Strengthen the Evidence Base for Maternal and Child Health Programs

NPM 6: Developmental Screening

Developmental Screening is one of fifteen MCH National Performance Measures (NPMs) for the State Title V Block Grant program. The goal is to increase the percentage of children ages 9 through 35 months who received a developmental screening using a parent-completed screening tool. Developmental screening uses a standardized tool to help identify whether a child is at risk of developmental problems.\(^1\)

This screening often occurs at well-child visits, but can also take place in other health care, community, or early care and education/school settings. This brief identifies evidence-informed strategies that State Title V programs might consider implementing to address NPM 6.

The evidence review categorized interventions along an evidence continuum from Evidence Against (least favorable) to Scientifically Rigorous (most favorable). Interventions that are characterized by Emerging Evidence or more favorable ratings are considered evidence-informed. Moderate Evidence was identified for quality improvement in health care settings and systems-level approaches with quality improvement initiatives. Health care provider training only and home visiting were not assigned evidence ratings due to the limited number of studies assessing these strategies.

This review was conducted as part of Strengthen the Evidence Base for Maternal and Child Health Programs, a Health Resources and Services Administration-funded initiative that aims to support states in their development and implementation of strategies to promote the health and well-being of MCH populations in the United States. The remainder of the brief summarizes the approach to the review. The full review may be found at [http://semch.org/evidence-reviews.html](http://semch.org/evidence-reviews.html).
The American Academy of Pediatrics recommends that all children receive a general developmental screen at the 9, 18, and 30 (or 24) month well-child visit. In addition, children should be screened for autism spectrum disorder at the 18 and 24 month well-child visit. According to the 2016 National Survey of Children’s Health, only 30.4% of parents whose children ages 9 through 35 months who had a health care visit in the past 12 months completed a standardized developmental screening tool.

**METHODS & RESULTS**

Peer-reviewed studies were identified by searching three online databases. Thirteen peer-reviewed studies and 4 gray literature source were included. Studies were categorized into 4 groups based on their primary intervention and target audience: “Home Visiting,” “Health Care Provider Training Only,” “Quality Improvement in Health Care Settings,” and “Systems-level Approaches with Quality Improvement.” Systems-level interventions engage diverse stakeholders and may involve public-private partnerships. Examples of each intervention and its evidence rating are shown below.

<table>
<thead>
<tr>
<th>Target Audience</th>
<th>Intervention</th>
<th>Example(s)</th>
<th>Evidence Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>Parents</td>
<td>Home Visiting</td>
<td>Routine developmental screening and parent education by home visitors</td>
<td>———</td>
</tr>
<tr>
<td>Health Care Providers</td>
<td>Health Care Provider Training Only</td>
<td>Learning module implemented in pediatric practices</td>
<td>———</td>
</tr>
<tr>
<td>Health Care Practices</td>
<td>Quality Improvement in Health Care Settings</td>
<td>Statewide learning collaborative for pediatric practices</td>
<td>Moderate Evidence</td>
</tr>
<tr>
<td>Systems</td>
<td>Systems-level Approaches with Quality Improvement</td>
<td>Statewide learning collaborative for primary care practices with enhanced reimbursement for developmental screening and collaboration with local agencies</td>
<td>Moderate Evidence</td>
</tr>
</tbody>
</table>

—— indicates insufficient number of studies to assign evidence rating or outcome

Interventions identified from both peer-reviewed and gray literature (e.g., technical reports supported by data) were placed along an evidence continuum to reflect whether they were: *Evidence Against*, *Mixed Evidence*, *Emerging Evidence*, *Expert Opinion*, *Moderate Evidence*, or *Scientifically Rigorous*. Specific criteria for both study type and study results informed the designation of the level of evidence for each intervention. Interventions with fewer than four studies were not placed on the continuum.
KEY FINDINGS

- Quality improvement in health care settings appears to be effective.

- Systems-level approaches with quality improvement interventions appears to be effective.

- Health care provider training and home visiting programs may be effective; however, further evidence is needed to fully assess their impact.

IMPLICATIONS

- Ongoing evaluations of multiple national initiatives, such as the Early Childhood Comprehensive Systems Collaborative Improvement and Innovation Network (ECCS CoIIN) and Project LAUNCH (Linking Actions for Unmet Needs in Children’s Health) may yield additional strategies to increase the percentage of children receiving developmental screening.

- Sustained investment in evaluations of systems-level approaches is essential for expanding the base of strategies to improve developmental screening.

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References


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