Room for Improvement: Examining Baseline Data Review for High-Risk Infant Follow-Up after Neonatal and Cardiac Intensive Care Unit Discharge

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Close periodic surveillance of development is a cornerstone of care for high-risk infants discharged from the Neonatal Intensive Care Unit (NICU) and Cardiothoracic Intensive Care Unit (CTICU) with high-risk status most often attributed to prematurity-associated sequelae or significant medical comorbidities. High-risk infant follow-up (HRIF) programs are crucial in aiding pediatricians with developmental screening and facilitating referrals to early intervention programs as well as providing a multidisciplinary approach to education for families. Studies show that infants who meet criteria for referral to HRIF programs often are not referred at the time of hospital discharge and have poor attendance to their HRIF follow-up appointments.

A single centered quality improvement project was designed for our free-standing quaternary care children's hospital to increase referrals to the HRIF program and improve institutional awareness of the criteria required for referral. As part of the project, baseline data was collected via retrospective chart review looking at infant discharges from the NICU, CTICU, and inpatient wards from January to June 2022 and a 2-year follow-up period to determine the primary outcome measure: attendance to follow-up appointments. Inclusion criteria was based on HRIF medical eligibility criteria which resulted in 151 qualifying patients.

Baseline data showed that 89% of patients who met criteria were referred to the program and 43% went to their first appointment. Additionally, 7% of infants who met criteria had documented education from providers for families about HRIF included in their progress notes and discharge summaries. Eleven percent of patients attended all their follow-up appointments with HRIF after discharge. Data showed that infants who were discharged from the cardiac floor were less likely to attend their initial appointment in comparison to infants who were discharged from the NICU and the general pediatrics floor. This data largely suggests that there is room for improvement in all aspects of the referral process, ranging from the referral being placed to the provider's role in ensuring safe follow-up for the patient prior to discharging them to another unit or to home. Based on this data, PDSA cycles were designed with the aim to increase referral rates and attendance to appointments through a multidisciplinary approach throughout the hospital to ensure qualified patients receive referral to HRIF clinic and appropriate developmental monitoring.

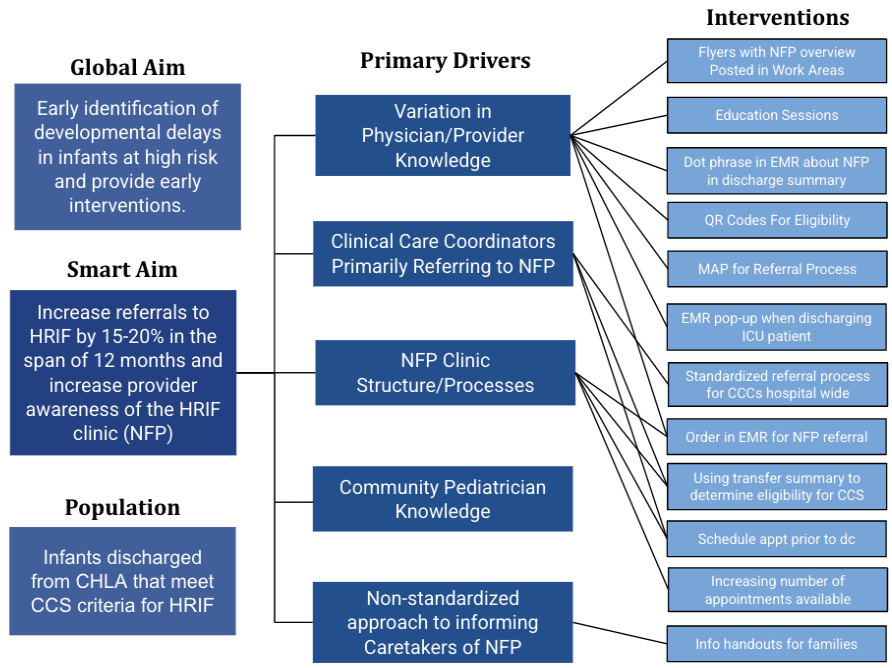

Figure 1. Key Driver Exam Diagram Aimed to Improve Newborn Follow-Up Program (NFP) Referrals and Hospital Wide Awareness of the Program. The NFP is the clinic otherwise known as the High Risk Infant (HRIF) Clinic. The key driver diagram identifies the predicted primary obstacles and intervention that have been implemented or plan to be implemented during the Plan-Do-Study-Act (PDSA) cycles.

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