

Developmental Screening

About Technical Assistance Briefs. The MCH Evidence Center provides ongoing technical assistance (TA) to Title V agencies related to the emerging evidence base, strategies, and measures related to many topics interconnected with National Performance Measures and other critical topics in MCH. *Technical Assistance Briefs* are an outcome of these TA sessions that are designed to act as *conversation starters* in thinking about programs that can be developed to address issues that affect women, infants, children, adolescents, youth, families, and communities. These briefs are not meant to be comprehensive; full analyses of the NPM topic areas are provided in [Evidence Analysis Reports](#).

The Center makes these customized briefs available during TA and on the program website to identify evidence-based/informed strategies, promising practices, examples of ESMs from the field and peer-reviewed resources. Please [contact us](#) if you would like us to develop a similar report for topics that you are working on.

Initial Query for this Brief. Identify measures and best practices around Developmental Screening.

Evidence-Based Strategy Measures

ESM: Program Integration. These ESMs have been chosen by other states. You can review the ESMs to see if any resonate with your goals. Evidence Center staff are available to talk through how you could modify select ESMs to serve your needs.

State	ESMs
AL	ESM 6.2: Proportion of children birth to age 19 that received a developmental screening in conjunction with a well child appointment in the past year
AS	ESM 6.3: Percent of families who participated in community outreach activities hosted by MCH to promote developmental screenings.
AS	ESM 11.2: Percent of Providers attending Autism Screening Training
AZ	ESM 6.1: Proportion of new home visitors trained to provide ASQ within 6 months of hire.
AZ	ESM 6.2: Percentage of children receiving an ASQ within 1 year of program enrollment.
AZ	ESM 6.3: Percent of children enrolled in home visiting who received a referral for developmental services and have a complete referral.
AZ	ESM 6.5: Percent of providers that receive developmental screening training who report initiating developmental screenings with parents in their practices.
AK	ESM 6.1: Percent of WIC-enrolled children ages 2-59 months at Learn the Signs Act Early (LTSAE) sites who received developmental monitoring
AK	ESM 6.2: Percent of children, ages 2-59 months, in home visiting programs who were referred for therapy due to the results of a developmental screening using a validated parent-completed tool
CT	ESM 6.1: Percent of children less than 3 years old (1-2 years 364 days old) who receive a developmental screening according to claims code 96110
DC	ESM 6.1: Number of children who received a developmental screening
DC	ESM 6.2: Operationalize the use of a centralized registry (ASQ HUB) to track data on developmental screening.
GA	ESM 6.1: Number of providers that receive developmental screening training who report initiating developmental screenings with parents in their practices
GA	ESM 6.2: Percent of children that screen with concern that are referred to appropriate intervention services by providers

GA	ESM 6.3: Number of new community partners who implement developmental screening and make referrals to their local public health district
GA	ESM 6.4: Percent of children, ages 0 through 5, who receive a developmental screening from DeKalb Board of Health Refugee Clinic
GU	ESM 6.1: Number of home visitors trained to provide ASQ over the next 5 years.
GU	ESM 6.3: Percent of children participating in an evidence-based home visiting program who received age appropriate developmental screening,
HI	ESM 6.1: Develop and implement Policy and Public Health Coordination rating scale to monitor developmental screening efforts around the areas of systems development, family engagement, data integration, and addressing vulnerable populations
IL	ESM 6.1: Percent of Medicaid recipients ages 1-5 receiving at least one screening
IA	ESM 6.1: Percentage of Medicaid enrolled children ages 0-6 receiving a brief emotional behavioral assessment using a standardized tool according to Early Periodic Screening Diagnosis and Treatment (EPSDT) guidelines.
LA	ESM 6.1: Number of early care/education and health providers receiving developmental, social/emotional, and environmental screening trainings
ME	ESM 6.1: Percent of children aged 0-3 enrolled in MaineCare who had a claim for a developmental screening in the previous year.
MD	ESM 6.1: Number of parents who receive information/education on the importance of developmental screenings
NV	ESM 6.1: Percent of Medicaid enrolled children, ages 9 through 35 months, who received a developmental screening using a standardized tool.
NH	ESM 6.1: The number of sites using ASQ/ASQ-SE screening tools and participating in the Watch Me Grow (WMG) System.
NJ	ESM 6.1: Promote parent-completed early childhood developmental screening using an online ASQ screening tool.
NC	ESM 6.1: Percent of LHDs whose child health staff receive training on appropriate use of valid and reliable developmental, psychosocial, social determinants of health, and behavioral health screening tools for children during state fiscal year
OH	ESM 6.1: Percent of children, ages 1 through 66 months, receiving home visiting services who have received a developmental screening
PW	ESM 6.1: Increase the number of parents of children 9-35 months who complete the ASQ developmental screening tool
SC	ESM 6.1: Collaborate with partners to develop a state-wide developmental screening registry
TX	ESM 6.1: Number of Texas Health Steps Online Provider Education (OPE) users completing developmental screening modules
TX	ESM 6.2: Number of developmental screenings provided in the Healthy Child Care Texas Grant
TX	ESM 6.3: Percent of families participating in Help Me Grow Texas (HMGTX) who receive a developmental screening
UT	ESM 6.1: Number of annual ASQ trainings offered by the Early Childhood Utah program
UT	ESM 6.2: The number of ASQ screens contributed to the UDOH ASQ Online Enterprise Account by participating partners and enrolled programs.
VT	ESM 6.1: Number of providers trained in developmental surveillance and screening
VI	ESM 6.1: Children receiving a developmental screening using a parent-completed screening tool.
VA	ESM 6.1: Number of LHDs, community partners, and providers receiving developmental screening resources, training, or TA
WA	ESM 6.1: Number of ASQs provided by WithinReach to callers
WA	ESM 6.2: Number of children reported by HCA as receiving developmental screening
WA	ESM 6.3: Percentage of children screened by Home Visiting/MIECHV programs
WI	ESM 6.1: Percent of medical providers trained who report using an evidence-based screening tool
WI	ESM 6.2: Percent of medical providers trained who report a change in knowledge related to developmental screening age interval recommendations

WI	ESM 6.3: Percent of community developmental screening training participants who report an increase in knowledge regarding developmental screening
----	---

Evidence-Based Strategies – What Works for Health

The following programs have been identified as effective models related to developmental screening:

Title	Link	Category
Medical homes	https://www.countyhealthrankings.org/take-action-to-improve-health/what-works-for-health/strategies/medical-homes	Scientifically Supported
Parents as Teachers	https://www.countyhealthrankings.org/take-action-to-improve-health/what-works-for-health/strategies/parents-as-teachers-pat	Some Evidence
Health Families America (HFA)	https://www.countyhealthrankings.org/take-action-to-improve-health/what-works-for-health/strategies/healthy-families-america-hfa	Some Evidence

Evidence-Based Strategies – Innovation Hub

The following programs have been identified as effective models related to developmental screening:

Title	Link	Category
PASOS Connections for Child Development	https://amchp.org/wp-content/uploads/2021/05/PASOS-Connections-for-Child-Development.pdf	Promising
Expanded eligibility for WV CYSHCN through enhanced screening	https://amchp.org/wp-content/uploads/2021/09/Spring-2021_WV-CYSHCN_Practice-Handout-Emerging.pdf	Emerging
ASD in Primary Care Education (ASD-PRIME)	https://amchp.org/wp-content/uploads/2022/03/Emerging-ASD-PRIME-Implementation-Guide.pdf	Emerging
Child Development Clinic Services	https://amchp.org/wp-content/uploads/2021/10/Child-Development-Clinic-Services-Practice-Handout-Emerging-1.pdf	Emerging

Evidence-Based Resources

Resources from the MCH Digital Library & The Peer Reviewed Literature

Improving Health Outcomes for Children (IHOC): First STEPS II Initiative: Improving Developmental, Autism, and Lead Screening for Children. *Annotation* This report assesses changes in developmental, autism, and lead screening rates and evidence-based office processes in participating practices during the initiative, as well as related systems changes.

<http://digitalcommons.usm.maine.edu/cgi/viewcontent.cgi?article=1014&context=healthpolicy>

HV CoIIN: Implementing quality improvement to achieve breakthrough change in developmental promotion, early detection, and intervention. *Annotation* This paper describes the work of the Home Visiting Collaborative for Improvement and Innovation Network (HV CoIIN). It shares promising early evidence of achieving “breakthrough change” for vulnerable young children and families served by the Federal Home Visiting Program. The authors also share data on the progress that the HV CoIIN is making in improving outcomes for families across the United States.

<https://www.edc.org/hv-coiin-implementing-quality-improvement-achieve-breakthrough-change>

Enhancing developmentally oriented primary care: an Illinois initiative to increase developmental screening in medical homes. *Annotation* The leaders of this initiative sought to increase primary care providers' use of validated tools for developmental, social/emotional, maternal depression, and domestic violence screening and to increase early awareness of autism symptoms during pediatric well-child visits in children aged 0 to 3 years. These screenings facilitate identification of children at risk and those who need referral for further evaluation. Primary barriers to such screenings include lack of practitioner confidence in using validated screening tools.

<https://www.ncbi.nlm.nih.gov/pubmed/21123480>

Setting the stage for success: implementation of developmental and behavioral screening and surveillance in primary care practice--the North Carolina Assuring Better Child Health and Development (ABCD) Project. *Annotation* Early identification of children with developmental and behavioral delays is important in primary care practice, and well-child visits provide an ideal opportunity to engage parents and perform periodic screening. Integration of this activity into office process and flow is necessary for making screening a routine and consistent part of primary care practice. In the North Carolina Assuring Better Child Health and Development Project, careful attention to and training for office process has resulted in a significant increase in screening rates to >70% of the designated well-child visits.

<https://www.ncbi.nlm.nih.gov/pubmed/16818532>

The Bright Futures Training Intervention Project: implementing systems to support preventive and developmental services in practice. *Annotation* This project demonstrated the feasibility of implementing specific strategies for improving preventive and developmental care for young children in a wide variety of practices. It also confirmed the usefulness of a modified learning collaborative in achieving these results. This model may be useful for disseminating office system improvements to other settings that provide care for young children.

<http://pediatrics.aappublications.org/content/122/1/e163>

Improving developmental screening among pediatricians in New Mexico: findings from the developmental screening initiative. *Annotation* Seven pediatric primary care practices participated in New Mexico's Developmental Screening Initiative in a year-long quality improvement project with the goal of implementing standardized developmental screening tools.

<https://www.ncbi.nlm.nih.gov/pubmed/24658910>

Routine developmental screening implemented in urban primary care settings: more evidence of feasibility and effectiveness. *Annotation* Implementation of validated screening by using the Parents' Evaluation of Developmental Status was feasible in large, urban settings. Effectiveness was demonstrated via chart review documenting an increased rate of identification of developmental and behavioral concerns. Perceived obstacles, such as the time requirement, should not prevent widespread adoption of screening.

<https://www.ncbi.nlm.nih.gov/pubmed/19171635>

Engaging pediatricians in developmental screening: the effectiveness of academic detailing. *Annotation* Use of formal developmental screening tools in the pediatric medical home improves early identification of children with developmental delays and disorders, including Autism

Spectrum Disorders. A pilot study evaluated the impact of an academic detailing module in which trainers visited 43 pediatric primary care practices to provide education about implementing developmental screening tools in well-child services. Attendees responded to a post presentation survey stating that they planned to implement screening in their practices. Medicaid billing data showed an increase in the state's overall rate of screening. An audit of medical charts in five practices that received the training and five that did not showed higher screening rates in practices that received the training as well as higher rates after the training than before. These pilot study results indicate the potential of academic detailing as an effective strategy for improving rates of developmental screening.

<https://www.ncbi.nlm.nih.gov/pubmed/21826585>

Assisting primary care practices in using office systems to promote early childhood development.

Annotation The aim of this study was to use family-centered measures to estimate the effect of a collaborative quality improvement program designed to help practices implement systems to promote early childhood development services. The learning collaborative was associated with an increase in the number of practice-based systems and tools designed to elicit and address parents' concerns about their child's behavior and development and a modest improvement in parent-reported measures of the quality of care.

<https://www.ncbi.nlm.nih.gov/pubmed/19084789>

Implementing developmental screening and referrals: lessons learned from a national project.

Annotation In 2006, the AAP released a policy statement on developmental surveillance and screening that included an algorithm to aid practices in implementation. Simultaneously, the AAP launched a 9-month pilot project in which 17 diverse practices sought to implement the policy statement's recommendations. To assess the degree to which a national sample of pediatric practices could implement American Academy of Pediatrics (AAP) recommendations for developmental screening and referrals, and to identify factors that contributed to the successes and shortcomings of these efforts. A diverse sample of practices successfully implemented developmental screening as recommended by the AAP. Practices were less successful in placing referrals and tracking those referrals. More attention needs to be paid to the referral process, and many practices may require separate implementation systems for screening and referrals.

<https://www.ncbi.nlm.nih.gov/pubmed/20100754>

Use of a computerized decision aid for developmental surveillance and screening: a randomized clinical trial.

Annotation Developmental delays and disabilities are common in children. Research has indicated that intervention during the early years of a child's life has a positive effect on cognitive development, social skills and behavior, and subsequent school performance. Using a computerized clinical decision support system to automate the screening of children for developmental delay significantly increased the numbers of children screened at 9, 18, and 30 months of age. It also significantly improved surveillance at other visits. Moreover, it increased the number of children who ultimately were diagnosed as having developmental delay and who were referred for timely services at an earlier age.

<https://www.ncbi.nlm.nih.gov/pubmed/25022724>

Results from a randomized trial of the Healthy Families Oregon accredited statewide program: early program impacts on parenting. **Annotation** Examination of the outcomes of the Health Families Oregon (HFO) program Children in HFO received more developmental screenings than controls. Parents in HFO were more likely to read to their young child daily. Higher risk families had better outcomes than lower risk families.

<https://www.sciencedirect.com/science/article/pii/S0190740914002175>

Increases in behavioral health screening in pediatric care for Massachusetts Medicaid patients. Annotation To explore rates of screening and identification and treatment for behavioral problems using billing data from Massachusetts Medicaid immediately following the start of the state's new court-ordered screening and intervention program. The data suggest payment and a supported mandate for use of a formal screening tool can substantially increase the identification of children at behavioral health risk. Findings suggest that increased screening may have the desired effect of increasing referrals for mental health services.

<https://www.ncbi.nlm.nih.gov/pubmed/21383254>

A practice-based intervention to enhance quality of care in the first 3 years of life: the Healthy Steps for Young Children Program. Annotation There is growing concern regarding the quality of health care available in the United States for young children, and specific limitations have been noted in developmental and behavioral services provided for children in the first 3 years of life. To determine the impact of the Healthy Steps for Young Children Program on quality of early childhood health care and parenting practices. Universal, practice-based interventions can enhance quality of care for families of young children and can improve selected parenting practices. <https://www.ncbi.nlm.nih.gov/pubmed/14679271>

Developmental Screening: Technical Assistance Brief

Last Updated: July, 2022

Access other resources at <https://www.mchevidence.org>

This project is supported by the Health Resources and Services Administration (HRSA) of the U.S. Department of Health and Human Services (HHS) under grant number U02MC31613, Strengthen the Evidence for Maternal and Child Health Programs, \$3.5 M. This information or content and conclusions are those of the author and should not be construed as the official position or policy of, nor should any endorsements be inferred by HRSA, HHS or the U.S. Government.
