

Quality Improvement Project: Improving Pediatric Developmental Screening and Clinic Workflow in the DOC Family Medicine Clinic

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BACKGROUND

- Screening early for developmental delay and developmental disorders in pediatric population enables early intervention, which has been shown to provide improved outcomes.
- There are multiple tools available for screening for developmental delay, but unfortunately, a vast majority of them are not free.
- Epic has an included developmental screening tool that is part of every well child visit. Allows for easy access to vital part of well child visit and standardized way to screen for developmental delay across all pediatric children.
- A similar modality called the MCHAT is also available in Epic to screen for autism in 18 month and 24 month old children.
- Prior to this project, it had not been assessed how frequently providers were using any developmental screening process or documenting this in their charting.
- Many providers reported that going through the actual screening processes themselves with the patient/patient's parent and then documenting in the chart was time consuming.
- AIM: to develop a patient-centered approach to improve pediatric developmental screening, improve clinic workflow, and assess its impact on clinic/provider satisfaction and documentation.

METHODS

Setting: Durham Outpatient Center Family Medicine Clinic

Population: 466 well child visits from newborns - 5 years from Jan. 2020 - Feb. 2021

Methods:

- Age-appropriate developmental tool and MCHAT-R printed out for parents/guardians to complete in waiting room.
- MA entered information into EPIC during rooming process.
- Developmental tool entered under rooming tab.
- MCHAT-R entered under Flowsheets.
- Provider was notified of positive screen to review with parent/guardian and patient.

Charts were then reviewed to obtain documentation of developmental screening prior to and following implementation of the QI project. A survey was sent out to compare provider assessment of how often they document developmental screening. 19 providers responded to the survey.

A survey for satisfaction from MA/providers were sent out at the beginning and the end of the project to help determine if work-flow had improved.

This project was part of a QI initiative and was not subjected to an IRB.

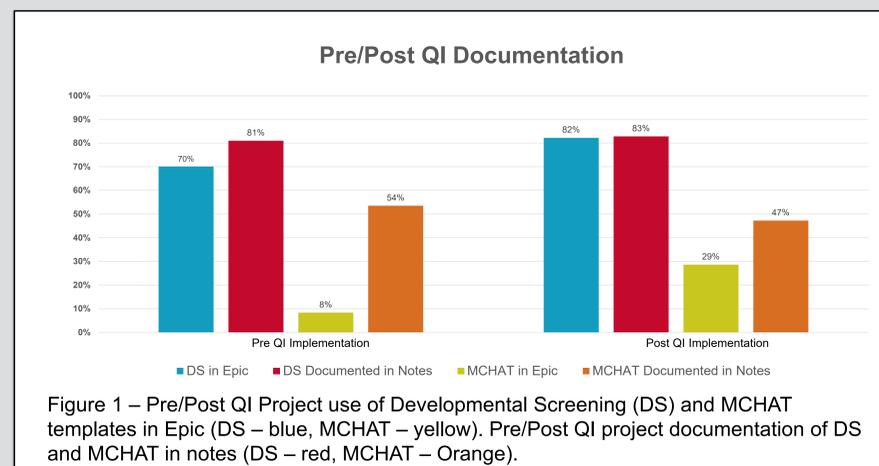


Figure 1 – Pre/Post QI Project use of Developmental Screening (DS) and MCHAT templates in Epic (DS – blue, MCHAT – yellow). Pre/Post QI project documentation of DS and MCHAT in notes (DS – red, MCHAT – Orange).

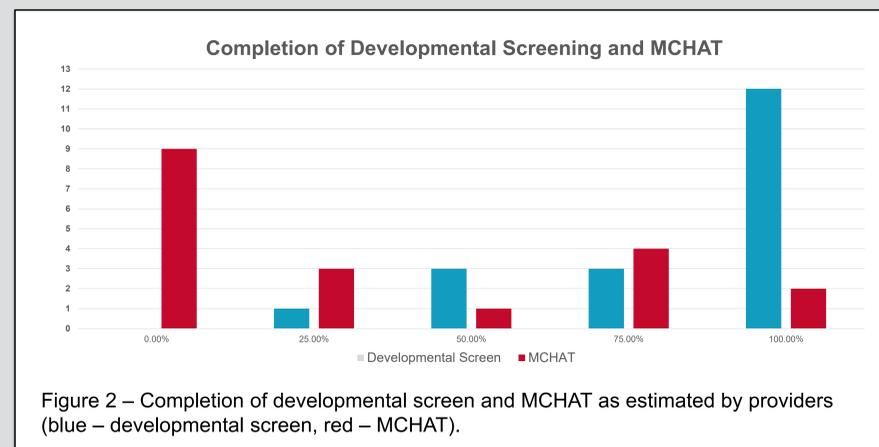


Figure 2 – Completion of developmental screen and MCHAT as estimated by providers (blue – developmental screen, red – MCHAT).

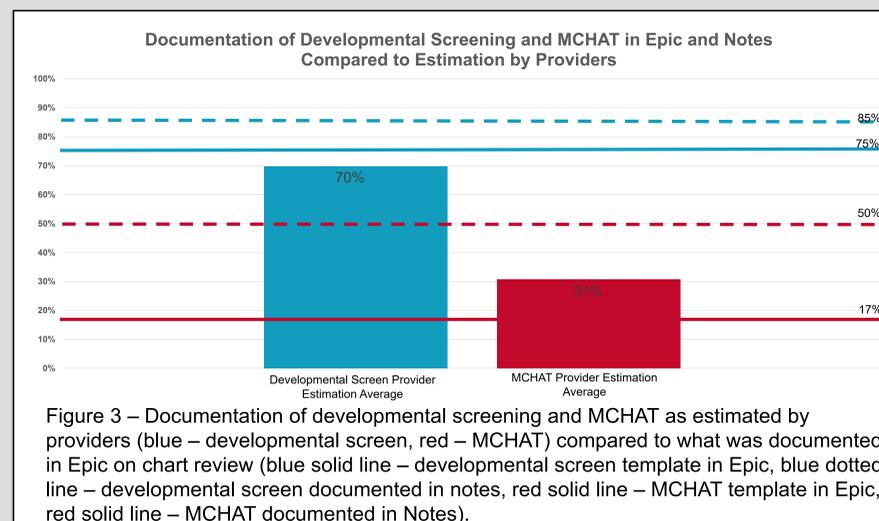


Figure 3 – Documentation of developmental screening and MCHAT as estimated by providers (blue – developmental screen, red – MCHAT) compared to what was documented in Epic on chart review (blue solid line – developmental screen template in Epic, blue dotted line – developmental screen documented in notes, red solid line – MCHAT template in Epic, red solid line – MCHAT documented in Notes).

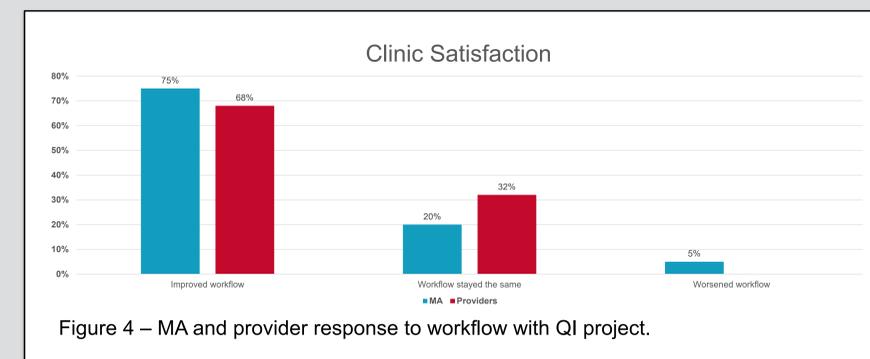


Figure 4 – MA and provider response to workflow with QI project.

DISCUSSION

- Developmental screening template use in Epic increased from 70.1% to 82.2%.
- MCHAT screening templated use also increased from 8.3% to 28.6%. Multiple resident providers had answered they were not familiar with MCHAT or know where to find it within the chart since this is not available under the rooming tab. There is also a much smaller patient population that qualify for MCHAT screening.
- Providers tended to overestimate the amount they utilize Epic's developmental screen. It is possible this is because they are relying on the MA's to have this information entered in to Epic for them.
- A way to determine other developmental screening done outside of Epic's developmental screening tool has yet to be assessed. Some providers reported using Ages and Stages, but this is currently not available in DOC FM clinic.
- Overall satisfaction with workflow was higher in providers than in MA's. This may be due to relying on MA's to enter in more information, which would slow down their workflow.

CONCLUSION & FUTURE DIRECTION

- This QI project increased overall documentation of developmental screening and satisfaction with workflow.
- Providers overestimate how often they enter developmental screening in Epic.
- MCHAT is available but underused by current providers in DOC. It is unclear if other autism screening is occurring at this time.
- This project was directly impacted and limited by covid-19 pandemic for multiple reasons including but not limited to decreased clinic visits as a whole, delayed well child checks, presumed fear of bringing children to the hospital, etc.
- Future directions include further assessment in to referrals placed due to screening concerns, continuing education on how/where to access screening in Epic, and continued work on improving clinic workflow.

WORKS CITED

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