Improving Maternal and Child Health Through Interconception Care

Statement of Problem

Birth outcomes are worsening in the United States and demonstrate stark racial inequities. More specifically, Black birthing individuals currently experience three times the rate of maternal mortality compared to White birthing individuals and twice the rate of preterm births.

There is a growing understanding that preventive care is crucial to improve pregnancy outcomes, decrease health care costs and increase health equity. The interconception period, which spans from one birth to a subsequent conception, is a key period for health promotion. During this time, preventive services can improve birth outcomes by monitoring for and addressing postpartum complications. In addition, because 60% of births in the U.S. are repeat births, interconception health promotion can improve outcomes in subsequent pregnancies by supporting chronic disease management, pregnancy spacing and early entry into prenatal care.

The interconception period is also a critical time for infant health. For infants, their early growth and development contributes to future health, and that growth and development is influenced by parents' health. The importance of the interconception period has recently been emphasized by the American College of Obstetricians and Gynecologists and the National Academies of Medicine regarding the transition from obstetrical to primary care, and by federal and state efforts to extend Medicaid coverage for the full year after birth.

Furthermore, during the interconception period, individuals interact with the health care system both as patients in adult settings and as parents in pediatric settings. Pediatricians are increasingly attentive to the need to address maternal health issues such as postpartum depression. Despite this overlap, coordination between adult and pediatric settings around preventive health for families is rare, leading to potential gaps in care or redundancies in mother-infant services.

Description

Analyzing care for mothers and babies in the first year of life

The goal of this body of research is to understand health care utilization from the perspective of the mother-infant pair and to help health systems achieve better integration and coordination of preventive care delivery, leading to reduced burdens for new families and improved maternal and child health outcomes.

This project addressed the lack of coordination between adult care and pediatrics by identifying preventive care opportunities from the mother-infant dyad perspective in the year after birth. Using Medicaid data from almost 600,000 mother-infant dyads with continuous coverage during the year after birth, our results showed that more preventative visits occurred in pediatric care than adult settings. We found substantial gaps in recommended

preventive care, with 38% of mothers and almost 10% of infants receiving no preventive visits. Yet there was also substantial utilization of care across dyads, who had a median of nine total visits.

We also looked at characteristics of dyads with no adult preventive services and above average pediatric preventive services to suggest populations that might particularly benefit from integrated services in pediatric settings. We found that dyads with Black and Latinx mothers, and those with preterm birth, were particularly likely to be in this category. Our results demonstrate both gaps in preventive care receipt but also a substantial number of visits, suggesting strategies to streamline care for mother-infant dyads would lead to improved outcomes.

We then examined a subgroup of this Medicaid sample, made up of more than 17,000 women who had either prematurity, hypertension, or diabetes in the first pregnancy and who went on to have a second birth within three years. We found substantial recurrence of pregnancy complications, with 48% experiencing prematurity, hypertension or diabetes in the subsequent pregnancy. However, adult preventive care in the year after birth was associated with lower odds of hypertension in subsequent pregnancies.

Lastly, our team looked at more than 20,000 dyads in the Medicaid sample mentioned above with mothers who are 18 years or younger. These parenting teens could be seen in the same setting as their infants, regardless of whether infant care was provided by a pediatrician or a family medicine office. We found that among teens who received integrated services, meaning visits for the infant and the mother were billed by the same clinician on the same day, rates of preventive care were higher for mothers. However, these integrated visits were not common. Only 17% of teens had integrated visits in the year after birth. Integrated visits were associated with younger age, maternal health risks, non-Latinx White race, living in rural or high-poverty areas, and receiving care from Family Medicine-trained clinicians. Again, these findings suggest that there are opportunities to better integrate preventive care with a goal of improving outcomes.

Exploring factors associated with receipt of interconception care

In a secondary analysis of data from 376 women who participated in a randomized trial on interconception care in pediatric settings, we assessed for factors related to interconception care utilization. We found that enabling factors, particularly having a personal doctor or nurse and having non-Medicaid insurance, were associated with receipt of care in this period.

Examining use of primary care among pregnant & parenting teens

This next study was designed to help us understand patterns of preventive care among pregnant pediatric patients. In this cohort of 150 teens with a positive pregnancy test at two pediatric primary care sites, we found primary care visits and reported contraceptive use declined following a pregnancy test, even when teens brought their infants for care at the same primary care site.

Next Steps

Taken together, this research demonstrates both substantial interconception utilization of care and substantial gaps in care. We found opportunities to offer preventive services during infant visits, but also demonstrated that providing integrated preventive care to mother-infant dyads is not the norm, even in circumstances where one office could feasibly offer care to both members of the dyad. Next steps to improve care and reduce burdens for families may include understanding health care structures and processes that support integrated care for mother-infant dyads and exploring care navigation strategies to address fragmented care in the interconception

period.

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PolicyLab Leads

Emily Gregory
Emily Gregory
MD, MHS
Faculty Member
Scott Lorch MD, MSCE

Team

Molly Passarella
Molly Passarella
MS
Statistical Programmer
Alexander Fiks
Alexander Fiks
MD, MSCE
Faculty Member
Adya Imani Maddox
Lisa Levine, MD, MSCE

Funders

Funders
Health Resources and Services Administration
Eunice Kennedy Shriver National Institute of Child Health and Human Development
Penn Measey Primary Care Pathway

Project Contact

Emily Gregory

gregorye@email.chop.edu

Related Tools & Publications

Acceptability of Dyad Care Management After Preterm Birth: A Qualitative Study

Article
Nov 2023

Communication and Birth Experiences Among Black Birthing People Who Experienced Preterm Birth
Article
Jan 2024

Enabling Factors Associated with Receipt of Interconception Health Care
Article
Dec 2019

Integrating Care for Mother-infant Dyads After Birth: A Qualitative Study of Clinician Perspectives on Feasibility
Article
Dec 2023

Interconception Preventive Care and Recurrence of Pregnancy Complications for Medicaid-insured Women
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Motivational Interviewing to Promote Interconception Health: A Scoping Review of Evidence from Clinical Trials
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Preconception and Interconception Pediatric Primary Care Utilization of Pregnant and Parenting Teens
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Reaching Mothers Through Intergenerational Care in Pediatric Settings
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Blog Post
Jun 11, 2020