



Bay Area First 5 Policy Brief

Developmental Screening

POLICY
BRIEF

01

Investing in Our Children...
Investing in Our Future...
Investments that Last a Lifetime.





About This Brief

This brief is the first in a series produced periodically by the Bay Area First 5 Commissions. First 5 Bay Area is a collaborative of the First 5 Children and Family County Commissions in eleven counties in the Bay Area: Alameda, Contra Costa, Marin, Monterey, Napa, San Mateo, Santa Cruz, Santa Clara, San Francisco, Solano, and Sonoma. For more information, contact www.first5kids.org/bay.

Improving Health and School Readiness Through Developmental Screening

Children's physical, intellectual and emotional growth in the first five years creates the foundation for their future. These early years are a time of rapid physical growth and brain development. Child development usually progresses in a typical sequence, with a wide range of timing for the "normal" milestones – walking, talking, and attaining social skills. For some children however, progress does not follow this typical pattern.

Consider this: in the last 24 hours, 250 babies have been born in the Bay Area.⁸ Three or four of these children have a disability that will be obvious from birth. But some – perhaps as many as 25 of the 250 born today – will have challenges that may derail typical development and that are not so quickly identified. These are the children that we are concerned about in this brief. Developmental screening can greatly increase the chances of identifying and helping these children before their issues become permanent disabilities.⁹

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What Is Developmental Screening, and How Does It Happen?

Developmental screening is the process of identifying children who may need further assessment to confirm a developmental problem. Screening may also identify children who are at risk for future problems.¹⁰ The process is conducted by pediatricians, nurses, teachers or specially-trained paraprofessionals using tools such as brief checklists, inventories, or parent-completed questionnaires. Routine screening covers all areas of child development: moving, hearing, seeing, thinking, communicating and relating to others.

Professionals that have frequent contact with young children and families are typically the “first responders” in spotting potential problems. Early screening, identification and intervention make a difference for many children. About one-third of California children who receive these intervention services before the age of three do not require additional intervention once they enter school.^{11,12,13} Early identification can also prevent or reduce additional disabling conditions before they emerge. Children who have participated at a young age in services to address developmental delays or disabilities have been found later to have improved cognitive and social skills, higher school achievement and greater success and well-being in adulthood.¹⁴ It makes sense to recognize challenges and intervene early in life during the time when the developing brain has demonstrated great capacity for new learning.^{15,16}

Why Is Developmental Screening Important?

When parents suspect that their child may be facing a developmental problem, they need support and information in order to take appropriate steps to address that concern.¹⁷ Typically, they look to trusted professionals for this support. In the National Survey of Children's Health more than one-third (36%) of California parents of children under five had worries about their child's physical, behavioral or social development.¹⁸ Yet fewer than half of these parents (42.5%) reported that they had been asked by their child's physician in the previous year whether they had any concerns about their child's learning, development or behavior.¹⁹

Many months may pass before a parent first senses such concern and has when the parent actually has in place a plan to support the child's development.²⁰ This time lag is stressful for families as precious months that could make a difference are wasted. Broadly available developmental screening can reduce this gap in time. For parents of typically developing children, screening can provide information that helps them to understand their child's development.



Policy Recommendations:

The American Academy of Pediatrics recommends that pediatricians conduct developmental screening using appropriate screening instruments during well-child check-ups at 9-, 18- and 30-months of age, and whenever a concern arises.²¹ Many physicians need support to implement these recommendations. California Children's Health and Disability Prevention program (CHDP) regulations and health care service provider manuals should clearly spell out expectations for screening at 9-, 18- and 30-month visits and provide specific information on appropriate, standardized screening methods. Insurance coverage and reimbursement systems, including Medi-Cal and Healthy Families, must cover the cost of screening whether it occurs as part of a well-child visit or separately, and allow for payment whether the screen is conducted by a physician or another trained medical staff member.

Screening should be comprehensive and systematic. Screening conducted by physicians typically covers health issues, physical milestones and language development.²² However, young children, especially infants and toddlers, are rarely screened for social-emotional problems. Training and resources should be made available to the professionals who have regular contact with young children and their families (for instance, pediatricians, public health nurses, child care providers and social workers) so that they can conduct systematic screening including social-emotional concerns.²³ Studies show that training and technical assistance can increase frequency of developmental screening by pediatricians.²⁴

Children from low-income families are at risk for developmental challenges. Children who have been exposed to family violence, parental substance abuse or other early trauma are at even greater risk.²⁵ These children deserve on-going monitoring and thorough screening at recommended times. Extra coordination is required to ensure that infants and toddlers in foster care receive recommended screenings. Programs with mandated child screening services, such as Medi-Cal, regional centers, local education agencies and child welfare agencies, should have stronger monitoring and non-compliance sanctions to ensure that all eligible children are screened.

Policy Makers Can:

- Incorporate specific language into health care, early education, early intervention and child welfare regulations to ensure that all children receive regular screening according to the guidelines recommended by the American Academy of Pediatrics, including physical, cognitive, language and social-emotional development.
- Ensure through standards, financing, program accountability, etc., that pediatricians and other child services use appropriate, comprehensive methods to regularly screen for problems in development.
- Fund technical assistance and training for doctors and community service providers to support adoption of appropriate screening and referral procedures.
- Ensure that children from vulnerable circumstances – children in the child welfare system – are connected to services that can assess their development and provide necessary services to address problems.

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Recommendations for Communities and County Agencies:

Identifying a possible developmental concern is only the first step in the chain of events that may lead to successful prevention or intervention. Children needing support can be identified and served earlier when screening is linked to a network of services. On-going developmental monitoring activities by health, education and social service professionals can ensure that young children receive preventive services before risks become developmental problems and problems become severe.

Helping parents understand child development and ask questions about concerns will pinpoint problems early. Parents can be asked to complete a questionnaire at the doctor's office, at community health fairs, at kindergarten registration, and other "child find" community events. Involving parents in monitoring their child's development helps them to ask effective questions and opens the door to connect with appropriate professionals.

Increasing the pool of community members familiar with child development and screening procedures also can connect families to appropriate resources. Child care providers, parent educators, children's librarians, public school administrators, public health nurses, and others who have regular contact with young children and their families can be oriented to screening and referral resources. They can be recruited to assist with community screening campaigns.



Communities Can:

- Give parents the tools to act on concerns about their child's development.
- Engage local pediatricians, general physicians, child care providers, WIC and social service providers, and others in the community in monitoring child development.
- Ensure that local public agencies align with state and federal guidelines for delivery of developmental screening.
- Once a developmental concern has been identified, ensure that families receive assistance to find and access appropriate intervention services.
- Coordinate local screening activities by building referral decision trees, creating Memoranda of Agreement to make and accept referrals, and training local United Way 2-1-1 helpline staff in the basics of developmental screening and referral. These actions will close the gap between the time a concern is first identified and when children receive services.

Why Does Early Intervention Pay?

What we know about Developmental Screening

- Almost one in five children face developmental disabilities or disabling behavioral problems before age 18.¹ Fewer than half of these children are identified before the age of five.²
- Over 25,000 Bay Area children five years of age or younger have a special health care need.³
- 20% to 30% of children with a disability may be missed by a single developmental screening but will be identified if screening and monitoring are continued in all well-child medical visits.⁴
- Poverty is well established as one of the strongest predictors of poor developmental outcomes in children. Low-income children are more likely to experience physical and social-emotional challenges that can lead to developmental delays and disabilities.⁵
- 45% of California's children birth to age five live in low-income families.⁶ All of these children (nearly 1.4 million California children) are eligible for developmental screening, diagnosis and treatment through the Medi-Cal or Healthy Families programs.
- California falls short of the federal benchmark for developmental screening of Medi-Cal children. The federal benchmark is 80% of children screened annually. In California, only 66% of infants and toddlers received at least one screening through Medi-Cal in 2007, and the percentage screened was even lower for 3-5 year olds (62%).⁷



Does your savings account or investment portfolio give you a 12%-17% return? Studies of early intervention programs for infants and toddlers have found that addressing children's developmental delays or disabilities early can have significant economic benefits down the road, by creating savings in social programs, and reducing crime and the need for remedial education.²⁶ While not every program will earn this high rate of return, significant long term savings can be gained from recognizing children's challenges early and responding appropriately. Glascoe and Shapiro estimate that two years of intervention prior to kindergarten can save \$30,000 - \$100,000 per child in the future.²⁷ With almost 14% of California's education budget spent on special education services in kindergarten through 12th grade,²⁸ early intervention can offer significant savings to the state in future education, criminal and correctional system expenses.





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¹ Centers for Disease Control and Prevention, "Child Development: Using Developmental Screening To Improve Children's Health," Centers for Disease Control and Prevention.
<http://www.cdc.gov/ncbddd/child/improve.htm> (accessed July 22, 2008).

² CDC, *ibid*.

³ Estimate based on findings of Child and Adolescent Health Measurement Initiative. 2005/2006 National Survey of children with Special Health Care Needs. Data Resource Center for child and Adolescent Health website. Retrieved 10/1/08 from www.cshcndata.org/DataQuery/DataqueryResults.aspx.

⁴ Glascoe, F. "Early Detection of Developmental and Behavioral Problems," *Pediatrics in Review* 21 (2000): 272-280.

⁵ Shonkoff, J. & Phillips, D, Eds., (2000). *From neurons to neighborhoods: The science of early childhood development*. Board on Children, Youth and Families, Commission on Behavioral and Social Sciences and Education. Washington DC: National Academy Press.

⁶ National Center For Children in Poverty (2008). California early childhood profile. Retrieved on 10/1/08 from http://www.nccp.org/profiles/pdf/profile_early_childhood_CA.pdf. Low-income families earn less than 200% of the Federal Poverty Level.

⁷ National Center For Children in Poverty, *ibid*.

⁸ California Vital Statistics and Population Summary Tables, Live births, deaths, maternal deaths, fetal deaths, and infant deaths by age, California counties, 2005 <http://www.cdph.ca.gov/data/statistics/Documents/VSC-2005-0102.pdf>.

⁹ U.S. Census, 2005-2007 American Community Survey, 3-year estimate, available at http://www.factfinder.census.gov/servlet/STGeoSearchByListServlet?_lang=en&_ts=249671160531.

¹⁰ Bergman, D., "Screening For Behavioral Developmental Problems: Issues, Obstacles, And Opportunities For Change," National Academy for State Health Policy (2004).

¹¹ Data Tables for OCEP State-Reported Data, Part C Program Exiting, 2005-06. Retrieved on 10/10/2008 from https://www.ideadata.org/arc_toc8.asp#partcEX.

¹² ZERO TO THREE Policy Center (2009). *Achieving the promise of a bright future: Developmental Screening of Infants and Toddlers*. Washington, DC: author.

¹³ Hebbeler, K., Spiker, D., Bailey, D., Scarborough, A., Mallik, S., Simeonsson, R., Singer, M., and Nelson, L., "Early Intervention for Infants and Toddlers With Disabilities and Their Families: Participants, Services, and Outcomes." Final Report of the National Early Intervention Longitudinal Study (NEILS), SRI International (January 2007).

¹⁴ Shonkoff, J. & Phillips, D., *ibid*.

¹⁵ ZERO TO THREE Policy Center (2009). *Making hope a reality: Early intervention for infants and toddlers with disabilities*. Washington, DC: Author.

¹⁶ American Academy of Pediatrics (2006). Identifying infants and young children with developmental disorders in the medical home: An algorithm for developmental surveillance and screening. *Pediatrics*, 118 (1), 405-420.

¹⁷ ZERO TO THREE (2000). *What Grown Ups Understand About Child Development: A National Benchmark Survey*. Washington, DC: author.

¹⁸ Child and Adolescent Health Measurement Initiative. 2005/2006 National Survey of children with Special Health Care Needs. Data Resource Center for child and Adolescent Health website. Retrieved 10/1/08 from www.cshcndata.org/DataQuery/DataqueryResults.aspx.

¹⁹ Child and Adolescent Health Measurement Initiative, *ibid*.

²⁰ Hebbeler, et al, *ibid*.

²¹ American Academy of Pediatrics, *op. cit*.

²² Bergman, *op. cit*.

²³ Glascoe, *op. cit.*; Earls, M. and Hay, S. (2006). 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. *Pediatrics*, 118, 183-188.

²⁴ Earls, M. and Hay, S. *ibid*.

²⁵ Shonkoff and Phillips, *op. cit*.

²⁶ Robert Wood Johnson Foundation, March 2006; Ramey, C., 1999; Reynolds, A.J. et al, 2001.

²⁷ Glascoe, F. and Shapiro, H. (1999). Developmental and behavioral screening. Retrieved on 10/1/2008 from http://www.dbpeds.org/section/fall_1999/glascoe.html.

²⁸ Stanford Research Institute (2007).