Autism Spectrum Disorder Screening Quality Improvement at the Family Health Center of Worcester

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Background

- Autism spectrum disorder (ASD) is a neurodevelopmental disorder that encompasses disorders previously known as autistic disorder, Asperger’s disorder, childhood disintegrative disorder, and pervasive developmental disorder—not otherwise specified
- ASD is prevalent, affecting an estimated 1 in 68 children
- The Modified Checklist for Autism in Toddlers (MCHAT) is a tool that screens for ASD
- The MCHAT is required at all 18 and 24 month well child checks (WCC) per Massachusetts Children’s Behavioral Health Initiative
- Children at risk for ASD are referred to Early Intervention (EI)
- EI is only offered until the age of 3
- EI leads to better outcomes, especially if started sooner
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Modified Checklist for Autism in Toddlers (M-CHAT)

![M-CHAT Modified Checklist for Autism in Toddlers](image)

**Project Aims**

1. Create a sustainable screening process along with an accompanying training program
2. Screen 90% of patients at their 18 and 24 month WCC
3. Report 100% of screening rates on a weekly basis

**Results**

- **Figure 1.** May 2014 MCHAT Completion Rates at 18 and 24 Month WCC
- **Figure 2.** June 2014 MCHAT Completion Rates at 18 and 24 Month WCC
- **Figure 3.** MCHAT rate comparison from 2013 to 2014
- **Figure 4.** Visit Length Breakdown and MCHAT Scoring Process
- **Figure 5.** Average Visit Length Breakdown and MCHAT Scoring Process
- **Figure 6.** Medical Assistant Survey: How do you think this affected your workflow?
- **Figure 7.** Medical Assistant Survey: How do you think this affected the workflow of the clinic?
- **Figure 8.** Positive MCHAT Algorithm

**Discussion**

- MCHAT completion rates have improved over the last year, particularly for 24 month WCC (Figure 3)
- MCHAT completion rates are still below the project goal of 90% and the state required 100%
- Entering the MCHAT into the EMR before providers saw patients did not seem to lengthen triage time (Figures 4 and 5)
- Scoring the MCHAT before providers saw patients seemed to improve clinic workflow, although more data is needed (Figure 5)
- Barriers to MCHATs being completed range from lack of staff training, parent comprehension issues, workflow issues such as forms not being given to parents, technical issues like forms being too blurry to read, and the inability to track screening rates
- Staff felt entering MCHAT results into the EMR before providers saw patients was helpful or made no difference to their workflow (Figures 6 and 7)
- Standardizing workflows are promising ways to ensure MCHATs are completed, and helpful for quality improvement (Figure 8)
- Figure 8 was aimed to better characterize abnormal MCHAT workflows and referrals; it was developed with referral staff and social services staff

**Next steps**

- Create a standardized workflow for pre-visit planning
- Update workflow of patient visits to have MCHATs entered in EMR before provider sees patient
- Integrate workflows into current systems of care
- Train staff on updated workflows and rollout team by team
- Create a report to track MCHAT completion rates
- Integrate training needs into the training program
- Integrate WCCs with data from behavioral health
- Continue exploring integration of behavioral health services including perinatal advocates into follow up of children referred to EI

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