

Enhancing Early Childhood Development-Behavioral Screening by Integrating the SWYC Tool at Asylum Hill Family Medicine

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INTRODUCTION

The monitoring of early childhood developmental milestones through screening tools, such as the Modified Checklist for Autism in Toddlers (MCHAT) and Ages and Stages Questionnaire (ASQ) is recommended by the American Academy of Pediatrics in their Bright Futures Guidelines.³ However, a recent study showed that less than one-third of all children 9 through 35 months of age have received a standardized parent-completed developmental screening from a health care professional in the last year. At 37.1%, developmental surveillance or elicitation regarding concerns during a health care visit is not substantially higher, and only 1 in 5 children received both screening and surveillance.¹

These screening tools evaluate motor, language, cognition, social, and emotional development to screen for developmental delays. Unfortunately, another study showed that one-third of pediatricians are not applying standardized screening test tools in United States due to several causes such as time limitation, inadequate reimbursement, and lack of treatment options for positive screening results.² MCHAT and ASQ also fail to evaluate for parental risk factors like postpartum depression and alcohol abuse, which can critically impact early childhood development.

The Survey of Well-being of Young Children (SWYC), created by Tufts's Medicine, is a comprehensive screener with fewer questions and a simpler scoring system, typically faster than MCHAT and ASQ.⁴ The AHFM clinic currently employs MCHAT and ASQ for autism and developmental milestone screening, and has noted a need for improved screening processes at specific ages. The Behavioral Health Screening (ages 1-18, which includes depression and MCHAT screenings) rates was 18.5% while the Developmental Screening in the first three years of life (ASQ screenings) rates was 31.3% in 2023. Thus, the aim of this CQI study is to enhance childhood development screening rates, and to integrate assessment of parental risk factors via the utilization of the SWYC.

METHODS

The Tufts Survey of Well-being of Young Children (SWYC) was employed as the developmental screening tool exclusively by the Green Team providers at AHFM.

- Our first project, seen in Figure 1, focused on the rate of screener's completed and scanned into the EMR system. We realized that it would be more efficient if we focused on the billing aspect of the screeners as it was less time consuming and would provide more utilization to our practice in the future in terms of practice management while also ensuring adequate screening for our patients. This new data collection can be seen in Figure 2.

- The SWYC screener's implementation was structured into three phases:

Phase 1: February 2024 to March 2024

Phase 2: March 2024 to April 2024

Phase 3: May 2024 to September 2024 (Not performed with Project 1)

- Workflow enhancements between Phases 1 and 2 included email reminders, team meetings, and administrative/nursing initiatives. From Phases 2 and 3, our dot phrase was implemented and included reminders for Developmental/Behavioral billing codes. All workflow enhancements were aimed at improving usage, scoring, note documentation, and scanning into the Epic EMR system.

- Data were collected using EMR software.

PURPOSE

Our goal is to increase Asylum Hill Family Medicine childhood development screening rates and to assess parental-risk factors via the utilization of the SWYC tools.

RESULTS

-Project 1: Completion of SWYC Rates using the Scanned Screeners Data:

In Phase 1, 14 total WCC encounters were completed by Green Team providers. Out of these, 5 WCC encounters (36%) were documented SWYC scores and conducted into the associated EMR note.

In Phase 2, 35 total WCC encounters were completed by Green Team providers. Out of these, 20 WCC encounters (57%) documented the SWYC scores into the associated EMR note.

-Project 2 Completion of SWYC Rates using Billing Data:

In Phase 1 (February 2024), 18 total WCC encounters (n=18) were completed by Green Team providers. Out of these, 4 WCC encounters (22%) SWYC scores were documented and billed for Developmental and Behavioral Screenings.

In Phase 2 (March to April 2024), 44 total WCC encounters (n=44) were completed by Green Team providers. Out of these, 19 WCC encounters (43%) SWYC scores were documented and billed for Developmental and Behavioral Screenings.

In Phase 3 (May to September 2024), 90 total WCC encounters (n=90) were completed by Green Team providers. Out of these, 43 WCC encounters (48%) SWYC scores were documented and billed for Developmental and Behavioral Screenings.

-From Phase 1 to Phase 2 both Projections showed an increase in rates by 21%.



Figure 1. Project 1: Shows the SWYC screener completion rates of total green team WCC encounters between Phase 1 and Phase 2 using our first project data, which focused on the rate of scores completed and scanned into the system.

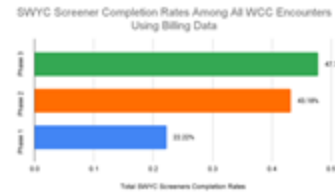


Figure 2. Project 2: Shows the SWYC screener completion rates of total green team WCC encounters between Phases 1-3 using data based off of the billing for Developmental/Behavioral screening.

CONCLUSION

The SWYC study across three distinct phases demonstrated notable differences in the documentation and billing for developmental and behavioral screening. When compared to our first project, which focused on the rate of screener's completed and scanned into the EMR system vs our new data collection which focused on completion rates based off of billing, despite being different data sets, both projects showed our rates for SWYC screening increased by 21% from Phase 1 to Phase 2. Phase 1 revealed a foundational challenge with lower documentation rates, while Phase 2 showed a significant improvement, which can be attributed to the integration of strategic workflow enhancements. Phase 3 was able to show an improved yet stable rate of screening with an increased sample size. Despite this progress, achieving complete documentation and utilization of the SWYC remains a critical goal. This study highlights the effective role of targeted workflow interventions, such as email reminders and team meetings, in enhancing the adoption and consistent use of the SWYC tool. Future efforts should concentrate on identifying and overcoming barriers to full screening completion and optimizing the integration of SWYC into the Epic EMR to ensure its maximal use in pediatric practice as well as to ensure appropriate billing for our practice.

DISCUSSION/LIMITATIONS

As family medicine practitioners, we have the responsibility to monitor early childhood development and behaviors to ensure that children are not at risk for any developmental – behavioral delays. This was initially done with the ASQ and MCHAT screeners. However, we have found the SWYC is easier to use, comprehensive, and takes less than 10 minutes to complete. Not only is the SWYC a more holistic approach to child development, but it also focuses on factors such as to a child, postpartum depression, alcohol abuse in home all of which can affect a child's environment and have a significant impact on healthy development.

The main limitations for our study were: 1. Our sample size only addressed the Green Team patient population. 2. Time was a barrier as the two implementations conducted in the study were both done within 3 months. 3. Patients who were late for well child follow up or had delayed care in screening. 4. Some providers forgetting to bill the visits for both behavior and developmental screening.

Our next steps for our study will focus on increasing the utilization of the SWYC clinic-wide, including our Gold and Purple Teams.

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