

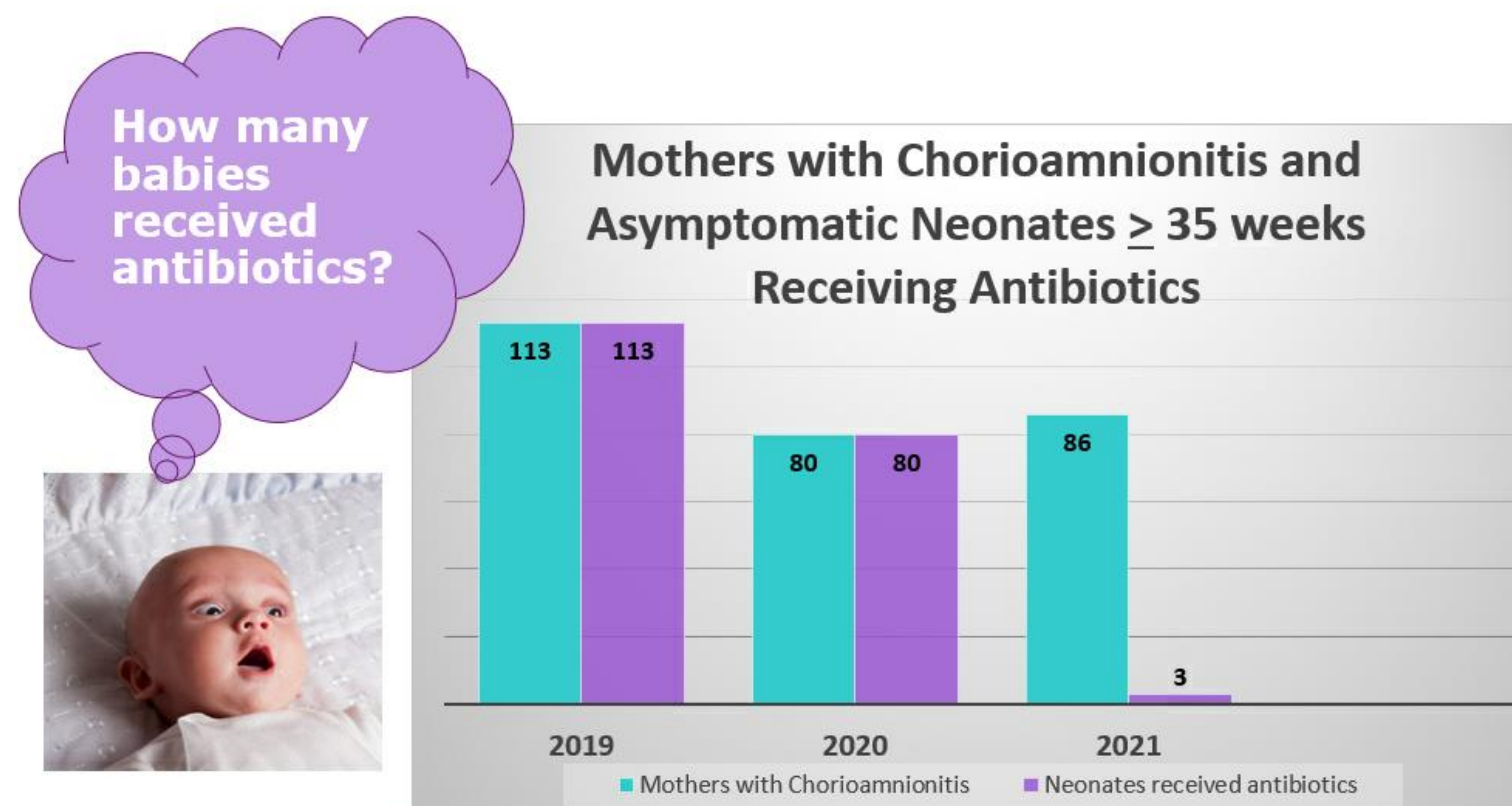
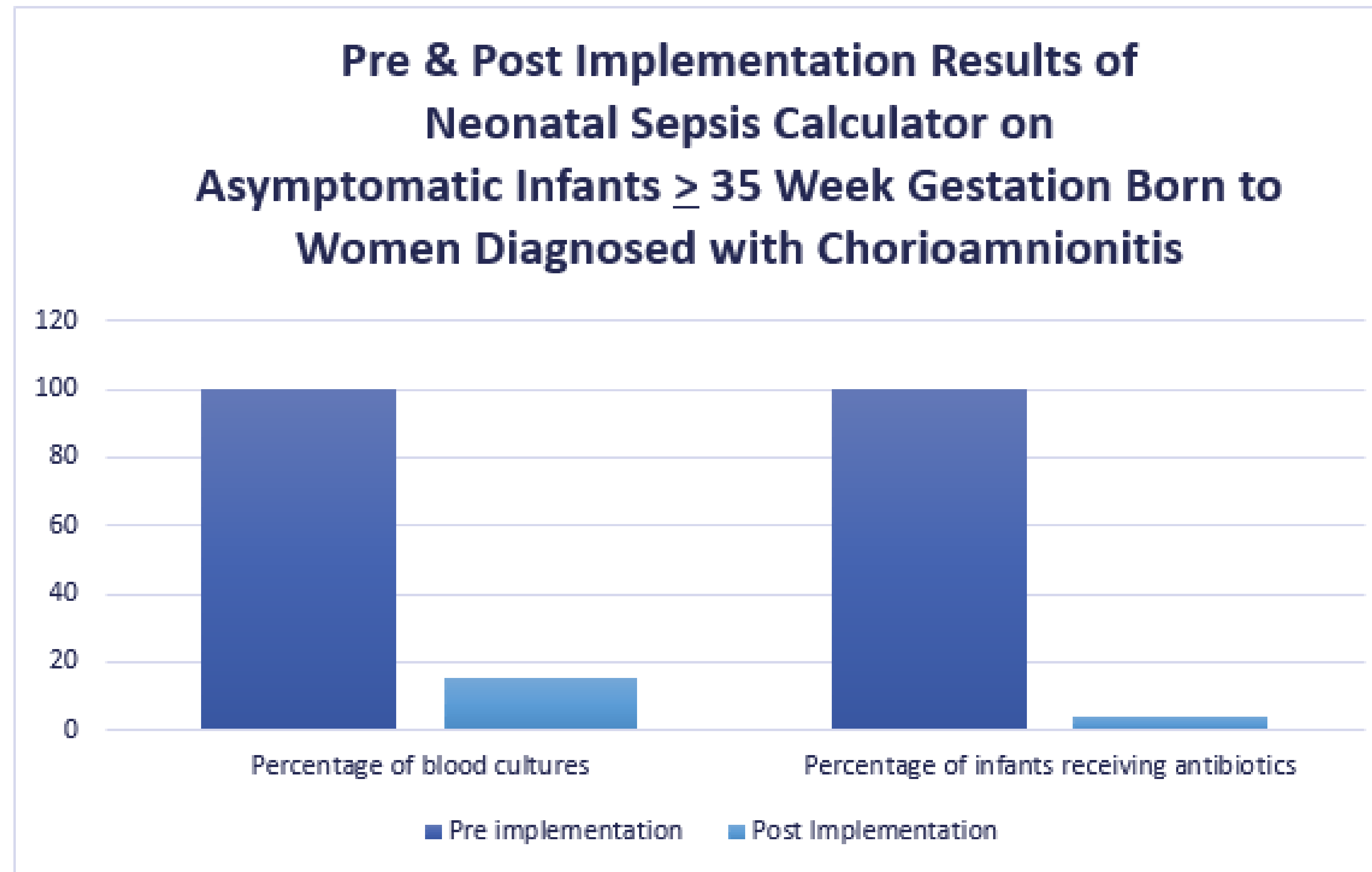
Problem

- Chorioamnionitis is a diagnosis given when a woman has temperature over 100.4 F twice, a fetal heart rate over 160 beats per minute for 10 minutes, maternal leukocytosis and/or purulent vaginal discharge during intrapartum period.
- Standard of treatment for all well appearing neonates born to mothers with chorioamnionitis was evaluation with a blood culture, complete blood cell count and empiric antibiotic treatment for 36 hours of life irrespective of their clinical status.
- Past audits showed 100% asymptomatic newborns born to mothers with chorioamnionitis had negative blood cultures.
- When medically necessary, antibiotics can be lifesaving, but may lead to long term health risks.
- We were challenged with finding a way to decrease empiric antibiotic treatment to these healthy neonates born to mothers with chorioamnionitis.

Project Implementation

- A validated neonatal sepsis calculator was incorporated into the electronic medical record and utilized for every neonate born at ≥ 35 weeks gestation.
- Education on the usage of the calculator was provided to the obstetrical and pediatric nurses and providers throughout the Advocate Health System.
- Implementation of the calculator began on January 4th 2021, at Advocate Hospitals.

Results



Results

Following implementation of the neonatal sepsis calculator:

- Number of blood cultures performed reduced by 82%.
- Number of neonates who received antibiotic reduced by 96%.
- This represents a savings of at least \$700 per neonate by avoiding the cost of the complete blood cell count, blood culture and antibiotic administration.

Implications for Practice

- The incidence of chorioamnionitis in term infants is 9.7/1000.
- Of 3.6 million infants born in United States in 2020, 34,920 infants were born to mothers with chorioamnionitis.
- Implementation of the neonatal sepsis calculator throughout the United States will significantly reduce the number of neonates receiving antibiotics during the first few days of life and save \$60 million in health care dollars.

References

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