

VIEWPOINT

How online training may help detect autism earlier

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We know from advances in autism research that early signs of autism emerge when a child is 12 to 14 months of age. And experienced professionals can diagnose these children at 18 to 24 months.

The American Academy of Pediatrics recommends screening all children for autism at 18 and 24 months because early intervention has been found to maximize autistic children's outcomes. And yet, the average age of diagnosis continues to hover at 4 to 5 years, beyond the critical window for early intervention.

This figure has not changed much in the past decade, despite screening recommendations and widespread awareness campaigns. Why has it been so challenging to bridge this chasm?

Primary-care clinicians are in a pivotal position to close this research-to-practice gap¹. Providing training for these professionals and for families can go a long way to lowering the average age of diagnosis and helping children get the services they need.

Many pediatric healthcare professionals do not conduct regular standardized screening for autism because of time restrictions, reimbursement issues and lack of information about autism. Hardly anyone — not even the family pediatrician — wants to be the one to raise the possibility of a child's developmental delay or condition, particularly if it could be autism, until the parent raises concerns.

Even pediatricians who regularly screen children for autism may not always refer those who screen positive for further testing with specialists. On top of all this, the most commonly used screening tool for autism, the Modified Checklist for Autism in Toddlers, may **miss more autistic toddlers** than it catches.

The first signs of autism that parents notice and bring up with primary-care providers are often delays in talking or a lack of response to speech. Because pediatricians may not encounter many

children with autism, and because parents might not bring up concerns about autism when their children are under 2 years, it is easy for clinicians without specialized training to miss or dismiss these early signs.

Training primary-care providers about early social-communication milestones, new screening and diagnostic tools, and evidence-based treatments for autism can help bridge these gaps.

Navigating autism:

Our team has been working to improve early detection for more than 20 years. We have developed an online professional course, **Autism Navigator for Primary Care**, that includes a video library of more than two dozen toddlers with autism. The videos contrast typically developing toddlers with those showing early signs of autism. The course also provides training on administering and interpreting a new screening tool, the Smart Early Screening for Autism and Communication Disorders.

We integrated the course and screening tool into a large, busy pediatric practice in Florida and found that in just one year, screening rates rose to 100 percent at 12- and 18-month well-child visits. The average age of screening and referral for a diagnostic evaluation fell from 37 months, based on chart review, down to 20 months using our new tool.

Research has found that using online screening tools in primary care is feasible, may identify more children and may increase follow-up screens for autism^{2,3}. However, just because a screening result is transferred to an electronic health record does not mean that the physician, nurse or staff member will take the next step to refer a child for a diagnostic evaluation to determine their eligibility for early intervention⁴.

A critical ingredient in our study is that the professionals in a busy practice completed our self-paced course. The course gave them practice in viewing both positive and negative cases, which helped them hone their observation skills while increasing their confidence in recognizing early signs to make referrals.

We plan to also launch an interactive lunchtime webinar series for primary-care professionals that will feature video examples of the early red flags for autism. These clinicians will also be able to bring their own cases to share with the group.

Family care:

Our next steps are to encourage families to visit a parent portal and complete re-screenings by answering questions about their child at home before their next office visit, which could streamline the efficiency even more. With the screening results already in hand, primary-care providers can be ready to act and help get families started with next steps right away. Families also have online

access to **Autism Navigator family resources**, which are tailored to help them recognize the early signs of autism and to support their child's learning in everyday activities.

We are also rolling out a new online resource for families — **My Baby Navigator** — to help them recognize social-communication milestones from birth to 24 months, and to nurture their children's early learning.

We engage families first with the '16-by-16' series, an online photo collection of 16 key social-communication milestones that develop between 9 and 16 months, such as gestures and actions with objects. Parents can also access the Social Communication Growth Charts to watch hundreds of video clips illustrating early milestones with narration on responsive parenting, and to chart their child's development.

The World Health Organization has documented that **responsive parenting** can improve not only children's learning, but also their health outcomes. We believe that by teaching parents to recognize precise developmental milestones, this tool will decrease the age at which parents start noticing delays. Parents with a child who screens positive for autism are automatically invited to learn about the early signs of the condition.

The last but most important component is our 'How-To Guide for Families,' for parents who suspect their child has autism and are ready to start learning to support their child's development. They can get started with intervention right away, which can minimize the stress parents often feel given a positive screen in the face of long waitlists for services.

Online courses can help professionals and families sharpen their observation skills and build their confidence in recognizing the earliest signs of autism. By screening for and speaking up about the early signs of the condition by 18 months of age, we can help lower the reachable age of early detection.

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REFERENCES:

1. Schrader E. *et al. Clin. Pediatr. (Phila)* **59**, 305-309 (2020) [PubMed](#)
2. Brooks B.A. *et al. Clin. Pediatr. (Phila)* **55**, 927-934 (2016) [PubMed](#)
3. Campbell K. *J. Pediatr.* **183**, 133-139.e1 (2017) [PubMed](#)
4. Monteiro S.A. *et al. Pediatrics* **144** (2019) [PubMed](#)