

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 leads to better outcomes, especially if started sooner
- EI is only offered until the age of 3
- Health centers cannot bill for the entire WCC without doing a developmental screen, such as the MCHAT
- MCHAT completion rates at the Family Health Center of Worcester are around 50-70%, below the required 100%

Modified Checklist for Autism in Toddlers (M-CHAT)

Please fill out the following about how your child usually is. Please try to answer every question. If the behavior is rare (e.g., you've seen it once or twice), please answer as if the child does not do it.

1. Does your child enjoy being swung, bounced on your knee, etc.?	Yes	No
2. Does your child take an interest in other children?	Yes	No
3. Does your child like climbing on things, such as up stairs?	Yes	No
4. Does your child enjoy playing peek-a-boo/hide-and-seek?	Yes	No
5. Does your child ever pretend, for example, to talk on the phone or take care of dolls, or pretend other things?	Yes	No
6. Does your child ever use his/her finger to point, to ask for something?	Yes	No
7. Does your child ever use his/her finger to point, to indicate interest in something?	Yes	No
8. Can your child play properly with small toys (e.g., cars or bricks) without just mouthing, fiddling, or dropping them?	Yes	No
9. Does your child ever bring objects over to you (parent) to show you something?	Yes	No
10. Does your child look you in the eye for more than a second or two?	Yes	No
11. Does your child ever seem oversensitive to noise? (e.g., plugging ears)	Yes	No
12. Does your child smile in response to your face or your smile?	Yes	No
13. Does your child imitate you? (e.g., you make a face-will your child imitate it?)	Yes	No
14. Does your child respond to his/her name when you call?	Yes	No
15. If you point at a toy across the room, does your child look at it?	Yes	No
16. Does your child walk?	Yes	No
17. Does your child look at things you are looking at?	Yes	No
18. Does your child make unusual finger movements near his/her face?	Yes	No
19. Does your child try to attract your attention to his/her own activity?	Yes	No
20. Have you ever wondered if your child is deaf?	Yes	No
21. Does your child understand what people say?	Yes	No
22. Does your child sometimes stare at nothing or wander with no purpose?	Yes	No
23. Does your child look at your face to check your reaction when faced with something unfamiliar?	Yes	No

Project Aims

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

Results

Figure 1. May 2014 MCHAT Completion Rates at 18 and 24 Month WCC

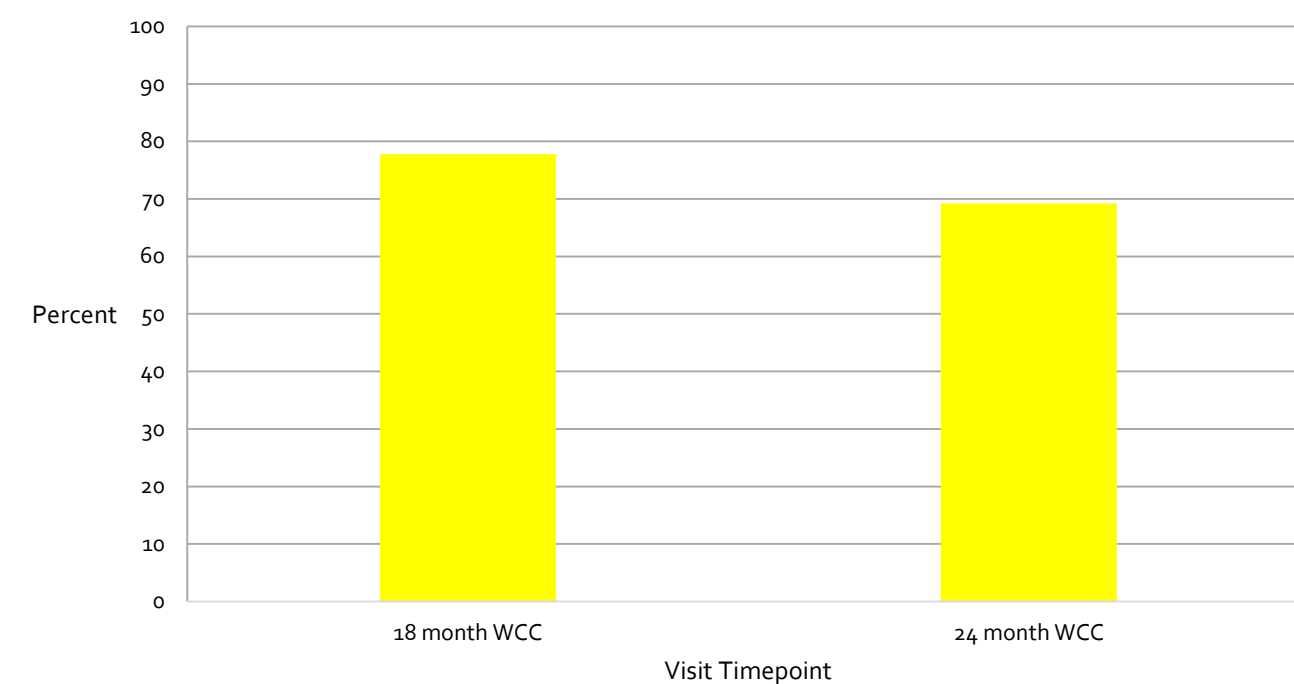


Figure 2. June 2014 MCHAT Completion Rates at 18 and 24 Month WCC

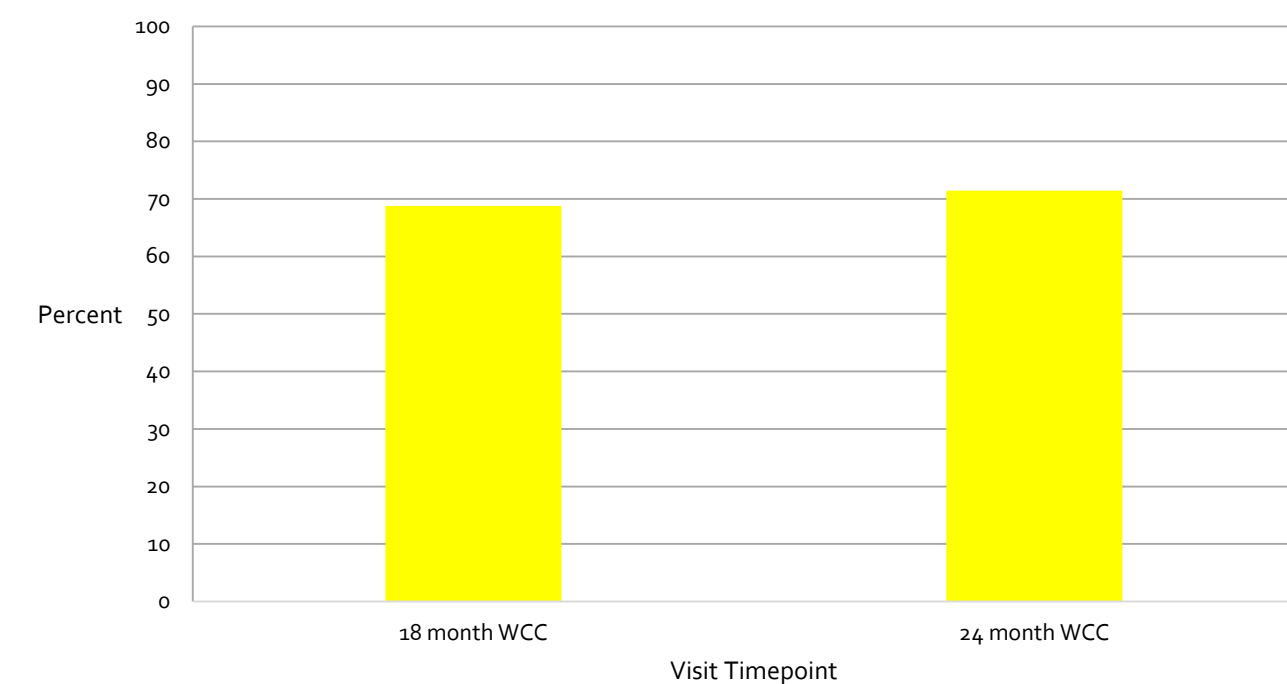
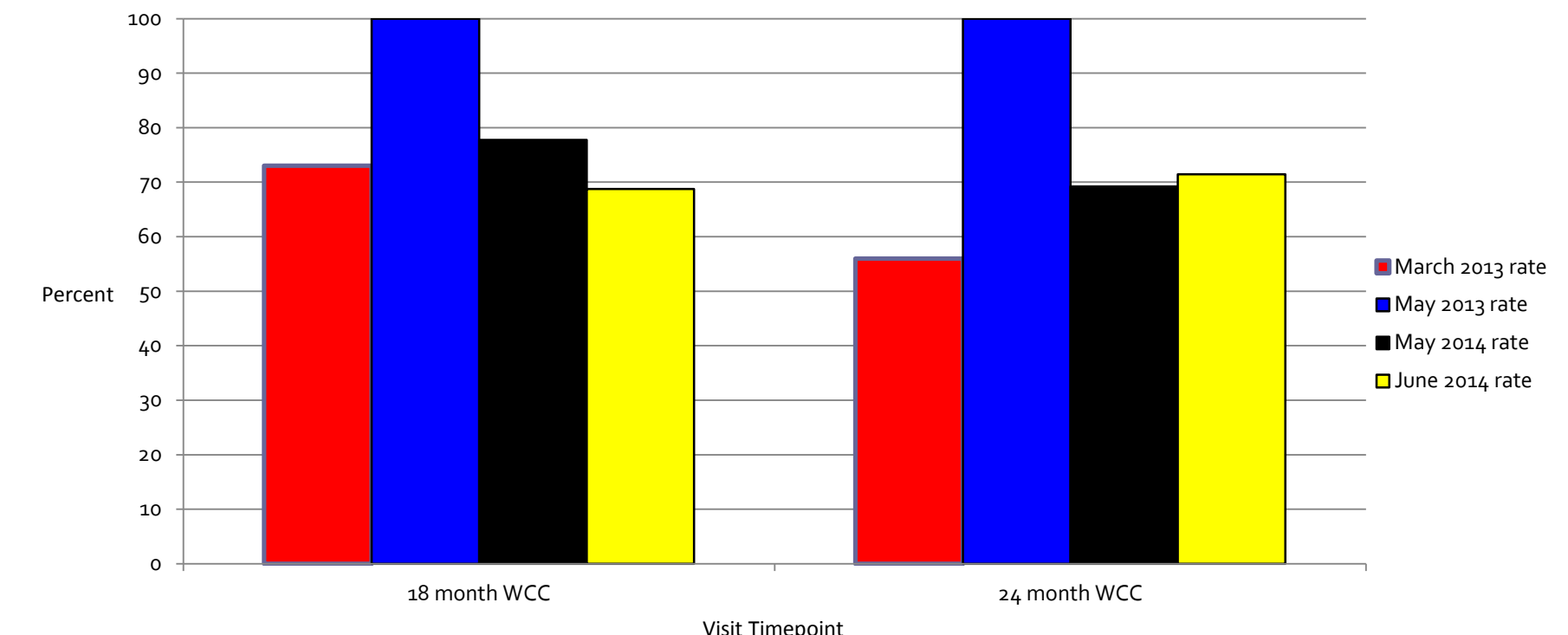


Figure 3. MCHAT rate comparison from 2013 to 2014



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 be 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
- Track MCHAT results weekly using MCHAT report
- Continue exploring integration of behavioral health services including perinatal advocates into follow up of children referred to EI

Acknowledgements

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Figure 4. Visit Length Breakdown and MCHAT Scoring Process

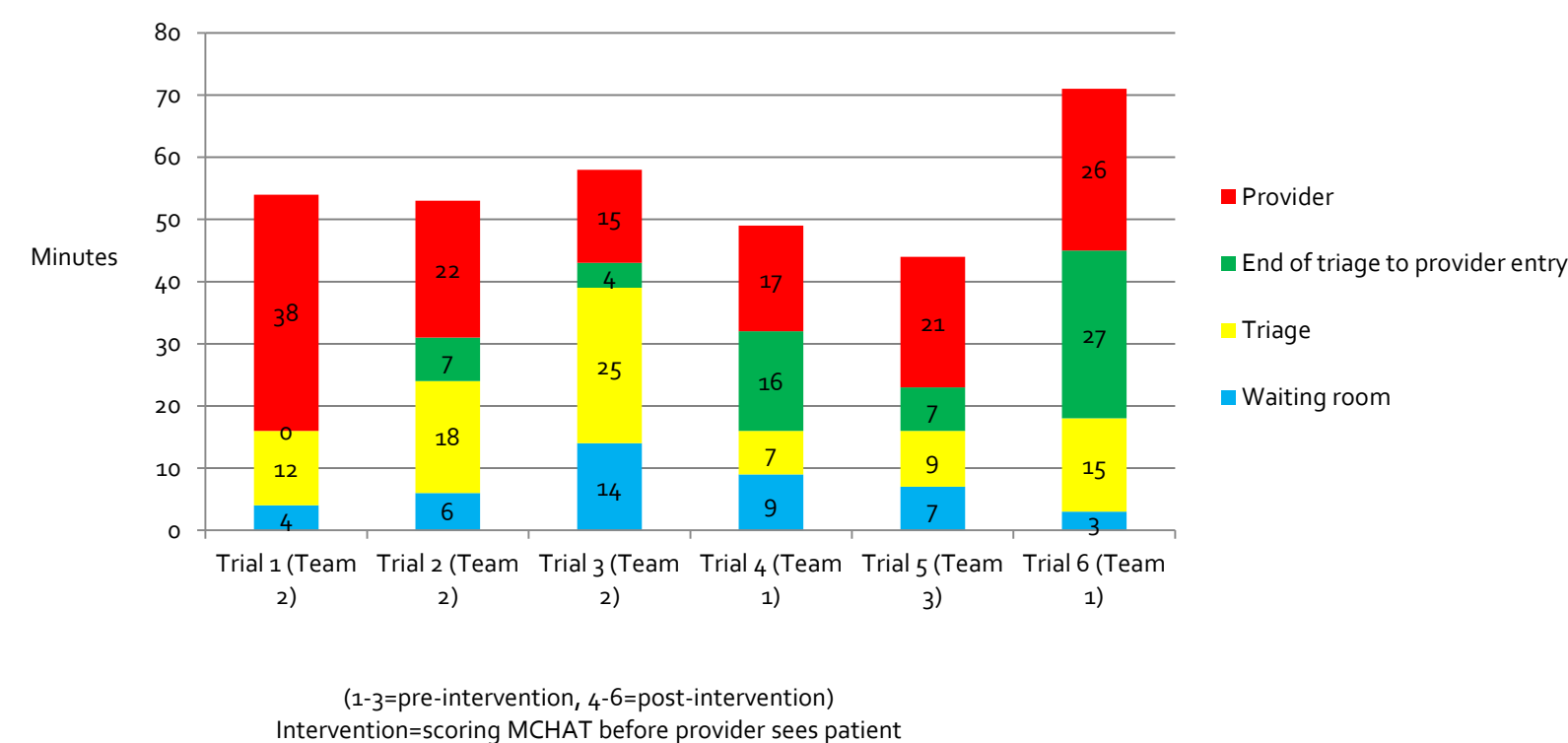


Figure 6. Medical Assistant Survey:
How do you think this affected your workflow?

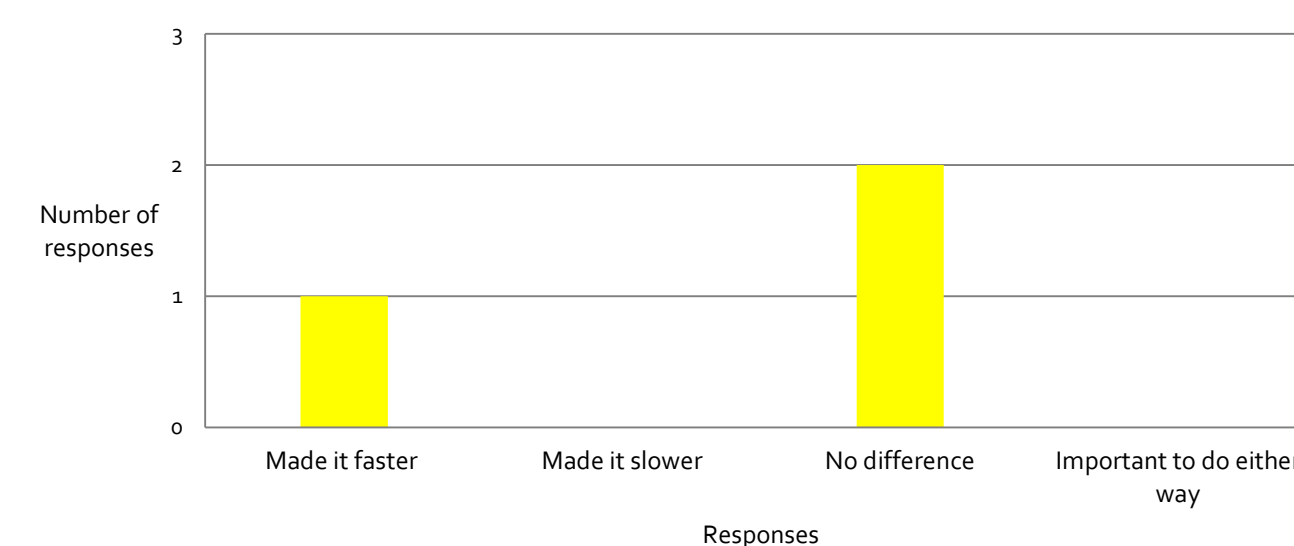


Figure 7. Medical Assistant Survey:
How do you think this affected the workflow of the clinic?



Figure 5. Average Visit Length Breakdown and MCHAT Scoring Process

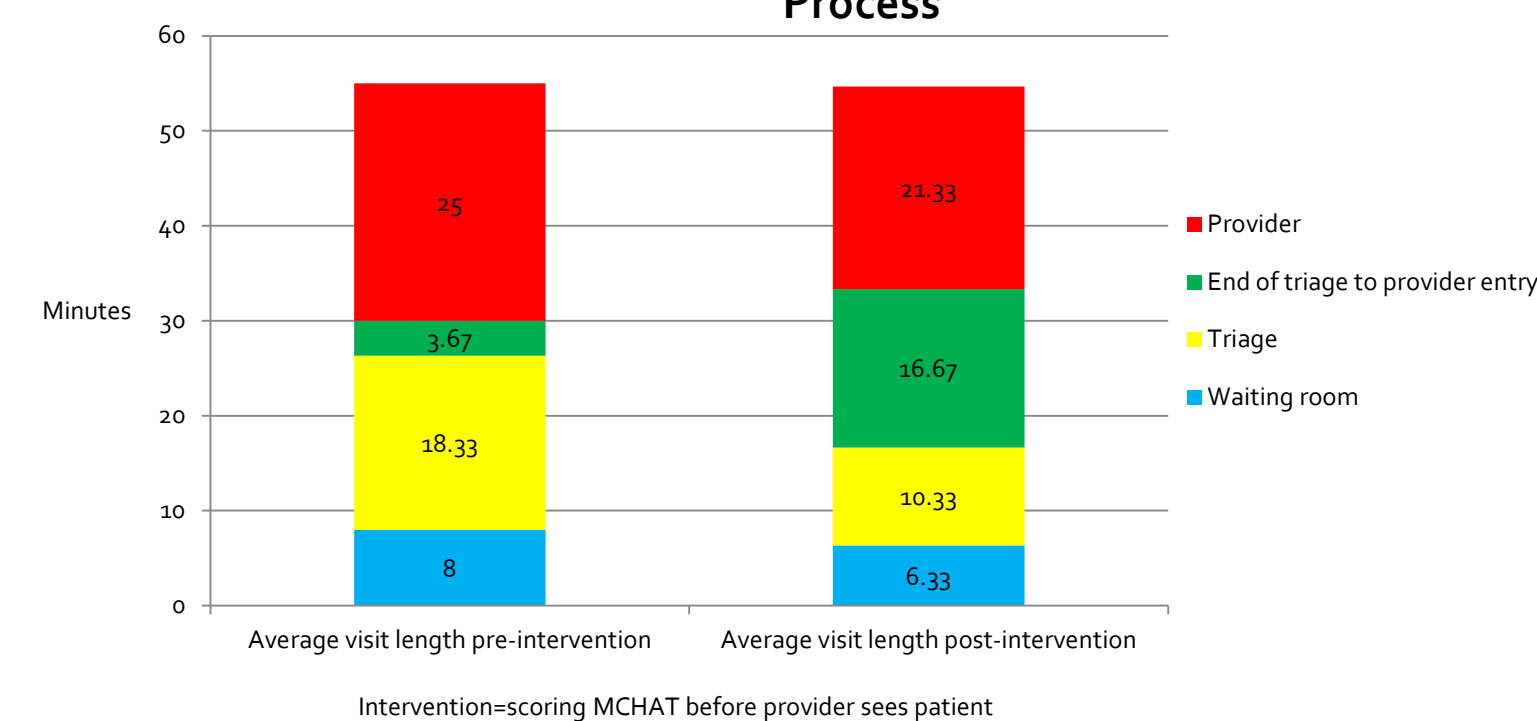


Figure 8. Positive MCHAT Algorithm

