

## **Improving the Lives of Young Children**

### **The Role of Developmental Screenings in Medicaid and CHIP**

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#### **Executive Summary**

Many young children have health, developmental or behavioral problems that are not identified before entering kindergarten, preventing them from receiving such services as medical care, early intervention services, or simple equipment like eyeglasses or hearing aids. Yet as health care providers and early childhood providers alike recognize, ensuring that children get the right treatment or services early on can maximize their developmental outcomes, while failing to identify and treat these problems may compromise children's ability to perform to their potential in school and lead to more costly special education and/or health care interventions later. For these reasons, the importance of screening is reflected in both the American Academy of Pediatrics' Bright Futures guidelines and the Head Start Performance Standards.

Yet large gaps in early identification exist in Medicaid, the nation's largest health insurance program for children, in which eligible children are entitled under federal law to get regular health and developmental screenings. In Medicaid, practical implementation challenges result in missed screening and treatment services; CHIP benefits vary by state and do not always offer coverage for these services. Together, Medicaid and CHIP cover half of low-income children and an even larger share of low-income young children. Increasing developmental surveillance and screening rates in Medicaid and CHIP could greatly increase how often developmental delays are correctly identified in this population.

This brief breaks down the shortfalls in receipt of developmental screenings among low-income children into the following components: not all eligible children are enrolled in Medicaid/CHIP; not all those who are enrolled see a health care provider for well-child visits, and many do not have a regular provider who tracks their care over time; and even when children visit health care providers, not all providers have the appropriate tools or skills to carry out effective developmental screenings. Together, these problems undercut the intent of the law

that all Medicaid-covered children should receive screenings.

To address these problems, states can take a number of steps within the Medicaid/CHIP policy environment. To track both gaps and progress in this area, states will need to invest in data systems that allow them to evaluate how rates of Medicaid and CHIP participation, screening, assessments, and referrals are changing. Progress in this area will require investments in health information systems and technology, quality measurement, and public program administration.

#### **Increase Participation in Medicaid and CHIP**

Even though Medicaid and CHIP reach the vast majority of low-income children who are eligible, millions of uninsured children who are eligible do not participate. Therefore, a first step to improving their access to screening is to enroll them. State strategies to increase participation in these programs include simplifying and implementing automated enrollment and retention systems, engaging in targeted outreach, developing partnerships with community-based organizations for outreach and application assistance, and adopting Express-Lane enrollment strategies.

#### **Increase Provision/Receipt of Well-Child Visits under Medicaid/CHIP**

Many young children who are enrolled in Medicaid do not receive regular well-child visits. Some barriers have to do with the availability of health care providers and clinics for children on Medicaid (or "supply-side barriers"), while others have to do with whether low-income families believe preventive care is important and whether they can access the care that is available ("demand-side barriers"). To increase receipt of well-child care, states may need to address both kinds of barriers through several strategies, including raising reimbursement rates, increasing the timeliness of payment, and rewarding providers for providing well-child care; providing funding for interpretation and translation services; educating providers and families about the value of well-child care;

expanding insurance coverage to parents; and rewarding families for well-child care receipt. While there is some evidence that rewarding families whose children have recommended levels of well-child care can increase receipt of care, more analysis and evaluation are needed around what policies increase demand for these services.

### *Increase Use of Standardized Developmental Screenings during Well-Child Visits*

Primary care providers identify developmental issues and delays more often and earlier when they use standardized, objective screening tools to enhance their clinical assessment, rather than relying on judgment alone. Increasing the rate at which providers use standardized screening instruments to monitor development in their young Medicaid and CHIP patients will likely require removing barriers that include gaps in provider training, lack of connections to community resources for referral and follow-up, and inadequate reimbursement (which lowers the time and staffing available to conduct screenings). Simplifying and clarifying billing practices for developmental screenings; providing incentives in managed care contracts for using standardized tools; providing reminder sheets to providers and parents; conducting provider trainings; and establishing a network of primary care, specialist, and community-based service providers for referrals and follow-up services can improve screening rates among children.

### *Use Data to Monitor, Develop, and Fine-Tune Policy Changes*

To track progress in this area, states need to invest in data systems that allow them to evaluate how Medicaid/CHIP participation, screening, assessment, and referral rates are changing. For receipt of screenings, accurate data are needed on the number of children screened (the numerator) and the number who should have been screened (the denominator) for children covered through both managed care plans and fee-for-service settings. The CMS Form-416 Reports for Medicaid programs and the Healthcare Effectiveness Data and Information Set provide some information on these measures; however, further investments are needed in these data systems to enable valid comparisons across states and over time.

### *Take Advantage of New Opportunities in CHIPRA and Health Reform*

The Children's Health Insurance Program Reauthorization Act (CHIPRA) of 2009 and the Patient

Protection and Affordable Care Act (PPACA) of 2010 both contain provisions that could lead to greater identification of children at risk for or in need of services under Medicaid and CHIP. CHIPRA mandates the establishment of core quality measures for child health care, including the provision of developmental screenings for children from birth to 36 months. As Medicaid and CHIP begin tracking this measure, it may increase how often providers conduct such screenings. CHIPRA also funds demonstration projects focused on child health quality improvements (including delivery system changes, implementation of electronic health records, quality measurement, and childhood obesity reduction) that may draw more attention to the inadequacies of the current system and lead to corrections.

PPACA contains a number of provisions that change the playing field for children's health. First, federal health care reform will likely increase the number of children and parents covered under Medicaid because of new investments in outreach, enrollment simplifications, and eligibility expansions to adults. Second, the law uses federal funding to increase reimbursement rates for primary care physicians providing certain services up to the rates paid by Medicare in 2013 and 2014, which could increase provider enrollment in Medicaid and the provision of services, including well-child care, to young children covered under the program. However, it is unclear whether these increases will be sustained beyond 2014 or whether the higher rates will ultimately be available to non-physician providers of primary care, such as registered nurses. Moreover, there is no scope in current legislation for increasing Medicaid rates for specialty care. Third, changes in funding for community health centers could also affect access to care for uninsured and publicly insured populations. Fourth, the law includes funding to promote a medical home model, which may increase the provision of both well-child care and developmental screenings to children.

To increase the provision of developmental screenings to young children in Medicaid and CHIP, states will need to address shortfalls in Medicaid/CHIP participation, well-child visits, and the extent to which providers are conducting developmental screenings. While a number of promising policy options are available to states in each area, more systematic analysis of how state policy choices influence the receipt of well-child care and the provision of developmental screenings would provide critical information to help guide state action.

## Introduction

Many young children have developmental or behavioral problems that are not identified before entering kindergarten, preventing them from receiving treatment and services, such as medical care, early intervention services, or simple equipment like eyeglasses or hearing aids that could maximize their developmental outcomes (Rydz et al. 2006; Sand et al. 2005). The failure to identify and effectively treat these problems may compromise a child's ability to perform up to his or her potential in school and lead to costly special education or health care interventions later (Schweinhart 2003; Schweinhart et al. 1993). Child health pertains not only to children's physical health, but also to their mental and social-emotional health and well-being and their development (Bruner 2010b; Institute of Medicine 2004). For these reasons, the importance of screening is reflected in both the American Academy of Pediatrics' Bright Futures guidelines (Hagan, Shaw, and Duncan 2008) and in the Head Start Performance Standards. and early identification, screening and broader "child find" efforts are required under the Individuals with Disabilities Education Act, Part C, Program for Infants and Toddlers with Disabilities.

Several standardized tools have been developed to identify children who are at high risk of developmental delays or disabilities.<sup>1</sup> These include standard hearing and vision tests as well as tools designed to screen for delays in fine and gross motor skills, language, cognition, and social-emotional development. While some tools are designed to detect specific problems, others inquire more broadly about the child's development and about parent/caregiver concerns about how the child is behaving and developing.

Some screening tools are administered as parent-completed questionnaires, while others may require the child to perform certain tasks in front of a parent, physician, or other provider who completes the screening form. Parent-completed questionnaires can be completed in the waiting room and scored by office staff before the child enters the exam room (Schonwald et al. 2009). Parents can also be asked to have the child perform tasks at home and record the results before coming in for a preventive visit.

No screening tool is universally recommended for all ages and populations because different tools have

been designed and validated for children of different ages, cultural groups, and domains of development. In fact, the choice of screening tool may influence which children are identified for further evaluation and referral (Rydz et al. 2006; Sices et al. 2009).

Over the past three decades, the federal government and medical organizations have increased emphasis on developmental screening and early intervention for infants and toddlers. Public Law 99-457, signed in 1986 and reauthorized as the Individuals with Disabilities Education Act in 1991, created an Early Intervention state grant program specifically for infants and toddlers from birth to their third birthday (Arc of the United States 1990; Committee on Children with Disabilities 1994). The American Academy of Pediatrics recommends that all children undergo developmental screenings at regularly scheduled preventive visits. Research has shown that clinical assessment without the use of standardized screening tools identifies less than 30 percent of children with developmental disabilities, while reliable screening tools correctly identify such children at least 70 percent of the time (Sand et al. 2005).

Because health and developmental problems evolve over a child's life span, it is important that a child's primary care physician conduct ongoing developmental surveillance and repeated screenings at scheduled visits. Developmental surveillance extends beyond the use of standardized screening tools to encompass the questions a primary care provider asks to elicit parent concerns and uncover potential developmental problems. Developmental surveillance should be conducted at every visit, and it can trigger inter-periodic screening if concerns have arisen. It may also be used to detect and address family- or neighborhood-level influences or stressors that could relate to a child's abnormal development, including food insecurity, domestic violence, or unhealthy living conditions (Bruner 2010a).

Receiving ongoing surveillance may be a challenge for children with intermittent Medicaid/CHIP coverage as a result of complicated and time-consuming renewal procedures, seasonal income changes, and transient housing situations. Recent data suggest that a third of currently uninsured children were enrolled in Medicaid or CHIP at some point in the previous year and that an even higher share was enrolled at some point in the previous two years

(Kenney and Pelletier forthcoming; Sommers 2007). Gaps in health insurance coverage are associated with lower rates of well-child visits (Olson, Tang, and Newacheck 2005).

Once a child has been identified as needing additional evaluation and referral, ideally, appropriate referrals and a developmental assessment (i.e., diagnostic evaluation) would be conducted to identify the degree of impairment and specific developmental disorder(s), whether the child might benefit from intervention services, and what intervention services would be most beneficial. However, in practice, children with developmental delays wait on average 9 months after the parent's first stated concern to receive services (Hebbeler et al. 2007). Assessments are more costly and time consuming to administer than screenings and may be administered in the physician's/pediatrician's office, or the child may be referred to another provider, including a community-based early intervention provider (Bergman 2004; Rosenthal and Kaye 2005). When possible, assessments or services would be provided immediately in the primary care provider's office.

Other problems, such as those affecting a child's vision or hearing, may be remedied if caught early by providing the child with glasses or a hearing aid, along with any needed supports and services for the family. Delaying diagnosis of these problems, however, can lead to delays in other areas, such as speech and motor skills and behavioral issues, potentially raising the need for more intensive treatment services.

Over a quarter (26.4 percent) of children under age 5 are at moderate or high risk of developmental, behavioral, or social delays based on parent report.<sup>2</sup> However, risk factors are not evenly distributed across all children. Poor children (33 percent), minorities (34 percent of Hispanic children and 32 percent of black children), and children with public insurance (33 percent) appear more likely to be at risk for delays. These children may be in situations where their healthy social, emotional, behavioral, or cognitive development is jeopardized. But guidance, support, and community services to those young children and their families could improve their opportunities for healthy development. For instance, young children in low income households are at higher risk of developmental delays partially because they experience lower levels of verbal communication with parents, have less access to toys, have fewer

opportunities to fully engage with their environment, experience higher family-related stress and more environmental hazards such as exposure to lead paint, and because they are more likely to live in violent or distressed neighborhoods where they cannot safely play.

While no definitive estimates are available on how many young children are getting screened during well-child visits, according to one national survey of parents, just one in five children between the ages of 10 months and 5 years who had had a health care visit in the past year had a parent who had completed a standardized developmental and behavioral screening instrument during a visit.<sup>3</sup> Twenty-five percent of children covered by Medicaid or CHIP had parents who had completed a standard screen, which, while low, was significantly greater than the share of privately insured and uninsured kids with reported screenings (18 percent of privately insured and 15 percent of uninsured).<sup>4</sup>

Together, Medicaid and CHIP cover half of all low-income children and two-thirds of low-income young children.<sup>5</sup> Increasing developmental screening and surveillance rates in Medicaid and CHIP could greatly increase how often developmental delays are correctly identified in this population. While identifying at-risk children in Medicaid/CHIP does not guarantee that they will receive needed intervention services, it is an important first step to improving developmental outcomes for children.

## Medicaid and CHIP Policy Framework

Medicaid provides acute and long-term care services to many low-income Americans, including children, parents, the disabled, and the elderly. The program is jointly financed by the federal government and states, with the federal government funding between 50 and 76 cents of every dollar spent.<sup>6</sup> After meeting federally mandated minimum standards on eligibility rules and covered benefits, states have broad latitude over the design of their Medicaid programs. As a result, eligibility rules, application processes, and delivery systems vary widely across states.

The Children's Health Insurance Program (CHIP) was established in 1997 to provide health insurance coverage for children in families whose incomes were too high to qualify for coverage under Medicaid, but who lacked access to affordable private health



insurance coverage. Though an optional program, all states expanded coverage under CHIP, which now covers just under 5 million children (Smith, Roberts, Marks, et al. 2010). While some states chose to expand eligibility in their Medicaid program to children with higher incomes, other states designed a separate program that operates outside Medicaid; still other states pursued a combination of both approaches. CHIP also allows states some latitude over benefits design and cost sharing up to a maximum of 5 percent of family income. The share of program costs that the federal government provides is larger for CHIP than for Medicaid, between 65 and 83 cents of every dollar.

The Children's Health Insurance Program Reauthorization Act (CHIPRA) of 2009 (PL 111-3) included several provisions designed to improve the quality of care enrollees receive in the program, including the establishment of initial core quality

measures that states could choose to report for their Medicaid and CHIP programs. One measure is the rate of screening of children age 0–36 months using a standardized screening tool for potential delays in social and emotional development.<sup>7</sup>

Table 1 shows income eligibility levels in Medicaid and CHIP for children age birth through 5 by state as of December 2009. Through CHIP, all states cover children above the federally mandated minimum levels established for children 5 and under in Medicaid, 133 percent of the federal poverty level (FPL). All but three states cover children at 200 percent FPL or higher, and 15 states and the District of Columbia cover children at 300 percent FPL or higher. Medicaid is a much larger program than CHIP, covering around four to five times as many children (Kaiser Commission 2010; Smith, Roberts, Rousseau, et al. 2010).

**Table 1. Medicaid and CHIP Income Eligibility for Children Age 0–5 in All States, December 2009**

State	Under 1 Year	1 to 5 Years	0 to 5 Years
	Medicaid	Medicaid	CHIP
Alabama	133	133	300
Alaska	175	175	
Arizona	140	133	200
Arkansas	200	200	
California	200	133	250
Colorado	133	133	205
Connecticut	185	185	300
Delaware	200	133	200
District of Columbia	300	300	
Florida	200	133	200
Georgia	200	133	235
Hawaii	300	300	
Idaho	133	133	185
Illinois <sup>a</sup>	200	133	200 (no limit)
Indiana	200	150	250
Iowa	300	133	300
Kansas	150	133	241
Kentucky	185	150	200
Louisiana	200	200	250
Maine	200	150	200
Maryland	300	300	
Massachusetts <sup>a</sup>	200	150	300 (400)
Michigan	185	150	200
Minnesota <sup>b</sup>	280	275	
Mississippi	185	133	200
Missouri	185	150	300
Montana	133	133	250
Nebraska	200	200	
Nevada	133	133	200
New Hampshire	300	185	300
New Jersey	200	133	350
New Mexico	235	235	
New York	200	133	400
North Carolina <sup>c</sup>	200	200	
North Dakota	133	133	160
Ohio	200	200	
Oklahoma	185	185	
Oregon	133	133	300
Pennsylvania	185	133	300
Rhode Island	250	250	
South Carolina	185	150	200
South Dakota	140	140	200
Tennessee <sup>d</sup>	185	133	250
Texas	185	133	200
Utah	133	133	200
Vermont <sup>e</sup>	300	300	300
Virginia	133	133	200
Washington	200	200	300
West Virginia	150	133	250
Wisconsin	300	300	
Wyoming	133	133	200

Source: Cohen Ross et al. (2009).

a. State-only funds are used to provide coverage to children above the CHIP income limit up to the level shown in parentheses.

b. In Minnesota, children age 0–2 are defined as infants and covered up to 280 percent of FPL.

c. North Carolina operates a separate CHIP program that provides coverage only for children age 6–19 up to 200 percent of FPL.

d. Enrollment in Tennessee’s CHIP program is now closed to children with family income above 200 percent of FPL.

e. Vermont covers uninsured children up to 225 percent of FPL in Medicaid and between 226 and 300 percent of FPL in CHIP. The state also covers underinsured children up to 300 percent of FPL in Medicaid.

Medicaid provides a comprehensive benefit package to eligible children that covers any service deemed “medically necessary” to promote a child’s healthy physical, behavioral, and emotional development. This includes the Early and Periodic Screening, Diagnostic, and Treatment (EPSDT) program, which is effectively the child health benefits package under Medicaid (Johnson 2010). Federal law mandates that under EPSDT, all children in Medicaid receive comprehensive well-child visits (known as screening visits) in accordance with established periodic visit schedules, additional (interperiodic) well-child screening visits when a problem is suspected, and any follow-up services necessary to “correct or ameliorate defects and physical and mental illnesses and conditions discovered by the screening services.”<sup>8</sup> The Medicaid EPSDT benefit package also includes coverage for outreach, transportation and case management services, which are not typically covered in private insurance plans (box 1).<sup>9</sup>

benchmark for children under 1 year old (Schneider et al. 2010). A more recent study of Medicaid programs in nine states found that 75 percent of children did not receive all required screenings, and 41 percent did not receive any medical screenings (U.S. Department of Health and Human Services 2010).<sup>10</sup> While coverage of well-child visits is required in all CHIP plans, children in CHIP are not guaranteed the full range of services covered by EPSDT. We focus on policy opportunities within the context of EPSDT and Medicaid because most young children served by these two programs are covered under Medicaid.

Developmental screenings are a reimbursable service under Medicaid (CPT codes 96110, for a limited screening, and 96111, for an extended screening or a diagnostic assessment), but states differ in when and by whom these screenings can be provided and by how much they reimburse for screenings. For example, some states bundle payments for all services provided during a well-child visit, prohibiting providers from receiving an additional payment for these screenings. Other states allow multiple charges on the same day, reimbursing providers for administering several screening tools during one visit; still other states require that a screening code be charged with a well-child visit to qualify for reimbursement (unbundled payments) (Kaye and May 2009a). Moreover, some states only allow certain types of providers (such as psychologists) to charge for developmental screening and assessments (Washington State Department of Health et al. 2009). In Medicaid, fee-for-service rates for limited screenings range from \$5 in New Hampshire and South Dakota to \$113.60 in Utah (median \$11.28), whereas fee-for-service rates for extended screenings or diagnostic assessments range from \$10.71 in Illinois to \$193.98 in Alaska (median \$89.49) (American Academy of Pediatrics 2008).

While information is available on what Medicaid pays providers for these services under fee-for-service, no published information indicates how much providers are paid for these services under Medicaid when they are under contract to capitated managed care organizations, which cover most children enrolled in Medicaid.<sup>11</sup> Managed care contracts come in many different forms, from primary care case management (PCCM) programs—which pay primary care providers a small, capitated

**Box 1. Medicaid Early and Periodic Screening and Diagnostic Treatment Benefit**

- **Screening services**, including all of the following:
  - Comprehensive health and developmental history
  - Comprehensive unclothed physical exam
  - Appropriate immunizations
  - Laboratory tests
  - Lead toxicity screening
- **Health education**, including anticipatory guidance on healthy lifestyles and accident and disease prevention
- **Vision services**, including diagnosis and treatment of defects, including eyeglasses
- **Dental services**, including maintenance of dental health, relief of pain and infections, and restoration of teeth
- **Hearing services**, including diagnosis and treatment of defects, including hearing aids
- **Diagnostic services** when screening indicates need for further evaluation
- **Other necessary health care** (including treatment) to correct or ameliorate defects or conditions discovered by screening services

Source: Centers for Medicare & Medicaid Services.

In practice, however, not all children in Medicaid receive EPSDT services. In 2008, 20 states met the performance benchmark of 80 percent of children age 3–5 having at least one developmentally appropriate health screen during a well-child visit, while 44 met the benchmark for children age 1–2, and 40 met the

monthly amount, in addition to reimbursement for individual services delivered, to manage care for the patients in their practice—to comprehensive plans administered by health maintenance organizations, in which the state pays a capitated monthly amount for all care provided to children enrolled in the plan.

The available data on receipt of screenings and assessments for Medicaid-covered children is inconsistent across states and over time given the data systems in use. CMS Form-416, which all states are required to submit in an annual report on their Medicaid programs, contains information on the number of enrolled children who received medical and dental screening visits and the number referred for further diagnosis or treatment. While states must report this data for all children enrolled in Medicaid, claims data provided by managed care plans may be incomplete, resulting in undercounting of receipt of services (Schneider, Hayes, and Crall 2005). In addition, in some states, only children enrolled in Medicaid for the entire fiscal year are included (Kenney and Pelletier forthcoming; Schneider et al. 2005).

States can also change reported receipt of services as a result of upgraded data management systems, creating challenges for examining changes over time (Schneider et al. 2005). The Healthcare Effectiveness Data and Information System, or HEDIS, collects data on receipt of well-child visits during the first 15 months of life and in the third, fourth, fifth, and sixth years of life.<sup>12</sup> Only 25 states use standard HEDIS measures in their Medicaid managed care programs,<sup>13</sup> and the National Committee for Quality Assurance, which oversees development and reporting of HEDIS measures, does not support HEDIS measurement in fee-for-service or PCCM programs (Scholle et al. 2009). In addition, states often adopt variations of HEDIS measures, preventing accurate cross-state comparisons.

There continue to be concerns about access to care in Medicaid due to lower reimbursement rates than those found in commercial insurance and payment delays that may make providers less willing to accept Medicaid patients (Cunningham and O'Malley 2009; Zuckerman et al. 2004). Nevertheless, it appears Medicaid does as well as, if not better than, commercial insurance in providing access to primary care for low-income children (Dubay and Kenney 2001; Perry and Kenney 2007).<sup>14</sup> However, access to

specialty care such as dental care, mental/behavioral health care, and specialty care for chronic conditions, can be problematic (Kuhlthau et al. 2001; Mayer, Skinner, and Slifkin 2004), which may make it difficult to refer Medicaid/CHIP-covered children in need of further diagnostic testing and/or treatment to providers willing to see them.

## State Medicaid/CHIP Policy Choices That Promote Receipt of Developmental Screenings

Despite the importance of regular developmental screening for children and the fact that this screening is mandatory for children enrolled in Medicaid, many children do not receive screenings due to barriers that can be broken down into three components: not all eligible children are enrolled in Medicaid/CHIP; not all those who are enrolled see a health care provider for well-child visits, and many do not have a regular health care provider who tracks their care over time; and standardized developmental screenings are not yet a universal element of well-child visits in all primary care offices. Together, these problems undercut the intent of the law that all children should receive screenings. Within the current Medicaid/CHIP policy environment, states can take the five steps outlined below to address existing gaps.

### *Increase Participation in Medicaid and CHIP*

Maximizing enrollment of children in Medicaid and CHIP could go a long way toward reducing uninsurance among young children; an estimated 75 percent of them were eligible for Medicaid or CHIP in 2008.<sup>15</sup> While states have made progress enrolling eligible children and the vast majority of eligible children are participating in Medicaid and CHIP, participation varies across the country and among racial and ethnic groups (Kenney et al. 2010). Younger children have higher participation rates than older children, but an estimated 1.5 million children under age 5 are uninsured despite being eligible for Medicaid/CHIP.

Many strategies have increased participation among eligible children and reduced the number of children who experience gaps in coverage or lose coverage at renewal (Dorn 2009; Dorn, Hill, and Hogan 2009; Edwards et al. 2010; Wachino and Weiss 2009). One is simplifying and streamlining



applications and renewals; this could include allowing self-declaration of income and Social Security number matching to verify citizenship; allowing applications and renewals to be completed and submitted online, by mail, or in person; automating enrollment and retention systems; and adopting Express Lane enrollment strategies. Express Lane strategies use data from other programs in which the family is enrolled (e.g., WIC, Food Stamps, National School Lunch Program) or tax records to determine eligibility for Medicaid and CHIP. Another successful strategy is targeting culturally and linguistically appropriate outreach to communities with low participation rates and developing partnerships with providers and community-based organizations and other institutions for outreach and application assistance. Adopting continuous eligibility policies can also reduce the number of children who experience gaps in coverage that could inhibit their continuous access to care and ongoing developmental surveillance.

Louisiana has made significant progress in simplifying enrollment procedures and reducing the number of children who lose coverage during renewal. By adopting Express Lane and passive renewal procedures and other simplifications, less than 1 percent of children due for renewal in Medicaid and CHIP in Louisiana were reportedly dropped from coverage in 2008, down from 22 percent in 2001 (Kennedy 2009).

CHIPRA provided funding for outreach and enrollment grants to states to increase participation in these programs. In addition, states can qualify for performance bonuses by adopting enrollment simplification procedures and increasing enrollment of eligible children in Medicaid. CHIPRA also increased funding for translation and interpretation services and expanded options for Express Lane enrollment strategies (Kenney, Cook, and Dubay 2009).

### *Increase Provision/Receipt of Well-Child Visits*

While enrolling uninsured eligible children in Medicaid and CHIP is important, it does not ensure that children receive recommended well-child care from a regular provider who knows the child, since many children enrolled in coverage do not receive such care (Bethell, Peck, and Schor 2001; Hakim and Bye 2001; Kenney, Haley, and Tebay 2003).<sup>16</sup> To date, no definitive research shows how to increase the

provision of well-child care to recommended levels, but it appears that it may be necessary to address both the availability of health care providers for children on Medicaid (supply-side barriers) and other barriers that have to do with whether low-income families value preventive care and their ability to gain access to available care (demand-side barriers).

Demand-side barriers include language, cultural, and transportation barriers (Cohen and Christakis 2006; Kelly et al. 2005) or families not placing a high value on preventive services, particularly if their children appear healthy (Blumberg, O'Connor, and Kenney 2005). Stressful family environments and parental depression also negatively affect children's service use (Fairbrother et al. 2005; Perry 2008). Parents whose first language is not English more often report communication problems with providers, and they and their children have reduced access to care and receive fewer health services than native English-speaking populations (Clemans-Cope and Kenney 2007; Flores, Abreu, and Tomany-Korman 2005; Flores et al. 1998). New funding for interpretation and translation services in the reauthorization of CHIP could help address this issue (Georgetown Center for Children and Families 2009; Jacobs et al. 2004).

Having to travel long distances to reach a primary care physician and relying exclusively on public transportation can make a trip to the doctor time consuming and difficult (Arcury et al. 2005; Grant et al. 2000; Yang et al. 2006). Evidence on the use of patient incentives to increase demand for and use of preventive services is mixed (Redmond, Solomon, and Lin 2007; Sutherland, Christianson, and Leatherman 2008). Rewarding Medicaid beneficiaries for obtaining preventive care in California, Pennsylvania, and Florida had mixed results, as states struggled to make beneficiaries aware of and encourage redemption of the rewards (Coughlin et al. 2008; Redmond et al. 2007). However, recent evidence from Idaho indicates that patient incentives can increase receipt of preventive care among CHIP enrollees (Kenney et al. forthcoming). Overall, more analysis and evaluation are needed around what policies increase demand for these services.

In terms of supply-side barriers, the fact that Medicaid and CHIP often reimburse providers at rates that are below commercial insurance may make providers less willing to accept Medicaid- and CHIP-

covered children in their practices (Berman et al. 2002; Zuckerman et al. 2004). Delays in reimbursement from Medicaid/CHIP and other administrative issues may also reduce provider willingness to participate in the programs (Cunningham and O'Malley 2009). In addition, other factors such as provider training, perceived gaps in cultural competence, and negativism about Medicaid may limit the supply of providers willing to serve the Medicaid population (Edelstein 2009). While evidence suggests that higher Medicaid reimbursement rates can increase receipt of preventive care, raising reimbursement rates alone does not appear to achieve targeted rates of preventive care receipt (Hughes et al. 2005; Mayer et al. 2000; McInerney, Cull, and Yudkowsky 2005; Shen and Zuckerman 2005); the other factors outlined here may deter well-child receipt among children enrolled in Medicaid and CHIP. Evidence on the effect of managed care on children's service use is mixed (Davidoff et al. 2007; Huffman et al. 2010; Newacheck et al. 1996; Szilagyi 1998).

### *Increase Use of Standardized Developmental Screenings during Well-Child Visits*

Primary care providers identify developmental issues and delays more often and earlier when they use standardized screening tools to enhance their clinical assessment, rather than relying on judgment alone or an informal intake sheet that has not been standardized and validated to detect potential problems (Sand et al. 2005). However, parents report that very few children are getting formal developmental screenings during health care visits. Information from provider surveys suggest that between a quarter and half of pediatricians regularly use standardized screening instruments to monitor development in their young patients (Sand et al. 2005; Sices et al. 2003). Barriers in this area include inadequate reimbursement, provider training, lack of connections to community resources for referral and follow-up, lack of time during regular office visits, and lack of office staff available to conduct screenings (Halfon et al. 2003; Sand et al. 2005).

States may be able to encourage greater provision of developmental screenings by ensuring that reimbursement rates are adequate for the time screenings require during visits and by clarifying Medicaid billing rules so providers know how to bill for the developmental screenings they administer

(Johnson et al. 2009). As indicated above, Medicaid reimbursement for developmental screenings varies widely across states, and leading to considerable confusion about billing practices (Bergman 2004). Medical and non-medical staff may require training on appropriate use of codes to ensure proper billing and accurate data collection.

States can also promote standardized screening tools through their managed care contracts (i.e., no reimbursement allowed for a well-child visit unless a screen is conducted) and through incentives to providers for increasing screening rates over the previous year. A number of states have implemented incentives to providers in the form of increases in capitated payments or annual bonus payments for provider networks that have increased their rates of specific screening services (e.g., lead screening for 2-year-olds) (Verdier et al. 2004). In turn, some managed care organizations (MCOs) have conducted outreach to members on the importance of bringing young children in for periodic check-ups. Providing materials such as provider reminders (flow sheets with age-specific recommendations, chart screening), parent prompts (cards outlining recommended screenings/immunizations at each age), and screening instruments to practices appear to raise screening rates (Bordley et al. 2001).

Iowa and Illinois have adopted many of these strategies as part of their participation in the Assuring Better Child Health and Development (ABCD) Initiative of The Commonwealth Fund and the National Academy for State Health Policy. Iowa published information on the state Medicaid web site to communicate EPSDT requirements to providers and clarified which codes can be used and how to bill for administering standardized screening tools. Illinois changed provider manuals and managed care contracts to emphasize that Medicaid encourages the use of standardized screening tools, and now requires managed care plans to conduct a performance improvement project evaluating the content of well-child care and whether developmental screenings are conducted. The state also now requires providers participating in its new PCCM program to include a developmental screening as part of an EPSDT visit and has changed its billing rules to allow reimbursement for two developmental screenings administered on the same day, which allows providers to conduct a general developmental screening and a

more specific social-emotional screening (Kaye, May, and Abrams 2006).

In addition to reimbursement changes, provider incentives, and outreach, states may need to address the fact that some providers are reluctant to use standardized screening tools because they do not have the confidence to manage their patients' developmental problems or the expertise to conduct subsequent diagnostic assessments. One survey of pediatricians found that about two-thirds were not confident in their ability to advise parents on questions related to their child's developmental status (Halfon et al. 2003). Increasing the provision of developmental screenings to young children may require giving providers on-site and web-based training sessions, workshops, and learning collaboratives on standardized screening tools and their importance to child development (Kaye and May 2009b; Young et al. 2006).<sup>17</sup>

Such concerns may make providers reluctant to conduct screenings in the first place and affect whether children identified as in need of services are connected to providers with the expertise and capacity to address their needs.<sup>18</sup> Case management and coordination systems between pediatric providers and community organizations specializing in child care, early education, and early intervention services can increase screening, assessment, and treatment rates (Halfon et al. 2003; Rosenbaum et al. 2009). Connecticut's *Help Me Grow* program established a state-wide referral system accessible through a hotline that parents or providers could call for help accessing developmental services for children, as well as on-site provider trainings, telephone care coordinators to answer families' calls to the hotline, and partnerships with community advocacy and service organizations (Bogin 2008). Referrals to service programs in Connecticut reportedly increased 60 percent under the program, and the share of referred children who successfully accessed services has increased steadily each year as well (Hughes and Damboise 2007). Similarly, North Carolina created county-specific consortia of professionals from different disciplines, service providers, and agencies to connect children to the developmental services they need (Pelletier and Abrams 2002). Public-private partnerships have also increased the use of developmental screenings (Earls and Hay 2006; Kaye and May 2009a; Shaw et al. 2006).<sup>19</sup>

Finally, to the extent that states can address training, quality, and referrals, states may want to consider allowing various providers to administer developmental screenings during home visits, in a child care facility, or at other locations (Johnson and Kaye 2003). In some cases, social workers or child care providers may be able to see the children more regularly than physicians do, making them better able to gauge whether a child is performing at his/her usual level during a screen. They also may already be connected to a network of community-based intervention services because they are also providing child services in the community (Johnson and Rosenthal 2009). However, questions remain about how to ensure that all providers who conduct screenings have appropriate training and can effectively connect children to medical specialists when needed for follow-up assessments and treatment.

### *Use Data to Monitor, Develop, and Fine-Tune Policy Changes*

In order to track both gaps and progress in this area, states will need to invest in data systems that allow them to evaluate how rates of Medicaid/CHIP participation, screening, assessments, and referrals are changing (Peck Reuland and Bethell 2005). In the case of receipt of screenings, accurate data are needed on the number of children screened (the numerator) and the number of children who *should* have been screened (the denominator). However, obtaining accurate data for the numerator and denominator is challenging for several reasons, including lack of incentives for providers to use appropriate codes in the claims files, lack of information on screenings done outside a provider's office, and lack of service use data for many children covered under Medicaid-managed care. The available data on receipt of screenings and assessments for Medicaid-covered children is inconsistent across states and over time. The CMS Form-416 Reports for Medicaid programs and the Healthcare Effectiveness Data and Information Set provide some information on these measures, but further investments are needed for the data provided by these tools to be useful for management and evaluation of program performance.

### *Take Advantage of New Opportunities in CHIPRA and Health Reform*

This brief has focused on how Medicaid and CHIP programs have operated historically. However, both

CHIPRA and the Patient Protection and Affordable Care Act (PPACA) of 2010 (PL 111-148) contain provisions that could lead to greater identification of children at risk for or in need of services under Medicaid and CHIP. CHIPRA mandated the establishment of core quality measures for child health care and broadened reporting requirements by CMS. One core measure is the provision of developmental screenings for children from birth to 36 months (separate rates to be calculated for children age 0 to 12 months, 12 to 24 months, and 24 to 36 months).<sup>20</sup> To the extent that Medicaid and CHIP begin tracking this measure, it may increase how often providers conduct such screenings. CHIPRA also funded a number of demonstration projects focused on child health quality improvements (including delivery system changes, implementation of electronic health records, quality measurement, and childhood obesity reduction), which may draw more attention to the inadequacies of the current system and lead to corrections (Georgetown Center for Children and Families 2010b).

PPACA contains a number of provisions that change the playing field for children's health. First, federal health care reform will likely increase the number of children covered under Medicaid due to new investments in outreach and enrollment simplifications (Georgetown Center for Children and Families 2010a). More parents will also qualify for Medicaid coverage, which could increase children's health care access and improve health and well-being (Davidoff et al. 2003; Dubay and Kenney 2003).

Second, the new law uses federal funding to increase reimbursement rates for primary care physicians providing certain services up to the rates paid by Medicare in 2013 and 2014, an increase of 51 percent on average across the country (Zuckerman, Williams, and Stockley 2009), which could increase provider access in Medicaid and the provision of services, including well-child care to young children covered under the program. However, it is unclear whether these increases will be sustained beyond 2014 or whether the higher rates will ultimately be available to non-physician providers of primary care, such as registered nurses. Moreover, there is no scope in current legislation for increasing Medicaid rates for specialty care.

Third, changes in funding for community health centers could also affect access to care for uninsured

and publicly insured populations. In addition, by funding the Medicaid and CHIP Payment and Access Commission (MACPAC), which is charged with assessing the adequacy of provider payment and access under Medicaid and CHIP, PPACA may also stimulate more policy changes aimed at improving access in Medicaid and CHIP.

Fourth, while not strictly focused on well-child care or developmental screenings, the law also includes funding to promote the use of a medical home model. The new Center for Medicare and Medicaid Innovation will test different health care delivery models, including the medical home. This center will provide grants for the establishment of interdisciplinary "health teams" that, as a condition of receiving funding, must promote a patient-centered medical home model. It will also promote training to primary care physicians on delivery of care in the context of a medical home model and on the implementation of this model in their practices.<sup>21</sup> The emphasis on medical homes may increase the provision of both well-child care and developmental screenings to children.

## Conclusion

To increase the provision of developmental screenings to young children in Medicaid and CHIP, states will need to address shortfalls in Medicaid/CHIP participation, well-child visits, and the extent to which providers are conducting developmental screenings. While a number of promising policy options are available to states in each one of these areas, more systematic analysis of how state policy choices influence the receipt of well-child care and the provision of developmental screenings would provide critical information to help guide state action. An important first step would be to assess reimbursement and billing practices for well-child visits and developmental screenings in fee-for-service and managed care settings and how those practices can be clarified or modified to encourage practice changes that incorporate standardized developmental screening into well-child visits. For example, states could clarify EPSDT requirements, unbundle well-child visit codes from codes for administering developmental screenings, and/or require standardized screenings to be conducted in order to receive reimbursement for well-child visits. Where possible, states may want to implement policy



changes at demonstration sites to test out which strategies work best and are most cost effective in a particular state or practice environment (Kaye and May 2009b).

While a number of promising policy developments could increase how many young children receive developmental screenings, major strides in this area have been limited to a few states. More evidence on the effectiveness of these strategies is needed to encourage their broader adoption so those policies found to increase screening rates become routine practice in Medicaid and CHIP programs around the country. However, identifying at-risk children in Medicaid/CHIP does not guarantee that they will receive needed treatment and intervention services to address developmental problems. Concerns persist about the capacity and willingness of specialists and subspecialists to provide treatment and intervention services for children enrolled in Medicaid, the effectiveness of care coordination and case management systems for children identified as needing services (Rosenbaum et al. 2009), and the availability of services to treat parent mental health problems that negatively affect both parents and children. These issues and available policy choices to address them are discussed in the other briefs in this series.

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## About the Project

The four briefs in this series provide a common core of knowledge about how state Medicaid/CHIP policy choices affect young children's development, knowledge that can be shared among state Medicaid/CHIP policymakers and state early childhood policymakers and advocates. State Medicaid and CHIP decisions have a large impact on young children's healthy development, both because those programs serve so many young children and because the policy framework for Medicaid and CHIP offers the potential to address children's physical, social, emotional, and developmental health. Above all, the briefs intend to inform early childhood leaders and advocates so they can be at the table for these high-stakes policy decisions.

Young children's healthy development depends on far more than medical treatments for physical conditions, illnesses, and injuries. Health and early childhood fields understand that healthy development requires early identification of a variety of developmental issues, effective referrals to professional treatment services, ongoing involvement in navigating different services and supports, and responses to parents' health and behavioral health challenges and family stress. Each brief concentrates on one of these four areas: screening, professional referrals, care coordination, and two-generation approaches.<sup>1</sup>

In each area, the federal-state policy framework for Medicaid and CHIP offers major opportunities to support effective child health systems that in turn can help communities, child health practitioners, and early childhood providers promote young children's healthy development. In these briefs, the Urban Institute seeks to identify the major opportunities and barriers, provide a summary of available research about promising approaches, and set the stage for more detailed state-by-state discussions.

The briefs are particularly timely because federal actions have provided new opportunities to states. The recent CHIP reauthorization legislation and the

new health reform legislation include important provisions that will affect children's health care access as well as the quality and coordination of health care. States' responsibilities to implement these laws also mean that many states are engaged in a range of major health policy decisions that could affect children and their families. For all these reasons, this is an important time for early childhood experts, policymakers, and advocates to engage in these discussions.

These briefs are one component of a project aimed at engaging early childhood leaders in state health policy decisionmaking. Because the health policy and financing issues that affect young children are so complex, data are so scarce, and states are so diverse, no series of short briefs can convey the full range of information. In addition, the Medicaid/CHIP and early childhood policy worlds have different frames of reference that are hard to bring together: different federal statutes and funding streams, professional backgrounds, even sometimes different languages. Therefore, the project includes three other components to enhance the potential partnerships and improve decisions:

- a federal memo, intended to identify for federal officials who oversee Medicaid and the HHS early childhood programs some of the issues and opportunities to promote more effective connections;
- webinars convened by the BUILD initiative to discuss the briefs with early childhood leaders; and
- targeted state discussions, led by the BUILD initiative, to bring state early childhood and Medicaid/CHIP leaders together in a small number of states.

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<sup>1</sup> The National Academy of State Health Policy (NASHP) is the author of the care coordination brief, and experts from NASHP, the BUILD Initiative, and other experts in the field represented on the Institute's advisory board have provided invaluable comments on all the briefs.

## References

- American Academy of Pediatrics. 2008. "AAP Medicaid Reimbursement Survey, 2007/08." Elk Grove, IL: American Academy of Pediatrics.
- Arc of the United States, The. 1990. "New Law to Impact Services to Disabled Infants, Toddlers, and Preschoolers." *Future Reflections* 9(3).
- Arcury, Thomas A., Wilbert M. Gessler, John S. Preisser, Jill Sherman, John Spencer, and Jamie Perin. 2005. "The Effects of Geography and Spatial Behavior on Health Care Utilization among the Residents of a Rural Region." *Health Services Research* 40(1): 135–56.
- Bergman, David. 2004. "Screening for Behavioral Developmental Problems: Issues, Obstacles, and Opportunities for Change." Portland, ME: National Academy for State Health Policy.
- Berman, Steve, Judith Dolins, Suk-fong Tang, and Beth Yudkowsky. 2002. "Factors That Influence the Willingness of Private Primary Care Pediatricians to Accept More Medicaid Patients." *Pediatrics* 110(2): 239–48.
- Bethell, Christina, Colleen Peck, and Edward Schor. 2001. "Assessing Health System Provision of Well-Child Care: The Promoting Healthy Development Survey." *Pediatrics* 107(5): 1084–94.
- Blumberg, Stephen J., Kathleen S. O'Connor, and Genevieve M. Kenney. 2005. "Unworried Parents of Well Children: A Look at Uninsured Children Who Reportedly Do Not Need Health Insurance." *Pediatrics* 116(2): 345–51.
- Bogin, Joanna. 2008. "Enhancing Developmental Outcomes for Children: *Help Me Grow* Connecticut." Presentation at the ABCD Training Academy, National Academy for State Health Policy, February 20.
- Bordley, W. Clayton, Peter A. Margolis, Jayne Stuart, Carole Lannon, and Lynette Keyes. 2001. "Improving Preventive Service Delivery through Office Systems." *Pediatrics* 108(3): e41.
- Bruner, Charles. 2010a. "From Child Health Coverage to Healthy Child Development: Federal Health Reform Opportunities to Improve the Health of America's Youngest Children." *Journal of Pediatrics* 157(1): 1–2.
- . 2010b. "The Health Child Story Book: Policy Opportunities to Improve Children's Healthy Development, 2010 Edition."
- Committee on Children with Disabilities. 1994. "Screening Infants and Young Children for Developmental Disabilities." *Pediatrics* 93:863–65.
- Clemans-Cope, Lisa, and Genevieve Kenney. 2007. "Low-Income Parent's Reports of Communication Problems with Health Care Providers: Effects of Language and Insurance." *Public Health Reports* 122:206–16.
- Cohen, Adam L., and Dimitri A. Christakis. 2006. "Primary Language of Parent Is Associated with Disparities in Pediatric Preventive Care." *Journal of Pediatrics* 148(2): 254–58.
- Cohen Ross, Donna, Marian Jarlenski, Samantha Artiga, and Caryn Marks. 2009. "A Foundation for Health Reform: Findings of a 50-State Survey of Eligibility Rules, Enrollment and Renewal Procedures, and Cost-Sharing Practices in Medicaid and CHIP for Children and Parents during 2009." Washington, DC: Kaiser Commission for Medicaid and the Uninsured.
- Coughlin, Teresa A., Sharon K. Long, Timothy Triplett, Samantha Artiga, Barbara Lyons, R. Paul Duncan, and Allyson G. Hall. 2008. "Florida's Medicaid Reform: Informed Consumer Choice?" *Health Affairs* 27(6): w523–32.
- Council on Children with Disabilities, Section on Developmental Behavioral Pediatrics, Bright Futures Steering Committee, and Medical Home Initiatives for Children with Special Needs Project Advisory Committee. 2006. "Identifying Infants and Young Children with Developmental Disorders in the Medical Home: An Algorithm for Developmental Surveillance and Screening." *Pediatrics* 118:405–20.
- Cunningham, Peter J., and Ann S. O'Malley. 2009. "Do Reimbursement Delays Discourage Medicaid Participation by Physicians?" *Health Affairs* 28(1): w17–28.
- Davidoff, Amy, Lisa Dubay, Genevieve Kenney, and Alshadye Yemane. 2003. "The Effect of Parents' Insurance Coverage on Access to Care for Low-Income Children." *Inquiry* 40:254–68.
- Davidoff, Amy, Ian Hill, Bridgette Courtot, and Emerald Adams. 2007. "Effects of Managed Care on Service Use and Access for Publicly Insured Children with Chronic Health Conditions." *Pediatrics* 119(5): 956–64.
- Dorn, Stan. 2009. "Express Lane Eligibility and Beyond: How Automated Enrollment Can Help Eligible Children Receive Medicaid and CHIP." Washington, DC: The Urban Institute.
- Dorn, Stan, Ian Hill, and Sara Hogan. 2009. "The Secrets of Massachusetts' Success: Why 97 Percent of State Residents Have Health Coverage." Washington, DC: The Urban Institute.
- Dubay, Lisa, and Genevieve Kenney. 2001. "Health Care Access and Use among Low-Income Children: Who Fares Best?" *Health Affairs* 20(1): 112–21.
- . 2003. "Expanding Public Health Insurance to Parents: Effects on Children's Coverage under Medicaid." *Health Services Research* 38(5): 1283–1301.
- Earls, Marian F., and Sherry Shackelford Hay. 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:e183–88.
- Edelstein, Burton L. 2009. "How Practices Make Medicaid Work." Lecture for the American Dental Association's Give Kids a Smile Symposium, Chicago, June 26.

- Edwards, Jennifer, Lisa Duchon, Eileen Ellis, Caroline Davis, Rebecca Kellenberg, Jodi Bitterman, and Catherine Hess. 2010. "Maximizing Enrollment for Kids: Results from a Diagnostic Assessment of Enrollment and Retention in Eight States." Portland, ME: National Academy for State Health Policy.
- Fairbrother, Gerry, Genevieve Kenney, Karla Hanson, and Lisa Dubay. 2005. "How Do Stressful Family Environments Relate to Reported Access and Use of Health Care by Low-Income Children?" *Medical Care Research and Review* 62(2): 205–30.
- Flores, Glenn, Milagros Abreu, and Sandra C. Tomany-Korman. 2005. "Limited English Proficiency, Primary Language at Home, and Disparities in Children's Health Care: How Language Barriers Are Measured Matters." *Public Health Reports* 120:418–30.
- Flores, Glenn, Milagros Abreu, Mary Anne Olivar, and Beth Kastner. 1998. "Access Barriers to Health Care for Latino Children." *Archives of Pediatrics and Adolescent Medicine* 152:1119–25.
- Georgetown Center for Children and Families. 2009. "The Children's Health Insurance Program Reauthorization Act of 2009: Overview and Summary." Washington, DC: Georgetown University Health Policy Institute.
- . 2010a. "Summary of Medicaid, CHIP, and Low-Income Provisions in Health Care Reform." Washington, DC: Georgetown University Health Policy Institute.
- . 2010b. "Understanding the New Quality Initiatives in CHIPRA." Washington, DC: Georgetown University Health Policy Institute.
- Grant, Roy, Dennis Johnson, Irwin Redlener, and Joan Winer Brown. 2000. *Getting There, Getting Care: Transportation and Workforce Barriers to Child Health Care in America*. New York: Children's Health Fund.
- Hagan, Joseph F., Judith S. Shaw, and Paula M. Duncan, eds. 2008. *Bright Futures: Guidelines for Health Supervision of Infants, Children, and Adolescents*. 3rd ed. Elk Grove Village, IL: American Academy of Pediatrics.
- Hakim, Rosemarie B., and Barry V. Bye. 2001. "Effectiveness of Compliance with Pediatric Preventive Care Guidelines among Medicaid Beneficiaries." *Pediatrics* 108(1): 90–97.
- Halfon, Neal, Michael Regalado, Kathryn Taaffe McLearn, Alice A. Kuo, and Kynna Wright. 2003. "Building a Bridge from Birth to School: Improving Developmental and Behavioral Health Services for Young Children." New York: The Commonwealth Fund.
- Halfon, Neal, Michael Regalado, Harvinder Sareen, Moira Inkelas, Colleen Peck Reuland, Frances P. Glascoe, and Lynn M. Olson. 2004. "Assessing Development in the Pediatric Office." *Pediatrics* 113:1926–33.
- Hebbeler, Kathleen, Donna Spiker, Don Bailey, Anita Scarborough, Sangeeta Mallik, Rune Simeonsson, Marnie Singer, and Lauren Nelson. 2007. *Early Intervention for Infants and Toddlers with Disabilities and Their Families: Participants, Services, and Outcomes*. Menlo Park, CA: SRI International.
- Huffman, Lynne C., Gabriel A. Brat, Lisa J. Chamberlain, and Paul H. Wise. 2010. "Impact of Managed Care on Publicly Insured Children with Special Health Care Needs." *Academic Pediatrics* 10(1): 48–55.
- Hughes, Marcia, and Meredith Clay Damboise. 2007. "Help Me Grow: 2007 Annual Evaluation Report." Hartford, CT: Center for Social Research, University of Hartford.
- Hughes, Ryan J., Peter C. Damiano, Michael J. Kanellis, Raymond Kuthy, and Rebecca Slayton. 2005. "Dentists' Participation and Children's Use of Services in The Indiana Dental Medicaid Program and SCHIP: Assessing the Impact of Increased Fees and Administrative Changes." *Journal of the American Dental Association* 136(4): 517–23.
- Institute of Medicine. 2004. *Children's Health, the Nation's Wealth: Assessing and Improving Child Health*. Washington, DC: National Academies Press.
- Jacobs, Elizabeth A., Donald S. Shepard, José Suaya, and Estalee Stone. 2004. "Overcoming Language Barriers in Health Care: Costs and Benefits of Interpreter Services." *American Journal of Public Health* 94(5): 866–69.
- Johnson, Kay. 2010. "Managing the T in EPSDT." Portland, ME: National Academy for State Health Policy.
- Johnson, Kay, and Neva Kaye. 2003. "Using Medicaid to Support Young Children's Healthy Mental Development." New York: The Commonwealth Fund.
- Johnson, Kay, and Jill Rosenthal. 2009. "Improving Care Coordination, Case Management, and Linkages to Service for Young Children: Opportunities for States." Portland, ME: National Academy for State Health Policy.
- Johnson, Kay, Neva Kaye, Ann Cullen, and Jennifer May. 2009. "Improving EPSDT Periodicity Schedules to Promote Healthy Development." Portland, ME: National Academy for State Health Policy.
- Kaiser Commission on Medicaid and the Uninsured. 2010. "Medicaid Enrollment: June 2009 Data Snapshot." Washington, DC: Kaiser Commission on Medicaid and the Uninsured.
- Kaye, Neva, and Jennifer May. 2009a. "State Policy Improvements That Support Effective Identification of Children at Risk for Developmental Delay." Portland, ME: National Academy for State Health Policy.
- . 2009b. "State Strategies to Support Practice Changes That Improve Identification of Children at Risk for or with Developmental Delays." Portland, ME: National Academy for State Health Policy.
- Kaye, Neva, Jennifer May, and Melinda Abrams. 2006. "State Policy Options to Improve Delivery of Child Development Services: Strategies from the Eight ABCD States." Portland, ME: National Academy for State Health Policy.
- Kelly, Susan E., Catherine J. Binkley, William P. Neace, and Bruce S. Gale. 2005. "Barriers to Care-Seeking for Children's Oral Health among Low-Income Caregivers." *American Journal of Public Health* 95(8): 1345–51.



- Kennedy, J. Ruth. 2009. "Children's Health Coverage Observations from Louisiana." Presentation at *Children's Health Coverage—A Primer*, Washington, D.C., February 2.
- Kenney, Genevieve, and Jennifer Pelletier. Forthcoming. "Monitoring Duration of Coverage in Medicaid and CHIP to Assess Program Performance and Quality." *Academic Pediatrics*.
- Kenney, Genevieve, Allison Cook, and Lisa Dubay. 2009. "Progress Enrolling Children in Medicaid/CHIP: Who Is Left and What Are the Prospects for Covering More Children?" Washington, DC: The Urban Institute.
- Kenney, Genevieve, Jennifer Haley, and Alexandra Tebay. 2003. "Children's Insurance Coverage and Service Use Improve." *Snapshots of America's Families III* no. 1. Washington, DC: The Urban Institute.
- Kenney, Genevieve, Victoria Lynch, Allison Cook, and Samantha Phong. 2010. "Who and Where Are the Children Yet to Enroll in Medicaid and the Children's Health Insurance Program?" *Health Affairs* 29(10): 1920–29.
- Kenney, Genevieve M., James Marton, Ariel E. Klein, Jennifer E. Pelletier and Jeffery Talbert. Forthcoming. "The Effects of Medicaid and CHIP Policy Changes on Receipt of Preventive Care among Children." *Health Services Research* no. doi: 10.1111/j.1475-6773.2010.01199.x.
- Kuhlthau, Karen, Timothy G.G. Ferris, Anne C. Beal, Steven L. Gortmaker, and James M. Perrin. 2001. "Who Cares for Medicaid-Enrolled Children with Chronic Conditions?" *Pediatrics* 108(4): 906–12.
- Mayer, Michelle L., Ashley Cockrell Skinner, and Rebecca T. Slifkin. 2004. "Unmet Need for Routine and Specialty Care: Data from the National Survey of Children with Special Health Care Needs." *Pediatrics* 113(1): e109–15.
- Mayer, M. L., S. C. Stearns, E. C. Norton, and R. G. Rozier. 2000. "The Effects of Medicaid Expansions and Reimbursement Increases on Dentists' Participation." *Inquiry* 37(1): 33–44.
- McInerney, Thomas K., William L. Cull, and Beth K. Yudkowsky. 2005. "Physician Reimbursement Levels and Adherence to American Academy of Pediatrics Well-Visit and Immunization Recommendations." *Pediatrics* 115(4): 833–38.
- Newacheck, Paul W., Ruth E. K. Stein, Deborah Klein Walker, Steven L. Gortmaker, Karen Kuhlthau, and James M. Perrin. 1996. "Monitoring and Evaluating Managed Care for Children with Chronic Illnesses and Disabilities." *Pediatrics* 98:952–58.
- Olson, Lynn M., Suk-fong .S Tang, and Paul W. Newacheck. 2005. "Children in the United States with Discontinuous Health Insurance Coverage." *New England Journal of Medicine* 353:382–91.
- Pelletier, Helen, and Melinda Abrams. 2002. "The North Carolina ABCD Project: A New Approach for Providing Developmental Services in Primary Care Practice." New York and Portland, ME: The Commonwealth Fund and the National Academy for State Health Policy.
- Perry, Cynthia D. 2008. "Does Treating Maternal Depression Improve Child Health Management? The Case of Pediatric Asthma." *Journal of Health Economics* 27(1): 157–73.
- Perry, Cynthia D., and Genevieve Kenney. 2007. "Preventive Care for Children in Low-Income Families: How Well Do Medicaid and State Children's Health Insurance Programs Do?" *Pediatrics* 120:e1393–e1401.
- Redmond, Pat, Judith Solomon, and Mark Lin. 2007. "Can Incentives for Healthy Behavior Improve Health and Hold Down Medicaid Costs?" Washington, DC: Center on Budget and Policy Priorities.
- Reuland, Colleen Peck, and Christina Bethell. 2005. "Key Measurement Issues in Screening, Referral, and Follow-Up Care for Young Children's Social and Emotional Development." Portland, ME: National Academy for State Health Policy.
- Rosenbaum, Sara, Kay Johnson, Emily Jones, and Anne Markus. 2009. "Medicaid and Case Management to Promote Healthy Child Development." Washington, DC: George Washington University School of Public Health and Health Services.
- Rosenthal, Jill, and Neva Kaye. 2005. "State Approaches to Promoting Young Children's Healthy Mental Development: A Survey of Medicaid, Maternal and Child Health, and Mental Health Agencies." Portland, ME: National Academy for State Health Policy.
- Rydz, David, Myriam Srouf, Maryam Oskoui, Nancy Marget, Mitchell Shiller, Rena Birnbaum, Annette Majnemer, and Michael I. Shevell. 2006. "Screening for Developmental Delay in the Setting of a Community Pediatric Clinic: A Prospective Assessment of Parent-Report Questionnaires." *Pediatrics* 118(4): e1178–86.
- Sand, Nina, Michael Silverstein, Frances P. Glascoe, Vidya B. Gupta, Thomas P. Tonniges, and Karen G. O'Connor. 2005. "Pediatricians' Reported Practices Regarding Developmental Screening: Do Guidelines Work? Do They Help?" *Pediatrics* 116:174–79.
- Scholle, Sarah H., Sarah L. Sampsel, Natalie E. P. Davis, and Edward Schor. 2009. "Quality of Child Health Care: Expanding the Scope and Flexibility of Measurement Approaches." New York: The Commonwealth Fund.
- Schneider, Don, Kathy L. Hayes, and James J. Crall. 2005. "The CMS Form-416 Report: Understanding Its Use in Assessing Dental Care Utilization in Medicaid's Early and Periodic Screening, Diagnostic and Treatment (EPSDT) Service for Children." Los Angeles: National Oral Health Policy Center.
- Schneider, Will, Sheila Smith, Dionna Walters, and Janice L. Cooper. 2010. *Promoting Young Children's Health and Development: Taking Stock of State Policies*. New York: National Center for Children in Poverty, Mailman School of Public Health, Columbia University.
- Schonwald, Alison, Noelle Huntington, Eugenia Chan, Wanessa Risko, and Carolyn Bridgemohan. 2009. "Routine Developmental Screening Implemented in Urban Primary

- Care Settings: More Evidence of Feasibility and Effectiveness.” *Pediatrics* 123(2): 660–68.
- Schweinhart, Lawrence J. 2003. “Benefits, Costs, and Explanation of the High/Scope Perry Preschool Program.” Paper presented at the Meeting of the Society for Research in Child Development, Tampa, April 26.
- Schweinhart, Lawrence J., Helen V. Barnes, and David P. Weikart. 1993. *Significant Benefits: The High/Scope Perry Preschool Study through Age 27*. Ypsilanti, MI: High/Scope Press.
- Selden, Thomas M. 2006. “Compliance with Well-Child Visit Recommendations: Evidence from the Medical Expenditure Panel Survey.” *Pediatrics* 118(6):e1766–78.
- Shaw, Judith S., Richard C. Wasserman, Sara Barry, Thomas Delaney, Paula Duncan, Wendy Davis, and Patricia Berry. 2006. “Statewide Quality Improvement Outreach Improves Preventive Services for Young Children.” *Pediatrics* 118(4): e1039–47.
- Shen, Yu-Chu, and Steve Zuckerman. 2005. “The Effect of Medicaid Payment Generosity on Access and Use among Beneficiaries.” *Health Services Research* 40(3): 723–44.
- Sices, Laura, Terry Stancin, H. Lester Kirchner, and Howard Bauchner. 2009. “PEDS and ASQ Developmental Screening Tests May Not Identify the Same Children.” *Pediatrics* 124(4): e640–47.
- Sices, Laura, Chris Feudtner, John McLaughlin, Dennis Drotar, and Michelle Williams. 2003. “How Do Primary Care Physicians Identify Young Children with Developmental Delays? A National Survey.” *Journal of Developmental and Behavioral Pediatrics* 24(6): 409–17.
- Smith, Vernon, Dennis Roberts, Caryn Marks, and David Rousseau. 2010. “CHIP Enrollment: June 2008 Data Snapshot.” Washington, DC: Kaiser Commission on Medicaid and the Uninsured.
- Smith, Vernon, Dennis Roberts, David Rousseau, and Tanya Schwartz. 2010. “CHIP Enrollment June 2009: An Update on Current Enrollment and Policy Directions.” Washington, DC: Kaiser Commission on Medicaid and the Uninsured.
- Sommers, Benjamin D. 2007. “Why Millions of Children Eligible for Medicaid and SCHIP Are Uninsured: Poor Retention Versus Poor Take-Up.” *Health Affairs* 26(5): w560–67.
- Sutherland, Kim, Jon B. Christianson, and Sheila Leatherman. 2008. “Impact of Targeted Financial Incentives on Personal Health Behavior: A Review of the Literature.” *Medical Care Research and Review* 65(6 Suppl): 36S–78S.
- Szilagy, Peter G. 1998. “Managed Care for Children: Effect on Access to Care and Utilization of Health Services.” *The Future of Children* 8(2): 39–59.
- U.S. Department of Health and Human Services. Office of the Inspector General. 2010. *Most Medicaid Children in Nine States Are Not Receiving All Required Preventive Screening Services*. Washington, DC: U.S. Department of Health and Human Services.
- Verdier, James, Suzanne Felt-Lisk, Fabrice Smieliauskas, Jaclyn Wong, and Laurie Felland. 2004. “Quality-Related Provider and Member Incentives in Medicaid Managed Care Organizations.” Washington, DC: Center for Health Care Strategies, Inc.
- Wachino, Victoria, and Alice Weiss. 2009. “Maximizing Kids’ Enrollment in Medicaid and SCHIP: What Works in Reaching, Enrolling, and Retaining Eligible Children.” Portland, ME: National Academy for State Health Policy.
- Washington State Department of Health—Combating Autism Advisory Council, Department of Social and Health Services, University of Washington Leadership Education in Neurodevelopmental Disabilities Program, Department of Early Learning, and Washington Chapter of the American Academy of Pediatrics. 2009. “Screening for Developmental Delay.” Issue brief. Olympia: Washington State Department of Health.
- Yang, Serena, Robert L. Zarr, Taha A. Kass-Hout, Atoosa Kouros, and Nancy R. Kelley. 2006. “Transportation Barriers to Accessing Health Care for Urban Children.” *Journal of Health Care for the Poor and Underserved* 17(4): 928–43.
- Young, Paul C., Gordon B. Glade, Gregory J. Stoddard, and Chuck Norlin. 2006. “Evaluation of a Learning Collaborative to Improve the Delivery of Preventive Services by Pediatric Practices.” *Pediatrics* 117(5): 1469–76.
- Zuckerman, Stephen, Aimee F. Williams, and Karen E. Stockley. 2009. “Trends in Medicaid Physician Fees, 2003–2008.” *Health Affairs* 28(3): w510–19.
- Zuckerman, Stephen, Joshua McFeeters, Peter Cunningham, and Len Nichols. 2004. “Changes in Medicaid Physician Fees, 1998–2003: Implications for Physician Participation.” *Health Affairs* w4-374–84.

## Notes

<sup>1</sup> For a description of validated, standardized screening tools, see Council on Children with Disabilities, Bright Futures Steering Committee, and Medical Home Initiatives for Children with Special Needs Project Advisory Committee (2006).

<sup>2</sup> Survey items derived from the Parents’ Evaluation of Developmental Status, © National Survey of Children’s Health, 2007, <http://www.nschdata.org>.

<sup>3</sup> National Survey of Children’s Health, 2007.

<sup>4</sup> A study that surveyed parents reported that 57 percent of children age 4 to 35 months had ever had a “developmental assessment,” defined as “screening and assessment activities conducted by pediatric providers, with or without validated tools or diagnostic instruments,” or having a doctor or other health care provider ask their child to “pick up small objects or stack blocks, use a crayon, or throw a ball, or recognize different pictures” (Halfon et al. 2004).

<sup>5</sup> Tabulations from the 2008 Urban Institute Health Policy Center Eligibility Simulation Model, based on data for children age 0–5 from the 2009 ASEC to the Current Population Survey.

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<sup>6</sup> The American Recovery and Reinvestment Act of 2009 provided a temporary increase in the federal matching rate of 6.2 percentage points, plus additional increases based on the increase in the unemployment rate in each state. The higher match rates range from 62 to 85 cents on the dollar.

<sup>7</sup> Agency for Healthcare Research and Quality, “Background Report for the Request for Public Comment on Initial, Recommended Core Set of Children’s Healthcare Quality Measures for Voluntary Use by Medicaid and CHIP Programs,” <http://www.ahrq.gov/chip/corebackgrnd.htm> (accessed April 6, 2010).

<sup>8</sup> U.S. Department of Health and Human Services, Health Resources and Services Administration, “EPSDT Overview,” <http://www.hrsa.gov/epsdt/overview.htm>.

<sup>9</sup> Centers for Medicare & Medicaid Services, “EPSDT Benefits: Medicaid Early & Periodic Screening & Diagnostic Treatment Benefit,” [http://www.cms.hhs.gov/MedicaidEarlyPeriodicScrn/02\\_Benefits.asp](http://www.cms.hhs.gov/MedicaidEarlyPeriodicScrn/02_Benefits.asp).

<sup>10</sup> A complete EPSDT screen must include medical, vision, hearing, and dental screenings. A complete medical screening must include a comprehensive health and developmental history, a comprehensive unclothed physical examination, appropriate immunizations, appropriate laboratory tests, and health education (including anticipatory guidance).

<sup>11</sup> Kaiser State Health Facts, “Medicaid Managed Care as a Percent of State Medicaid Enrollees as of June 30, 2008,” <http://www.statehealthfacts.org/comparemaptable.jsp?ind=217&cat=4>.

<sup>12</sup> National Committee for Quality Assurance, “CHIPRA Proposed Core Set,” <http://www.ncqa.org/tabid/1083/Default.aspx>.

<sup>13</sup> National Committee for Quality Assurance, “State Recognition of HEDIS,” <http://www.ncqa.org/tabid/135/Default.aspx>.

<sup>14</sup> See also the National Survey of Children’s Health, 2007.

<sup>15</sup> Tabulations from the 2008 Urban Institute Health Policy Center Eligibility Simulation Model, based on data for children age 0–5 from the 2009 ASEC to the Current Population Survey.

<sup>16</sup> While there is no source of definitive information on the content of care provided during visits, all data sources indicate that compliance rates with recommended care fall short of 100 percent (Selden 2006).

<sup>17</sup> States may also need to address physician concerns that they will not be able to refer children needing services to appropriate follow-up treatment, particularly children with mild developmental problems. State programs, including Part C, are often designed to deliver services to children with the most severe problems. Children with only mild delays or problems may not qualify for these programs, or pediatricians may have difficulty identifying appropriate providers and services for these children (Schonwald et al. 2009).

<sup>18</sup> In some cases, developmental screenings by primary care physicians and other providers can serve as a gateway to referral and treatment services through Part C of IDEA or other programs. Some states are also working to streamline referral processes and eligibility for Part C by encouraging administrative links between primary care physicians and early intervention service providers (Kaye and May 2009a).

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<sup>19</sup> Such partnerships can provide expertise, funding, and access to networks of specialty care providers that can enhance a state’s efforts in this area (Kaye and May 2009b).

<sup>20</sup> Agency for Healthcare Research and Quality, “Background Report for the Request for Public Comment on Initial, Recommended Core Set of Children’s Healthcare Quality Measures for Voluntary Use by Medicaid and CHIP Programs. Table 1. Initial, recommended set of children’s health care quality measures,” <http://www.ahrq.gov/chipra/corebackground/corebacktab.htm>.

<sup>21</sup> A patient-centered medical home model is defined as a delivery system that includes “personal physicians, whole person orientation; coordinated and integrated care; safe and high-quality care through evidence-informed medicine, appropriate use of health information technology, and continuous quality improvements; expanded access to care; and, payment that recognizes added value from additional components of patient-centered care” (PL 111-148, Sec. 3502).