Nationally, about 16 percent of children have some form of disability, including speech and language delays, mental retardation, learning disabilities, and emotional or behavioral problems. Among low-income children, such problems are even more common.

Screening and surveillance can identify developmental and behavioral problems and help children get the services they need. Even for children without problems, screening offers a way for providers to solicit parents’ concerns and for families to learn about age-appropriate behavior and development. But screening is not part of routine primary care—only 30 percent of children needing services are identified by the time they begin school.

In “Setting the Stage for Success: Implementation of Developmental and Behavioral Screening and Surveillance in Primary Care Practice,” (Pediatrics, July 2006), Marian F. Earls, M.D., of Guilford Child Health and the University of North Carolina School of Medicine, and Sherry Shackelford Hay, M.P.A., of the North Carolina Office of Research, Demonstrations, and Rural Health Development, present strategies for integrating developmental screening into pediatric offices. The strategies are drawn from lessons learned in North Carolina, which has developed a comprehensive system to significantly increase screening rates.

Physicians Are Key to Implementation
The authors attribute North Carolina’s success to the fact that it was led by physicians. This factor influenced the choice of screening tools: both the ASQ and PEDS instruments are inexpensive, parent-completed surveys that require little staff time and can easily fit into the office flow. A list of other suitable tools is available at www.dbpeds.org.

Participating practices identified several steps to successfully incorporating developmental services into their offices. These include: identifying a physician champion to maintain the initiative as a priority;
selecting a screening tool; identifying system supports, including community partners; conducting staff orientations, such as nursing and office staff; and sharing process and outcome data at regular intervals.

Resources for Replication
The model spread through the state partly through the efforts of a physician champion, who led an ABCD advisory group and participated in child welfare committees. The state also worked to identify care management resources in local communities to support practices.

In addition, the ABCD project team developed resources to guide practices in implementing developmental screening and surveillance. These include:

- an office resource guide;
- curricula and workbooks, eligible for continuing medical education;
- anticipatory guidance to use at each well-child visit, available in English and Spanish;
- “talking guides” for clinicians;
- posters for the exam and waiting rooms that promote awareness of early intervention and encourage families to request developmental screening; and
- video and companion workbooks for practice teams.

While some features of North Carolina’s programs are unique, such as its existing Medicaid case management system, the lessons and resources can inform efforts in practices across the country to expand developmental surveillance and improve the quality of pediatric care.

Facts and Figures

- According to a 2002 American Academy of Pediatrics (AAP) survey, most pediatricians (71%) use clinical observation only, without a screening instrument, to identify children with developmental delays.
- In the AAP survey, only 23 percent of pediatricians reported using a standardized tool, and many reported doing so only when parents expressed concern or the child was known to be at higher risk for developmental delays.
- According to the 2000 National Survey on Early Childhood Health, only 57 percent of children ages 10 to 35 months ever received developmental screening by their primary care provider. When screening did occur, parents gave their physicians higher ratings for providing family-centered care.

Children Screened Using the Ages and Stages Questionnaire

<table>
<thead>
<tr>
<th>Percent of 1-, 2-, and 4-year-olds screened</th>
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<tbody>
<tr>
<td>Baseline 1999</td>
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<td>24 25 64 67 76 64 65</td>
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Notes: ASQ = Ages and Stages Questionnaire. Years 2, 3, and 4 include two additional practices.
Source: Adapted from M. F. Earls and S. S. Hay, “Setting the Stage for Success: Implementation of Developmental and Behavioral Screening and Surveillance in Primary Care Practice,” Pediatrics, July 2006 117(7):e183–e188.