

Editorials

CDC's Revised Developmental Milestone Checklists

Jennifer Zubler, MD, FAAP, Good Samaritan Health Center, Atlanta, Georgia
Toni Whitaker, MD, FAAP, University of Tennessee Health Science Center, Memphis, Tennessee

An estimated 1 in 6 children has a developmental disability and 1 in 44 eight-year-olds has autism spectrum disorder.^{1,2} Evidence-based early interventions can substantially improve developmental progress.³ Unfortunately, many children with developmental delays and disabilities are not identified or do not receive services during early childhood, a time when interventions may be most beneficial.

Since 2004, the Centers for Disease Control and Prevention's (CDC's) Learn the Signs. Act Early. program has provided free milestone checklists for developmental surveillance during well-child visits to improve early identification of developmental delays and disabilities. The checklists can be accessed at <https://www.cdc.gov/ActEarly/Materials>. They can help clinicians obtain a developmental history and elicit parent concerns, which are two components of developmental surveillance recommended by the American Academy of Pediatrics at all well-child visits. Universal developmental screening using validated tools is also recommended at 9, 18, and 30 months of age (e.g., Ages and Stages Questionnaire, 3rd ed.; Parents' Evaluation of Developmental Status: Developmental Milestones; Survey of Well-being of Young Children), and autism screening at 18 and 24 months of age.⁴

Additional screening is recommended if concerns arise during surveillance or at any other time while monitoring development between well-child visits. The combination of surveillance and screening creates a layered and continuous approach for early identification of developmental delays and disabilities.

The milestone checklists were recently revised because families and health care professionals indicated improvements were needed to better support developmental surveillance. The revisions ensure that the milestones listed reflect what most children of that age (i.e., 75% or more) would be expected to achieve. This is opposed to using average age or 50th percentile, which may make

interpretation of missing milestones difficult. The revisions can help clinicians and families avoid a wait-and-see approach by clarifying when to act. Checklists for children 15 and 30 months of age were added to ensure surveillance at all recommended well-child visits from two months to five years of age. A child missing any of the revised milestones should be considered for additional screening to help determine the child's risk of developmental delays or disabilities, or referred for evaluation for early intervention services and appropriate diagnostic evaluations.

A group of eight developmental experts evaluated the milestone checklists to determine which milestones to include based on specific criteria (e.g., observable in natural settings, written in plain language). The revision process was completed in 2019. The updated milestones were published in early 2022 and included a literature review of published normative data, the collective clinical experience of the expert group, and a review of additional resources, such as developmental screening and evaluation tools and educational and parent resources. Revisions included a reduction in the total number of milestones, removal of duplicate milestones, and addition of new milestones. Most of the original CDC milestones that were retained stayed within the same age group. Normative data from one or more sources were available for most milestones, and the expert group unanimously agreed on the revisions. Details about the revision process and each milestone (including checklist age, whether it is an original or new milestone, and which resources support its inclusion and age placement) have been published.⁵

The CDC milestones are just one component of the more comprehensive checklists that can support parents and clinicians in monitoring a child's development and taking action (i.e., screening or referral) if there are any concerns. The revised checklists provide new, open-ended questions to support discussion of concerns that assessing ►

milestone achievement alone may not capture. The checklists encourage families to attend well-child visits, know when it is time for universal developmental screening, and ask for screening if there are concerns. The checklists also provide tips for developmental promotion and anticipatory guidance.

Although further research is needed to determine best practices for surveillance, screening, and referral to improve early identification of developmental delays and disabilities, the CDC's free milestone checklists are an important resource to assist with early identification.

The findings and conclusions in this report are those of the authors and do not necessarily represent the official position of the Centers for Disease Control and Prevention.

Address correspondence to Jennifer Zubler, MD, FAAP, at wyv4@cdc.gov. Reprints are not available from the authors.

Author disclosure: No relevant financial relationships.

References

1. Cogswell ME, Coil E, Tian LH, et al. Health needs and use of services among children with developmental disabilities—United States, 2014–2018. *MMWR Morb Mortal Wkly Rep*. 2022;71(12):453–458.
2. Maenner MJ, Shaw KA, Bakian AV, et al. Prevalence and characteristics of autism spectrum disorder among children aged 8 years—autism and developmental disabilities monitoring network, 11 sites, United States, 2018. *MMWR Surveill Summ*. 2021;70(11):1–16.
3. Noyes-Grosser DM, Elbaum B, Wu Y, et al. Early intervention outcomes for toddlers with autism spectrum disorder and their families. *Infants Young Child*. 2018;31(3):177–199.
4. Lipkin PH, Macias MM; Council on Children with Disabilities, Section on Developmental and Behavioral Pediatrics. Promoting optimal development: identifying infants and young children with developmental disorders through developmental surveillance and screening. *Pediatrics*. 2020;145(1):e20193449.
5. Zubler JM, Wiggins LD, Macias MM, et al. Evidence-informed milestones for developmental surveillance tools. *Pediatrics*. 2022;149(3):e2021052138. ■

Jay Siwek

Medical Editing Fellowship

American Family Physician is announcing a call for applications for the next Jay Siwek* Medical Editing Fellowship to begin in June 2023. It is designed to provide insight into the field of medical journalism, with the goal of adding or enhancing a skill set for career diversification or advancement. This is a one-year remote fellowship with weekly virtual meetings and possibly in-person meetings at family medicine conferences.

*—Jay Siwek, MD, served for 30 years as the editor of *American Family Physician*. Dr. Siwek currently serves in the role of AFP Editor Emeritus.

Fellow Duties:

- Review and edit manuscripts and editorials
- Assist with editing various journal departments
- Participate in special projects including *AFP's* video channel
- Assist the editor-in-chief at medical editing workshops at family medicine conferences
- Participate in topic selection and solicitation for articles, editorials, and departments
- Participate in social media and other online initiatives
- Provide feedback as a member of the editorial team

For more information, see <https://www.aafp.org/afp/fellowship>

Applications to be sent to afpjourn@afp.org; due by 2/1/2023



AMERICAN FAMILY PHYSICIAN®