TEAM KENTUCKY

CABINET FOR HEALTH AND FAMILY SERVICES

STATE UNIVERSITY PARTNERSHIP POLICY BRIEF

Assessing Policies and Systems to Improve Maternal and Infant Health in Kentucky

Melissa Eggen, PhD

Partner University: University of Louisville
College or School: School of Public Health and Information Sciences
Principal Investigator: Melissa Eggen, PhD

What is Known on This Topic?
Kentucky has one of the highest rates of maternal mortality in the United States. While contributing factors vary, the majority of maternal deaths in Kentucky can be attributed to accidental overdoses or other behavioral health conditions. Birthing people with Medicaid coverage are disproportionately impacted by adverse maternal and infant outcomes.

What Did This Project Do?
This project identified increasing trends in various maternal and infant morbidities, including pre-pregnancy and gestational hypertension, necrotizing enterocolitis, neonatal abstinence syndrome, and maternal and infant mortality. We also surveyed Kentucky-based birth providers to understand their perspectives and practices related to vaginal birth after cesarean. We surveyed women to learn about their experience with mode of birth following a cesarean delivery.

What could Medicaid do with these findings?
We recommend continuing to gather and share women's stories about birth, including birth after a cesarean, to bring further attention to the experiences of women in Kentucky. The findings from this project can be shared with community partners to support data-driven recommendations for improving access and outcomes for women and infants in Kentucky. We recommend systemic changes to data linkages with Medicaid claims, PRAMS, Vital Statistics, and other sources, to build a more robust understanding of the landscape of maternal health in the state.

Introduction

Women in Kentucky are 2.3 times more likely to die within one year of pregnancy or birth compared to the national average (Eggen & Creel, 2022). Non-Hispanic Black women, those living in rural areas of Kentucky, and Medicaid recipients are at an increased risk of death due to lack of access to care, lower socioeconomic status, and other factors (Eggen & Creel, 2022).

Contributing factors to maternal death vary and root causes are difficult to identify. In their 2021 report, the Kentucky Maternal Mortality Review Committee found that substance use disorder was a significant contributor to maternal deaths in the state (KDPH, 2021). Maternal substance use is associated with higher rates of low birthweight, premature birth, miscarriage, stillbirth, and neonatal abstinence syndrome (NAS) (Hayatbakhsh, 2012). Additionally, while cesarean delivery is medically necessary for many women, it is well known to be overused and a contributor to maternal mortality and morbidity. In 2021, Kentucky had one of the highest rates of cesarean delivery in the country at 34.7% of births (CDC, 2021). Vaginal birth after cesarean (VBAC) is one strategy for reducing the number of repeat cesareans and decreasing the likelihood of childbirth-related morbidity and mortality. While VBAC is considered safe for most women, it is difficult to access due to contextual and clinical factors that limit accessibility, especially in rural communities.

Medicaid pays for almost half of all births in Kentucky as well as a significant portion of prenatal and postpartum care (About Natality, 2022). With the 2022 extension of postpartum coverage in Kentucky, Medicaid will cover services for even more women over a longer postpartum period (Eggen, Yewell, & Creel, 2022). The wide reach of Medicaid coverage across Kentucky provides an important and significant intervention point for identifying potential intervention points and improving pregnancy and birth outcomes for women across the Commonwealth.

Methods

This project used Medicaid Administrative Claims Data, Pregnancy Risk Assessment and Monitoring System (PRAMS), Kentucky Inpatient Health Facilities and Services Data, and American Hospital Association Annual Survey Data to identify trends and predictors of healthcare access, utilization, and health outcomes for Kentucky infants and mothers covered by Medicaid. In this project period, we used ICD-9 and ICD-10 codes to identify trends. We developed surveys to better understand the landscape of VBAC in Kentucky from the perspective of birth providers and women who have had a previous cesarean delivery.

Continued on back page →

Results

We found a significant opportunity to expand access to VBAC in Kentucky by identifying and potentially intervening on provider and hospital-level factors associated with access to VBAC. We intend to explore this further in the future and make specific recommendations for practice and policy interventions. Additionally, we identified increases in the number of women with Medicaid coverage with pre-pregnancy and gestational hypertension, which warrants further analysis. Using the PRAMS data, we found that women with Medicaid coverage were much less likely than those with private insurance to attend a pre-conception healthcare visit in the year prior to pregnancy. National research has identified pre-conception healthcare, and continuous insurance coverage, as a facilitator of earlier utilization of prenatal care. Finally, the Kentucky Cabinet for Health and Family Services has an opportunity to link claims data with other data sources, including Vital Statistics, death certificates, and PRAMS, to provide a more comprehensive and robust lens into access, quality, and outcomes for women and infants in the state.

Policy Implications

Access to quality, patient-centered care, including all modes of birth, is needed and desired in Kentucky. Additional research and pilot testing of interventions should be conducted to identify data-driven policy and practice solutions to improve outcomes for mothers, infants, and families in Kentucky. We recommend expanding the existing Kentucky PRAMS dashboard and publishing a thorough report of findings each year of the survey to monitor trends in access and outcomes. We additionally recommend that Kentucky Medicaid consider linking claims data with Vital Statistics, PRAMS, and other data sources such as maternal and infant death certificates to better understand root causes and specific points of intervention.

Conclusion

While Kentucky has high rates of adverse maternal and infant outcomes in comparison with other states, there are opportunities to monitor, assess, and improve outcomes to ensure optimal and equitable outcomes.

References

Centers for Disease Control and Prevention. About Natality, 2016-2022. (2022). Retrieved from CDC Wonder: http://wonder.cdc.gov/natality-expanded-current.html

Eggen, M., & Creel, L. (2022). *Maternal Mortality in Kentucky.* Louisville: Commonwealth Institute of Kentucky.

Eggen, M., Yewell, K., & Creel, L. (2022). *Kentucky Extends Medicaid to One-Year Postpartum.* Louisville: Commenwealth Institute of Kentucky.

Hayatbakhsh MR, F. V. (2012). Birth outcomes associated with cannabis use before and. *Pediatr Res.*, 215-219.

Kentucky Department for Public Health. (2021). *Public Health Maternal Mortality Review. A report of data from years 2013-2019.* Louisville: Kentucky Cabinet for Health and Family Services (CHFS). Available online at https://www.chfs.ky.gov/agencies/dph/dmch/Documents/MMRAnnualReport.pdf.