Use of a Quality Improvement Initiative to Target Rates of Infant Feeding Counseling among Parents Living with HIV, Informing Implementation Science Needs

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Background: In 2023, in response to successful risk reduction techniques, parent advocacy, and equity considerations around the protective benefits of breastfeeding, U.S. guidelines on infant feeding among people living with HIV were updated. Prior advocacy for exclusive formula feeding shifted to evidence-based, patient-centered, shared decision making for parents receiving antiretroviral treatment with consistent viral suppression.

Aim: To improve prenatal informed decision making for parents living with HIV whose infants will follow up at the CHOP Special Immunology Family Care Center (SIFCC) by providing high-quality prenatal infant feeding counseling in line with the 2023 DHHS guidelines.

Methods: A Quality Improvement (QI) initiative was established with Plan-Do-Study-Act cycles supporting the primary aim of increasing counseling rates to ≥90% within five years. Feeding counseling discussions (Plan/Study) were incorporated into bi-monthly multidisciplinary perinatal case management conferences. Initiatives (Do/Act) to improve counseling rates included coordination of referral paths, lectures at local and regional referral centers, and training of additional SIFCC staff to build counseling capacity. Rates of prenatal feeding counseling (primary outcome), breastfeeding (exploratory outcome without target rate), and HIV transmission (safety/balancing metric recorded until four months post last breastmilk exposure) were updated every six months. Ongoing barriers were recorded within and between case management conferences.

Results: The number of perinatally HIV exposed infants followed in the SIFCC clinic varied between 22 and 27 over each of the five assessment periods. The proportion of mothers who underwent pre-birth counseling rose from a baseline of 0% to 57% in the first six months (December 2023- June 2024). In the subsequent four, six-month periods through June 2026, counseling rates were 69%, 70%, 58%, and 82%. Six-month breastfeeding rates, varied between 13% and 30%. All breastfed babies were tested according to guidelines with zero HIV transmissions. Language barriers, lack of quality on-line materials, difficulty scheduling in-person counseling, lack of reimbursement structure for counseling time, and non-disclosure of mother's HIV status to infants' fathers are among the barriers identified.

Conclusion: This QI initiative has both improved informed decision making for clinical care and informed needs for Implementation Science Studies to improve care beyond this single clinic setting.