

Implementing Food Insecurity Screening in the NICU at MCH

Kevin Travia, MS2, BSPH, John A Kohler, Sr, MD, MBA, FAAP,
Uduak S Akpan, MD

Disclosures

Nothing to disclose

Introduction

- 10.5% of U.S. households were food insecure at least some time during the year (Household Food Insecurity in the United States, USDA, Coleman-Jensen, et.al.)
- FI affects children's acute and chronic health outcomes (Food insecurity is associated with adverse health outcomes among human infants and toddlers, The Journal of Nutrition, Cook et.al)
- 66% of children in the area served by our institution receive free or reduced cost lunches (Hunger Matters 2021, 2020-2021 Pitt County Profile, Food Banks of Central and Eastern North Carolina)
- Aim Statement:
- Achieve 95% screening for food insecurity (FI) of all admissions at the Maynard Children's Hospital (MCH) NICU by January 21, 2022 (6 months after program start).

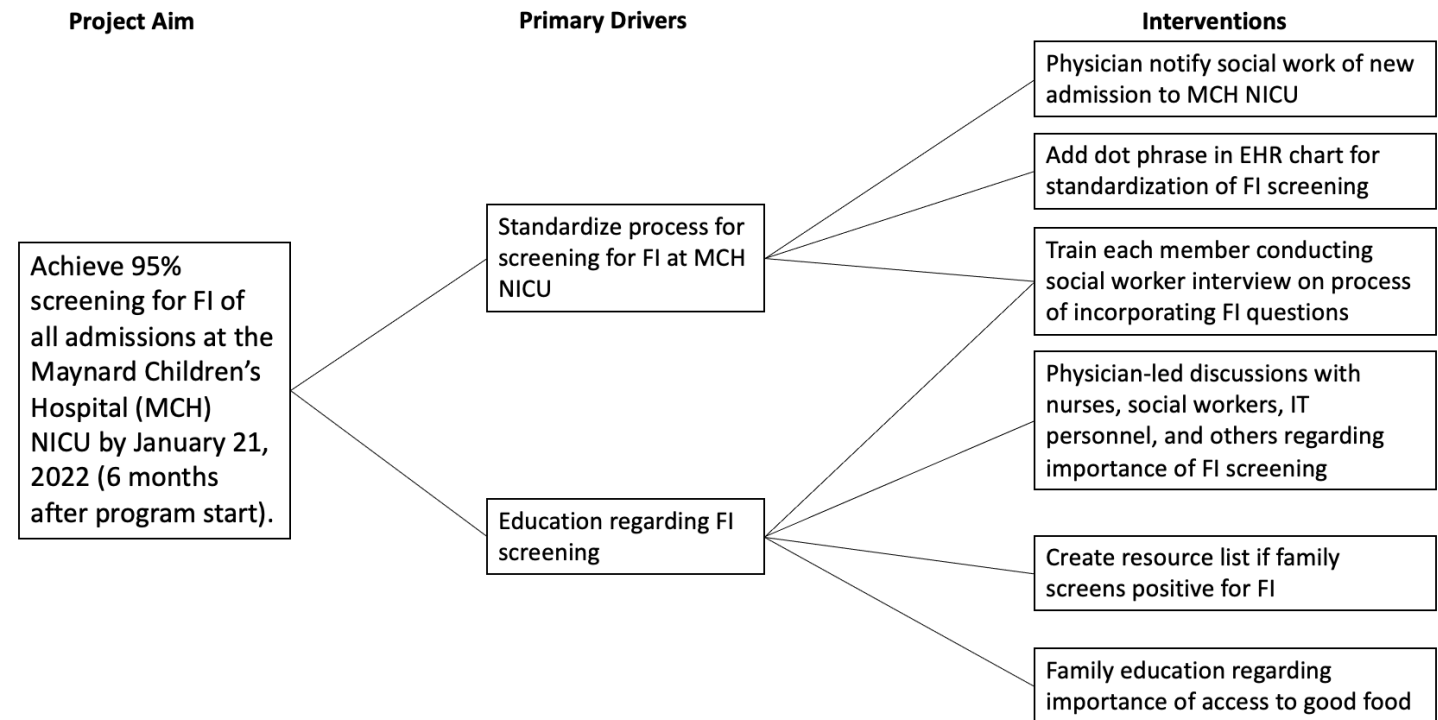
Methods

- Team was formed (7/21/2021) comprising a neonatologist, NICU social workers, medical student, nursing staff, and IT personnel
- Culture and resources available at MCH NICU discussed by team

Measuring the Change

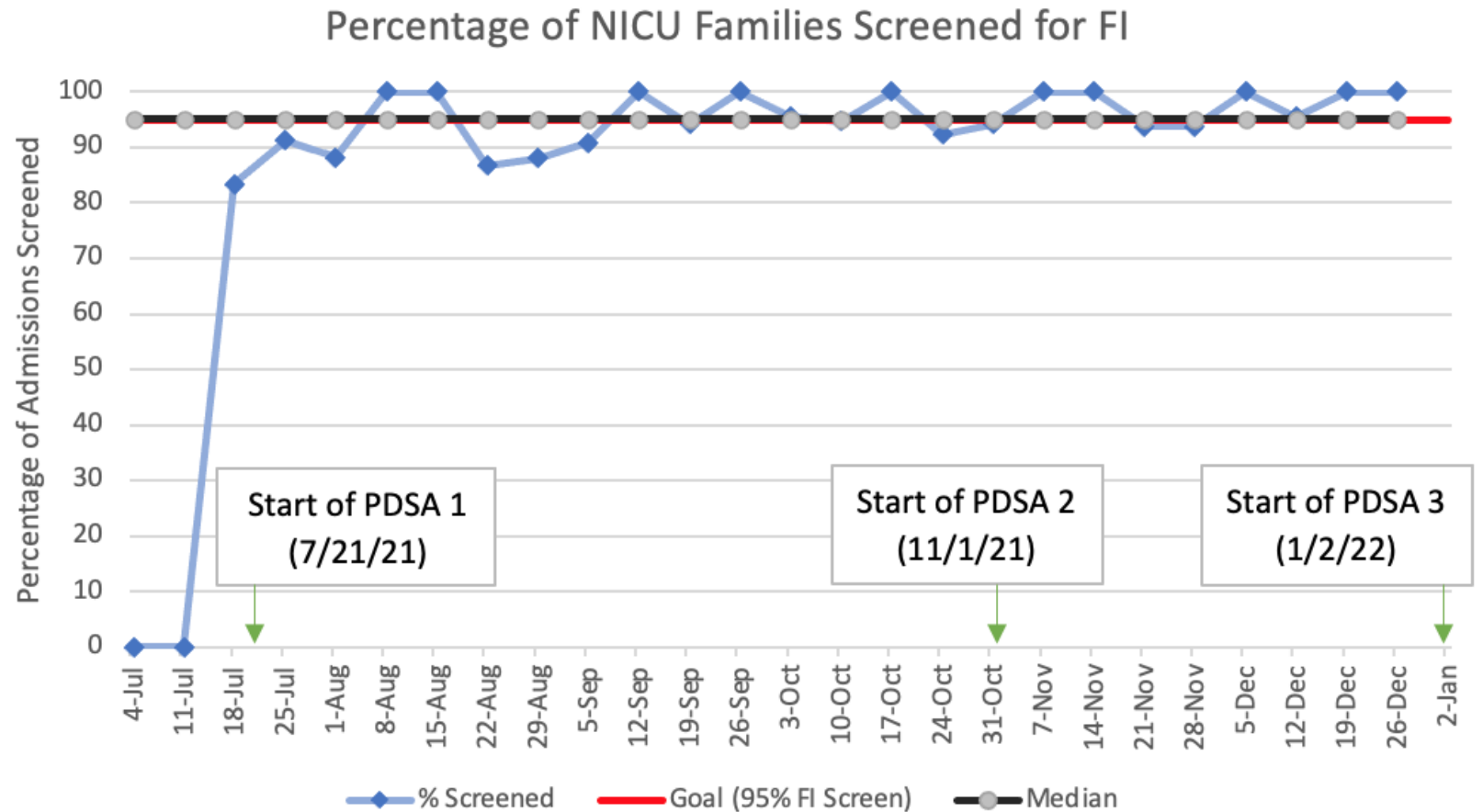
- Process measure: the % of NICU families screened for FI
- Outcome measure: the % of NICU families reporting FI
- Balancing measure: assess the extent of extra time/effort spent with families and overall burden on social workers (will be assessed)
- Data collection involves reviewing EHR chart record for FI screening questions and responses
- deidentified data is stored on an excel sheet only accessible to researchers

Improving Food Insecurity Screening in the NICU at MCH Driver Diagram



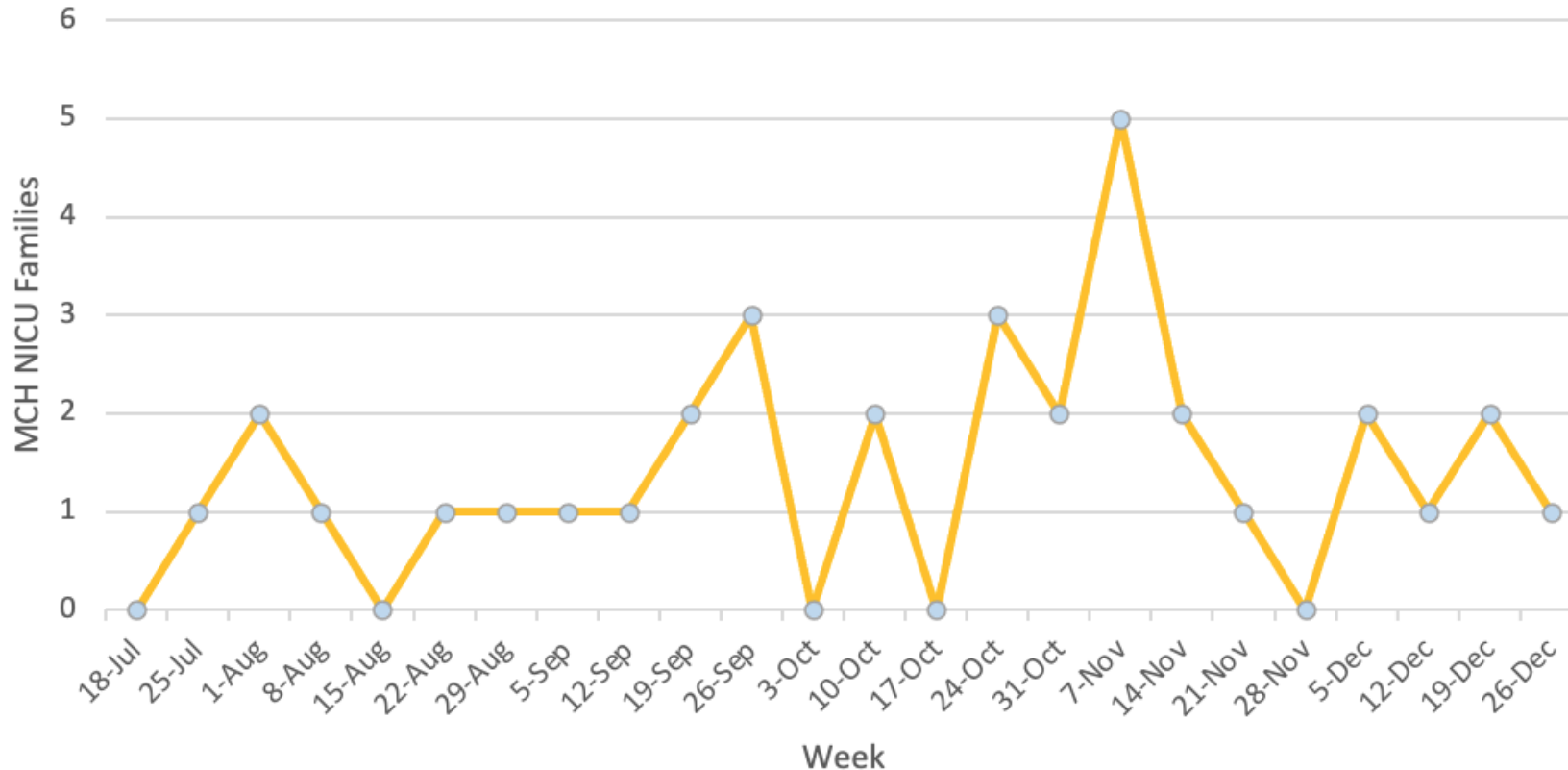
Results: Performance Measures

- Prior to PDSA 2 taking effect, percent screened is 93.7 with a standard deviation of 5.40
- As of 1/1/22 (after PDSA cycle 2) percent screened is 95.1% with a standard deviation of 5.08
- Goal screening rate of 95% has been met
- Each week is defined as starting on Sunday and ending on Saturday



Results: Outcome Measures

Maynard Children's Hospital NICU Positive for Food Insecurity



- Number of families who screened positive for FI at the MCH NICU
- Overall, 8.7% of families screened report FI and these have been connected to appropriate resources.
- The third PDSA aims to make patient families feel more comfortable discussing this sensitive issue
- Data Collection is still underway

Conclusion

Summary of Key Findings:

- Implementing a reproducible, 2-question, FI questionnaire at the MCH NICU has early screening and identification of FI
- Staff buy-in is critical to success of FI-questionnaire implementation

Other institutions around North Carolina should consider implementing a 2-question FI screening tool