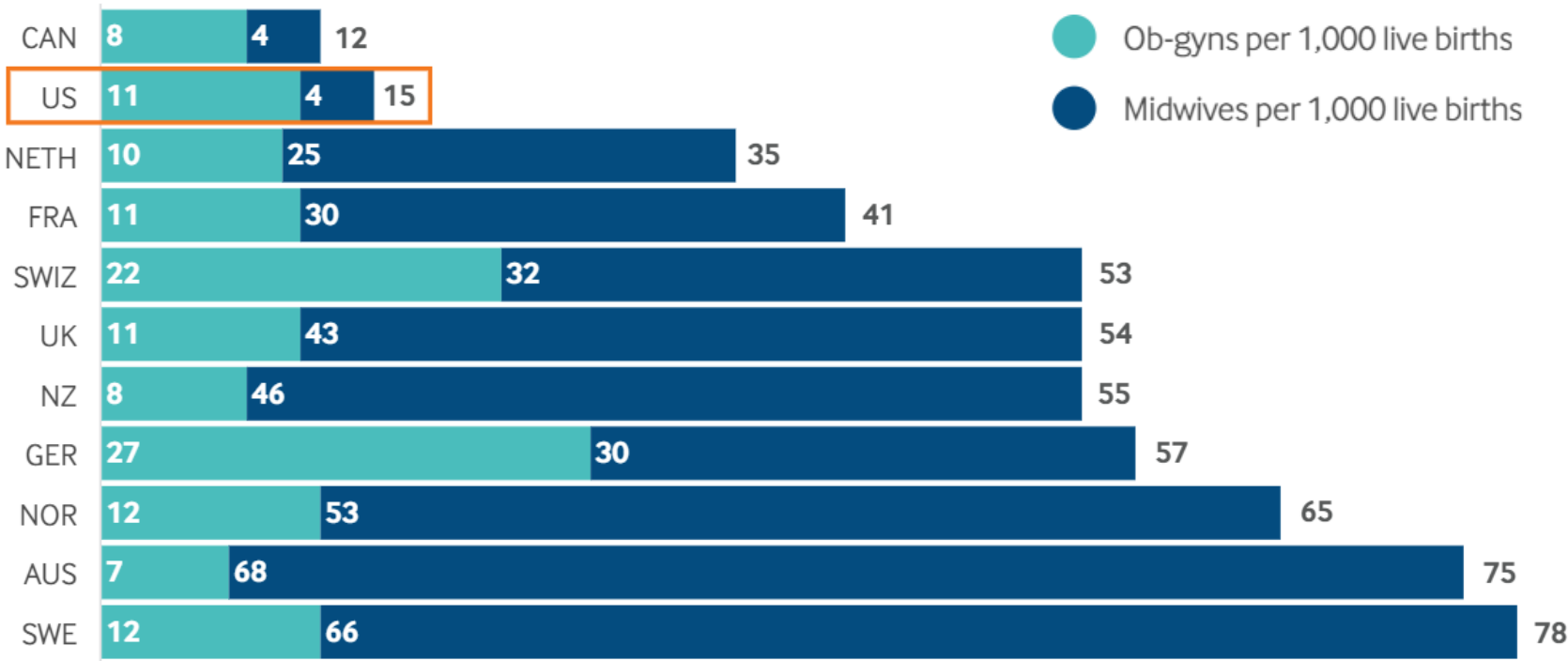
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Supply of Midwives and Ob-Gyns, 2018 or Latest Year

Number of providers (head counts) per 1,000 live births*

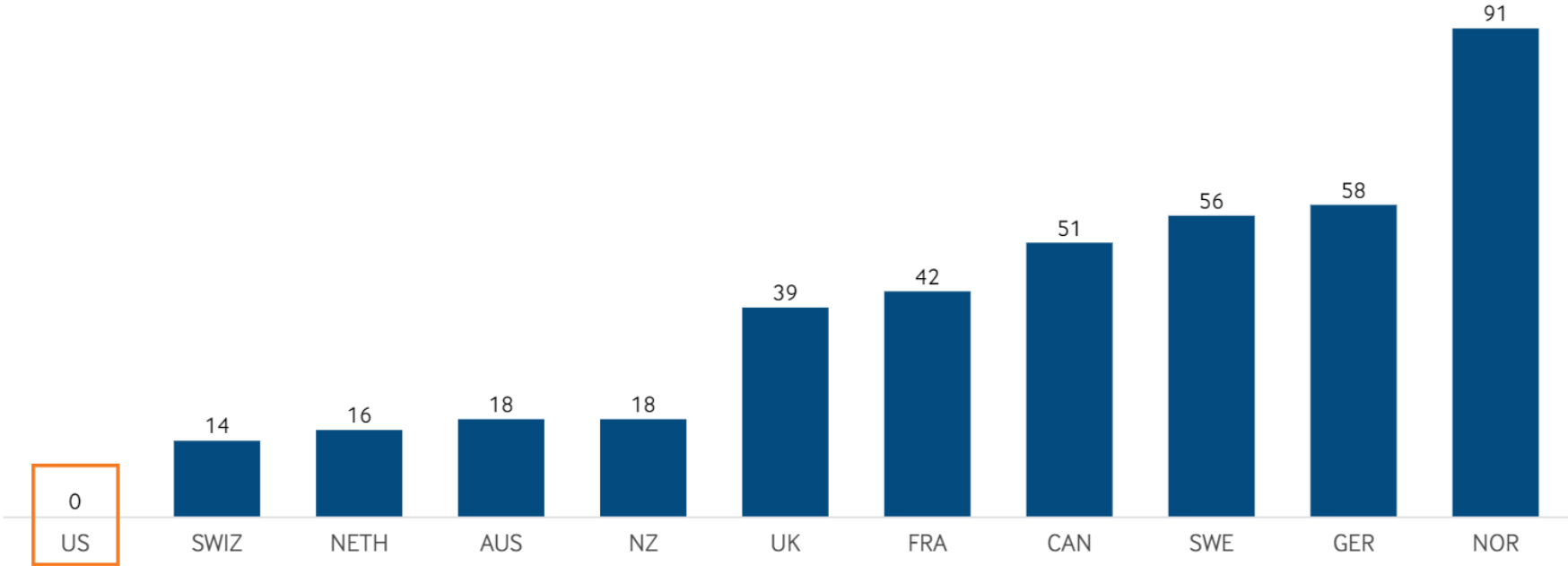


* "Sum" (right of horizontal bars) may not reflect arithmetic sum of figures shown for Ob-Gyn and midwife providers because calculations were performed on exact figures, while the figure presents rounded figures. Data: OECD Health Data 2020, representing "practicing midwives" except: Canadian data reflect "professionally active" midwives; U.S. data reflect midwives "licensed to practice." Data for professionals "licensed to practice" tend to be higher than data for "professionally active," while numbers of "practicing" professionals tend to be the lowest. Data for 2018 except 2017 for Australia, Canada, Sweden, and 2015 for the U.S. Reflects midwifery professionals and midwifery associate professionals (ISCO-08 2222, 3222). U.S. data reflect CNM, CM, CPM; excludes noncertified ("lay") midwives. "Sum" does not reflect total maternity care workforce, since primary care physicians/family practitioners are not shown.

Source: Roosa Tikkanen et al., *Maternal Mortality and Maternity Care in the United States Compared to 10 Other Developed Countries* (Commonwealth Fund, Nov. 2020). <https://doi.org/10.26099/411v-9255>

Weeks of Paid Maternity Leave, 2018

Total weeks of paid leave available to mothers



Postpartum Home Visits

Country	Covered by national insurance?	Timing and number of covered visits
Australia	Yes	Within week 1, typically 1-3 visits
Canada	Yes	Contacted/visited within 24-48 h after going home
France	Yes	Starting within 24 h after discharge, 1-3 visits
Germany	Yes	Daily if needed until day 10, plus 16 visits as needed until 8 weeks postpartum
Netherlands	Yes	Daily, starting immediately after birth and up to 10 days postpartum, staying at a minimum 4 h per day
New Zealand	Yes	≥5 visits over 6 weeks, starting within 48 h postpartum
Norway	Yes	Midwife: Starting at 24 to 48 hours, or 3 days (for low-risk multiparous women) after going home Nurse: 1 st visit on days 7 to 10 postpartum; 2 nd visit on days 14 to 21
Sweden	Yes	1 st visit during week 1; visits thereafter every 1-2 weeks until week 8
Switzerland	Yes	Daily, up to 10 days postpartum
UK	Yes	At least until 10 days postpartum
US	Some Medicaid Some health plans	Varies by state Medicaid prog. and by individual insurer



Policy Implications

- Maternity Care Providers
 - The U.S. has a relative undersupply of maternity care providers, especially midwives, and lacks comprehensive postpartum supports.
- Paid leave
 - Women receiving paid leave use fewer health care services compared to women with only unpaid leave
- Postpartum care
 - Expanding eligibility for Medicaid may lead to more stable postpartum coverage



Medicaid and maternal health



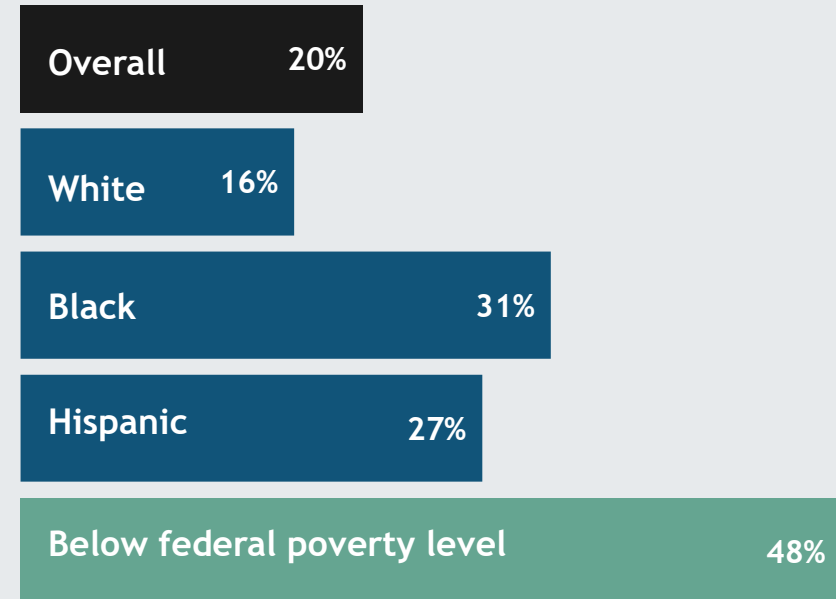
43% of all births are covered by Medicaid

66% of all births by Black mothers are covered by Medicaid

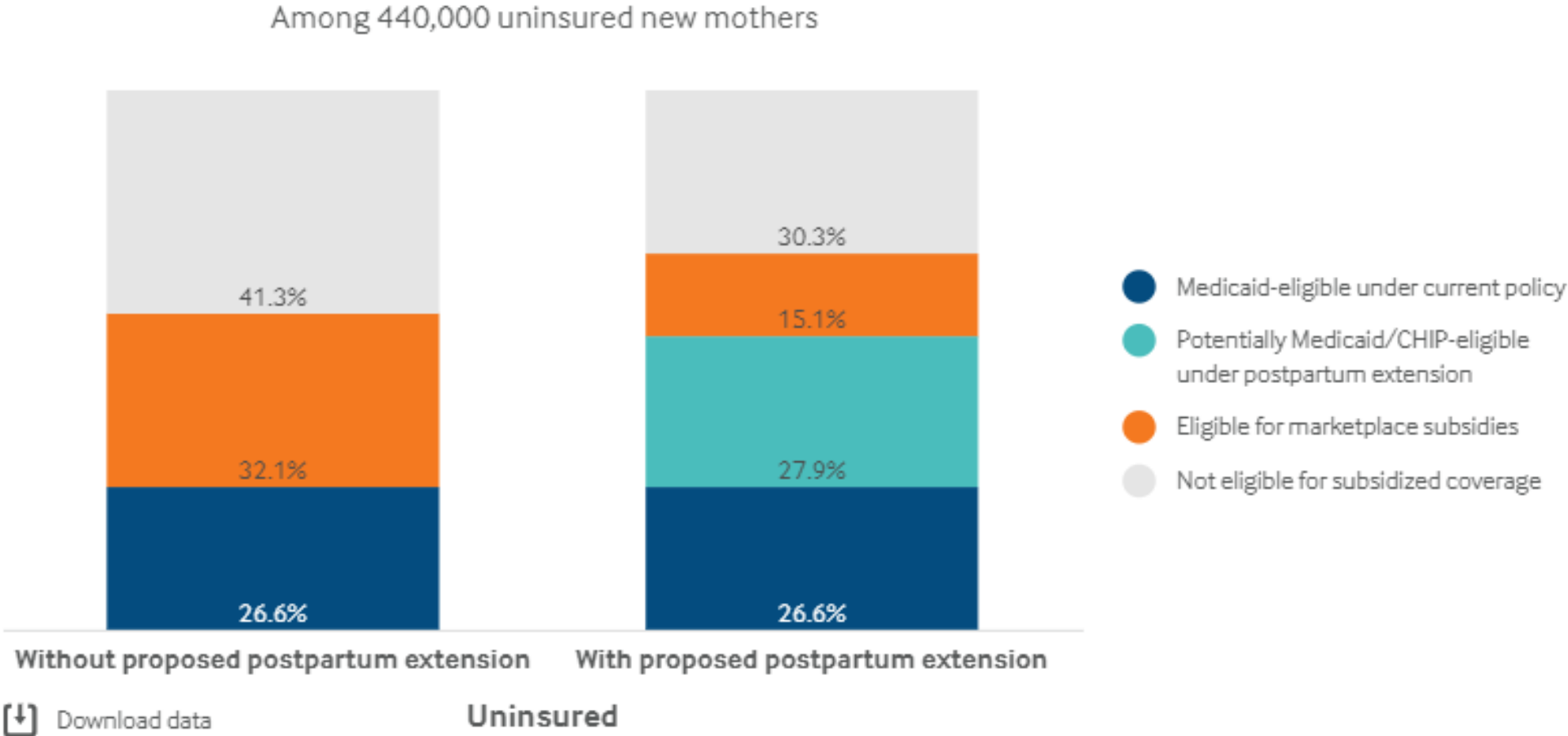


The program's coverage of **family planning services, prenatal and maternity care** plays a significant role in improving maternal health.

One in five women of reproductive age are enrolled in Medicaid, with even higher proportions among women of color

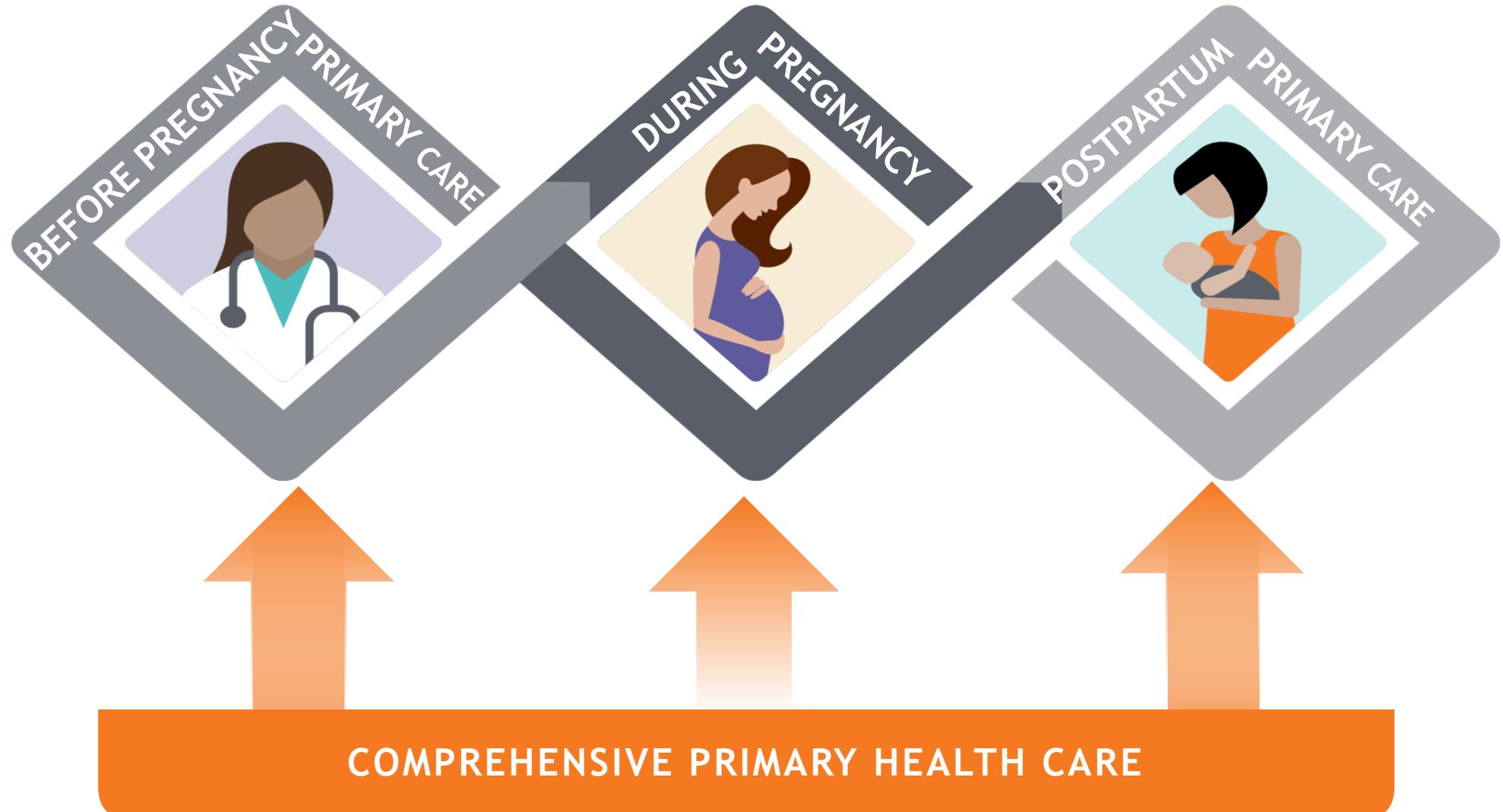


Nearly 30% of Uninsured New Mothers would be Eligible for Coverage with a 12-Month Postpartum Medicaid Extension



Source: Jennifer Haley and Emily M. Johnston, *Closing Gaps in Maternal Health Coverage: Assessing the Potential of a Postpartum Medicaid/CHIP Extension* (Commonwealth Fund, Jan. 2021).

Comprehensive primary health care



Racial Equity in Maternal Health

Addressing Unequal Treatment

Black serving hospitals are more likely to perform worse on 12 of 15 delivery indicators and have higher severe maternal morbidity rates than white serving hospitals

Black women are less likely to be screened postpartum for depression and access mental health treatment and less likely to receive health guidance on core maternal health concerns

Addressing Unequal Experience

Black women compared to white women are more likely to report:

Being treated unfairly and with disrespect by providers because of their race

Not having decision autonomy during labor and delivery

Feeling pressured to have a cesarean

Addressing Unequal Outcomes

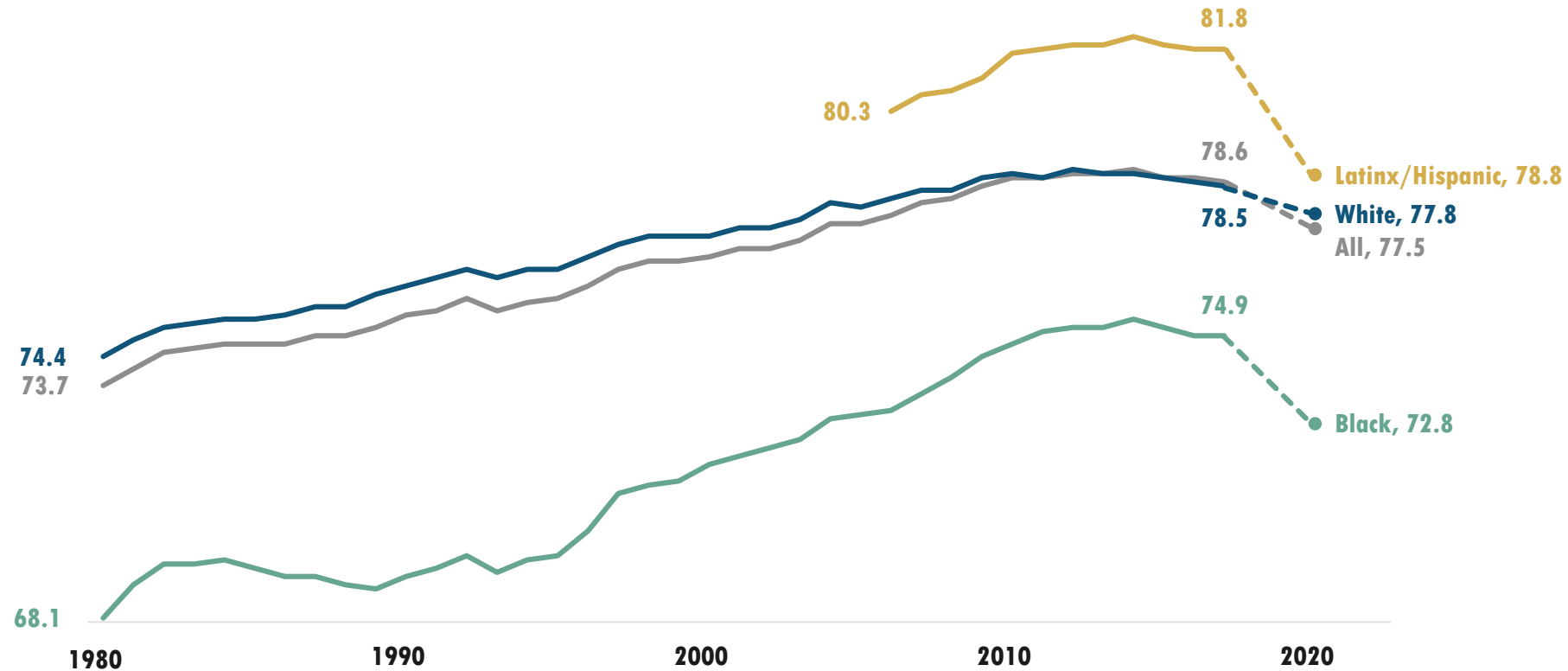
- Disparities in maternal mortality and morbidity
- Even within the same hospital Black and Latina women are more likely to suffer from severe maternal morbidity than white people, regardless of insurance





The gap in average life expectancy between Black and white adults has existed for generations, and COVID-19 erased recent progress.

Average life expectancy at birth (years), 1980–2020



Notes: 1980–2017 data come from: [United States Life Tables](#), National Vital Statistics Reports 68, no. 7 (June 24, 2019). Black and white data points before 2006 include Latinx/Hispanic people; starting in 2006, they represent non-Latinx/Hispanic Black and non-Latinx/Hispanic white. 2020 projections (dashed lines) appear in Andrasfay and Goldman (see below), representing the Institute for Health Metrics and Evaluation (IHME) current/medium projection (Oct. 2020).

Chart reproduced from: Theresa Andrasfay and Noreen Goldman, “Reductions in 2020 U.S. Life Expectancy Due to COVID-19 and the Disproportionate Impact on the Black and Latino Populations,” PNAS 118, no. 5 (Feb. 2021): e2014746118.



Community-Based Models to Improve Maternal Health Outcomes and Advance Health Equity

Doulas



Those at high risk for adverse birth outcomes receiving care from doulas, compared with those not receiving care from doulas, are:

- Two times less likely to experience a birth complication
- Four times less likely to have a low birthweight baby
- More likely to breastfeed
- More likely to be satisfied with their care

Midwifery Care



Midwifery-led maternity care results in:

- higher rates of vaginal delivery
- lower rates of C-sections
- significantly lower rates of preterm births and low-birthweight infants compared with other maternity models

Group Prenatal Care



Group prenatal care demonstrates:

- reduced rates of preterm birth (upwards of 41%), neonatal intensive care unit (NICU) admissions, low birthweight, and emergency department use during pregnancy
- increases in breastfeeding, patient and physician satisfaction, and parental knowledge of childbirth and child-rearing

Pregnancy Medical Homes



A medical home pilot in **Texas** resulted in better outcomes:

- fewer emergency department visits, and fewer C-sections
- Pilots in **Wisconsin and Texas** increased likelihood of attending a postpartum visit

North Carolina formed a PMH model to prevent preterm births and reduce C-sections for individuals enrolled in Medicaid:

- nearly 7 percent decrease in the low-birthweight rate among the state's Medicaid population

COVID 19 Highlights the Need for High-Value Care

The same communities impacted by COVID19 are the same impacted by the crisis of maternal mortality and morbidity - making action more urgent.



Invest in a diverse
perinatal workforce



Support and Strengthen
Birthing Centers



Extend postpartum
Medicaid coverage to 1
year

Thank You



Contact

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