Improving equity in maternal and newborn outcomes by eliminating disparities in maternal drug screening

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Despite similar rates of maternal substance use, Black peripartum mothers are more likely to undergo urine drug screening (UDS) and be reported to Child Protective Services (CPS) than White mothers. Mandated reporting to CPS that is associated with UDS threatens the therapeutic relationship between patient and provider, creating a barrier in prenatal care due to fear of punitive measures. Any barrier to care can significantly impact outcomes, however, access to prenatal care and a trusting relationship with a provider is particularly critical in Missouri, where Black women are three times more likely to die within one year of pregnancy than White women.

Cannabis use (similar to tobacco) is discouraged during pregnancy, and medical societies recommend verbal screening for the purpose of counseling. However, a positive history of isolated Cannabis use (iCU) is frequently used as an indication for UDS due to concerns that it is associated with other substance misuse. Recent literature, however, has demonstrated no association between prenatal isolated cannabis use and other substance misuse. Conversely, it has shown that Black mothers are disproportionately likely to be tested and reported to CPS for iCU. Thus, UDS for iCU poses a significant risk for harm that disproportionately impacts Black mothers, while compounding generational trauma inflicted by the health care system, with no known benefit.

To address these disparities, a multidisciplinary clinical team led an initiative to remove iCU as a UDS indication for peripartum mothers in hospital policy and practice. Pathology Informatics assisted this initiative by facilitating changes in the electronic medical record that restricted ordering to approved indications only and developing methods for streamlined auditing and analysis of the intervention's impact.

The initiative has been a resounding success. Overall, a 75% decrease in the number of deliveries with UDS performed was observed, and the significant racial disparity has been eliminated. Pre-intervention, 22% of deliveries for Black mothers had UDS vs. 10% for White mothers; post-intervention, 5% of deliveries for Black and 4% for White mothers had UDS. Additionally, the CPS reporting rate decreased by 66% for Black mothers and 50% for White mothers. This initiative highlights the high level of collaboration needed to effect systemic change when long-standing policy is rooted in racial bias. Laboratory data provided vital information about UDS disparities that propelled policy change. Removing racial bias in policy and practice is a step forward to improving prenatal care and maternal health outcomes.

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