

# HHS PERINATAL IMPROVEMENT COLLABORATIVE ANNUAL UPDATE

Among developed nations, the **U.S. ranks highest for maternal mortality, with over 80% of these deaths estimated to be preventable.**<sup>1-3</sup> Severe maternal morbidity (SMM)—characterized by the CDC as unexpected labor and delivery complications that result in short-term or long-term health consequences for women—occurs approximately 70 times more frequently than maternal mortality.<sup>4-6</sup>

**255**  
HOSPITALS

**50**  
STATES + DC

In 2020, the U.S. Department of Health and Human Services (HHS), through the Office of the Assistant Secretary for Health (OASH) Office on Women's Health (OWH), launched the Maternal Morbidity and Mortality Data and Analysis Initiative. This initiative includes the HHS Perinatal Improvement Collaborative (HHS PIC), a multi-year effort that connects over 250 hospitals nationwide to utilize standardized data, track clinical practices, generate actionable insights that inform policy, and improve outcomes for mothers and infants.

This interim summary report provides an overview of the activities and outcomes of the HHS PIC, including:

- Trends in maternal and infant health outcomes
- Assessment of select maternal infant quality improvement areas of focus, prevalence, and outcomes
- Association of maternal chronic conditions with the HHS PIC maternal focus areas
- Barriers to implementing best practices and managing maternal and infant risks

**2.6M**  
DELIVERY VISITS

The report covers 2,612,146 deliveries across two baselines and three performance years. **Findings demonstrate a 41.5% decline in delivery-visit mortality among hospitals participating in the HHS PIC compared with a 5.9% decline in a benchmark group of similar hospitals** over the same period. This difference may reflect the HHS PIC's impact; it may also be influenced by selection effects, as participating hospitals may have had greater opportunities for improvement, stronger leadership support, or greater organizational readiness for change. In contrast, SMM rates remained stable for both the HHS PIC and matched hospitals.

Findings highlight rising maternal complexity: 58.8% of women were in at least one of the ten HHS PIC

quality improvement areas of focus, and 23.5% were in multiple areas of focus. The number of women in seven HHS PIC areas of focus increased over time, with rates of mental health conditions, hypertensive disorders, and hemorrhage increasing by more than 15%. Additionally, 33.6% of women had at least one of the eight chronic conditions evaluated. **The prevalence of all but one chronic condition (SUD) increased, with the highest relative increase observed for obesity (17.3%), anemia (15.7%), and mental health conditions (12.3%).** Chronic conditions were distinguished from the HHS PIC quality improvement areas of focus using medical diagnosis codes.

**Condition-specific mortality rates show that some rare conditions are associated with very high mortality but may be overlooked when focusing only on prevalence.** For example, **venous thromboembolism (VTE) had the highest mortality rate (878.9 per 100,000) but occurred in <0.1% of women.** In contrast, mental health conditions, diabetes, hypertensive disorders, and infection each



Figure 1. Study measurement periods

affected more than 10% of women and were associated with a moderate mortality risk, with rates of 12.6–15.8 per 100,000 deliveries.

Maternal deaths during the delivery visit most often occurred in conjunction with multiple high-acuity complications, with 97.5% of women who died also having SMM. Of 200 delivery-visit deaths, 169 involved cardiovascular conditions, 150 involved blood utilization, and 133 involved hemorrhages. Among women who died, many had more than one chronic condition, with **obesity, anemia, and cardiovascular conditions each present in approximately one-third of delivery-visit deaths. Chronic cardiovascular conditions, mental health conditions, obesity, and anemia each occurred in approximately a fifth of women with SMM.** These findings suggest that further reductions in maternal mortality and morbidity **will likely require a focus on upstream prevention and chronic disease management, paired with a high-reliability response to acute obstetric complications.**

Across 2,805,931 infants, 10.9% were premature (<37 weeks of gestation), and 46.4% of eligible infants received exclusive breastfeeding during the birth hospitalization. Similar declines in mortality were seen between the HHS PIC hospitals (14.2%) and benchmark hospitals (14.0%). In contrast, **the HHS PIC hospitals demonstrated a substantially larger relative reduction in severe complications (19.7%)** compared with benchmark facilities (2.3%). Rates of overall complications remained largely unchanged over time.

**Supporting and promoting the implementation of best practices for managing maternal and infant risk and improving outcomes** is an important component of the HHS PIC. Commonly identified challenges include competing priorities (managing multiple initiatives and operational demands) and resource constraints (limited staffing, time, funding, or infrastructure to support implementation). **Physician engagement was the most frequently reported barrier to implementation.** Teamwork perception surveys found that management and administrative roles reported stronger overall teamwork than bedside and frontline staff, while the greatest

variability in responses was observed for perceptions of leadership.

**As HHS OWH looks to the future, it remains dedicated to leading and coordinating national efforts to enhance health outcomes for women and girls through policy initiatives, educational programs, and innovative solutions.** In the coming years, the HHS PIC initiative will continue disseminating patient safety and quality improvement strategies to hospitals nationwide, allowing participants to draw on proven and reliable tools and resources, put evidence-based practices into action, and achieve better patient outcomes.

## HHS PERINATAL IMPROVEMENT COLLABORATIVE REPORT FOCUS AREAS

### Maternal

1. Blood Utilization
2. Cardiovascular Conditions
3. Diabetes
4. Hemorrhage
5. Hypertensive Disorders
6. Infections
7. Mental Health Conditions
8. Shoulder Dystocia
9. Substance Use Disorder (SUD)
10. Venous Thromboembolism (VTE)

### Infant

1. Infections
2. Neonatal Abstinence Syndrome (NAS)
3. Breastfeeding

## CHRONIC CONDITIONS

1. Anemia
2. Autoimmune Disorders
3. Cardiovascular Conditions
4. Diabetes
5. Hypertension
6. Mental Health Conditions
7. Obesity
8. Substance Use Disorder (SUD)

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