New study finds higher C-section infection risk for mothers on Medicaid

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The risk of surgical site infection following cesarean delivery is higher among Medicaid-insured women when compared to women who were privately insured, according to a study published in *Infection Control &*

Hospital Epidemiology, the journal for the Society for Healthcare Epidemiology of America. The Centers for Disease Control and Prevention (CDC) study found that mothers delivering via cesarean section covered by Medicaid had a 1.4 fold increase in infection compared to those covered by private insurance.

"The findings force researchers to look beyond the usual suspects behind surgical site infections," says CDC health scientist Sarah Yi, Ph.D., lead author of the study. "More investigation is needed to determine why women with Medicaid health insurance had a much greater burden of surgical site infections after cesarean delivery than privately insured women."

One-third of births in the United States occur by cesarean delivery, also known as cesarean section or C-section; in 2014, about 40 percent of U.S. cesarean births were covered by Medicaid. While lifesaving in some cases, cesarean deliveries have additional risks, including surgical site infection. Researchers used linked data from CDC's National Healthcare Safety Network (NHSN) and state inpatient discharge data to identify surgical site infections in the 30 days following C-section from a pool of 291,757 C-section deliveries that occurred from 2011-2013 in California; 48% of this total were covered by Medicaid. This is the largest study to date to examine the role of health insurance coverage in the risk of surgical site infection following cesarean deliveries in the United States.

Surgical site infections were detected in 1,055 deliveries (0.75%) covered by Medicaid and 955 deliveries (0.63%) covered by private insurance. Surgical site infections were more frequently detected during post-discharge surveillance and hospital readmission than during the original hospitalization. Risk of surgical site infection during the original hospitalization was small and did not differ by payer type.

Researchers note that the increased risk may stem from a combination of factors, including patient, provider, facility, and state policy factors. Examples may include patient health literacy, patient living situation, and available social support following hospital discharge, and payer-driven differences in health care provision. Additionally, ensuring readiness for discharge and adequate discharge education may be important interventions to improve outcomes among patients with social, economic, and other vulnerabilities.

These findings suggest the need to evaluate maternal healthcare delivered to women covered by Medicaid to inform targeted infection prevention efforts by hospitals serving vulnerable patient groups.

"There is a gap in our understanding of health equity when it comes to healthcare-associated infections," said Yi. "Future research is needed to identify, understand, and reduce potential disparities in healthcare-associated infections related to socioeconomic status, insurance coverage, race/ethnicity, and rural residence."

This study may have been limited by the lack of information on post-discharge surveillance methods. Due to data limitations researchers were unable to account for other potential confounders, including marital status, repeated pregnancy loss, duration of insurance coverage, and prenatal and postnatal care.

More information: Sarah H. Yi et al, Surgical site infection risk following cesarean deliveries covered by Medicaid or private insurance, *Infection Control & Hospital Epidemiology* (2019). DOI: 10.1017/ice.2019.66

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