PROBLEM
• Standardized developmental screening is currently not incorporated as part of the workflow at Aurora St. Luke’s Family Practice Center (FPC) and Aurora Sinai Family Care Center (FCC) residency sites.
• Standardized developmental screening rates at FCC and FPC are low with only 3% and 4% of eligible children screened, respectively.

BACKGROUND
• Approximately 12-16% of children have disabilities and only 30% are diagnosed before entering school.1,2
• The American Academy of Pediatrics (AAP) currently recommends routine pediatric developmental screening during 9, 18, and 30-month office visits and autism spectrum disorder (ASD) screening at 18 and 24-month visits using standardized instruments.3
• In a randomized control study by Guevara et al., children who received screening (with ASQ and MCHAT-R questionnaires) had higher rates of developmental delay detection, referral to early intervention, and completion of early intervention than children who only received monitoring-based interventions.4

OBJECTIVES
• Improve clinician awareness of standardized pediatric developmental screening recommendations by the AAP.
• Implement standardized pediatric developmental screenings as part of the workflow at FCC and FPC sites.
• Increase rates of pediatric developmental and autism standardized screening at FCC and FPC sites.

METHODS
• Interventions to educate and train residents, faculty, and support staff on pediatric developmental screening started on 1/4/23.
• A handout detailing screening intervals, scoring, documentation, and billing was distributed to residents and faculty.
• Children eligible for screening included patients turning 1-3 years old (for ASQ) or 30 months (for MCHAT-R) by end of the measurement year, with at least 2 office visits at FCC or FPC in the last 24 months and at least one visit in the last 12 months.
• Screening rates of eligible children were calculated for the 365 days preceding educational intervention (“pre-intervention”) and for the 43 days following intervention (“post-intervention”).
• Screening rates were obtained through EPIC reports.
• Final post-intervention data was collected on 4/14/23 and outcomes were analyzed by Chi-square and Fisher’s exact test.

RESULTS
• ASQ screening rate at FCC was 3.2% pre-intervention and 9.4% post-intervention (p=.002).
• MCHAT-R screening rate at FCC was 13% pre-intervention and 12.9% post-intervention (p=.99).
• ASQ screening rate at FPC was 3.4% pre-intervention and 5.0% post-intervention (p=.54).
• MCHAT-R screening rate at FPC was 15.8% pre-intervention and 24.13% post-intervention (p=.35).

CONCLUSIONS
• Pre-intervention ASQ and MCHAT-R standardized screening rates were low at both sites.
• ASQ screening rate at FCC significantly improved from pre-intervention (3.2%) to post-intervention (9.4%; p < .002).
• MCHAT-R screening rate at FCC was unchanged from pre-intervention (13.0%) to post-intervention (12.9%; p > .99).
• ASQ screening rate at FPC was improved from pre-intervention (3.4%) to post-intervention (5.0%), but this change was not significant (p = .54).
• MCHAT-R screening rate at FPC was improved from pre-intervention (15.8%) to post-intervention (24.13%), but this change was also not significant (p = .35).
• Screening rates may be underestimated in this study, as screenings are not counted as a met outcome in Epic until a patient turns 1, 2, or 3 years old if seen and screened after 9, 18, and 30 months of age. Additionally, clinician error in documentation and billing may contribute to fewer “outcomes met” on EMR.
• Future directions for this project include surveying clinicians and staff on barriers to performing ASQ-3 and MCHAT-R screening and assessing for areas of improvement. Screening rates will be reassessed at a later interval (i.e., 6 months and 12 months post-intervention).

REFERENCES

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