



QUALITY OF PREVENTIVE HEALTH CARE FOR YOUNG CHILDREN: STRATEGIES FOR IMPROVEMENT

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ABSTRACT: Policymakers increasingly understand the importance of children's early years for promoting health, learning, and school readiness and for identifying and mediating risk that can compromise later functioning. Yet not all parents receive the services needed to identify developmental and behavioral issues in early childhood. In the National Survey of Early Childhood Health, conducted in 2000, only 57 percent of parents reported their child's development ever being assessed within a pediatric visit. While most parents receive counseling on traditional topics like immunization and nutrition, up to one-third report they did not receive counseling on important developmental and behavioral topics like discipline and toilet training. In a separate survey, pediatricians cited time constraints and inadequate reimbursement as barriers to providing optimal developmental services. To improve the quality of early childhood health care, the authors recommend national standards, enhanced reimbursement, improved provider training, and a strategy of raising parents' expectations of pediatric care.

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ABOUT THE SURVEYS

The National Survey of Early Childhood Health (NSECH) was conducted from February 2000 to July 2000 with parents and guardians most responsible for the health care of children ages 4 to 35 months. The Centers for Disease Control and Prevention's National Center for Health Statistics collected the data using the sampling frame from its State and Local Area Integrated Telephone Survey. The NSECH is a random-digit-dial telephone survey of a nationally representative sample of 2,068 children and includes an oversample of African American and Hispanic children so that results for these groups could be estimated with greater precision. Spanish-language interviews comprised 19 percent of all completed interviews. The survey response rate was 65.6 percent, and the proportion of completed NSECH interviews among known age-eligible households was 79.2 percent.

The American Academy of Pediatrics (AAP) Periodic Survey of Fellows #46 is a national, mailed survey of AAP members fielded March–August 2000 with a response rate of 67 percent. This Periodic Survey was designed and conducted to compare results to the NSECH information.

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OVERVIEW

A growing body of research links early childhood experiences with later cognitive, social, emotional, and physical health and development.^{1,2,3,4} By intervening early, providers and parents can influence children's health and development, including not only their readiness to learn at school but also the risk of many adult diseases. Increasingly, policymakers understand the importance of these early years for not only promoting learning but also for identifying and mediating risk that can compromise later functioning.⁵

Existing research suggests only a small proportion of children are born with neurodevelopmental problems, yet behavioral, mental health, and learning difficulties drive an ever-increasing number of school-age children into special education services. Many developmental concerns can be addressed with targeted counseling and information provided by pediatricians or by more in-depth interventions. However, it has been estimated that while approximately 12 percent to 16 percent of children experience developmental problems, only one-third of those children—usually those with the most obvious conditions—are identified in pediatric practices prior to school entry.^{6,7,8,9} These missed opportunities are of critical policy relevance because failure to identify problems until children enter school can compromise future educational success. To examine where these gaps in services are occurring, this report compares data from the 2000 National Survey of Early Childhood Health (NSECH), which contains information regarding parents' and guardians' concerns about their children's development, and the American Academy of Pediatrics (AAP) Periodic Survey of Fellows #46. This survey, developed to complement the NSECH, collected information from pediatricians regarding the kind of services they provide to children from birth to 35 months.

The two data sets give a broad picture of the provision of early childhood developmental services. Improving and expanding such services can help to close the gaps identified in the surveys, but doing so will require action from a variety of players in the public and private sectors. Targeted policy steps to create a comprehensive system, including the creation of national standards and tools, improved pediatric training, an enhanced reimbursement system, quality improvement initiatives, and heightened parental involvement and awareness, will be necessary to meet the needs of young children and their families.

DEFINING DEVELOPMENTAL SERVICES

The term *developmental services* refers to preventive pediatric services focused on optimizing healthy development. These services are distinct from other, more traditional preventive services, such as immunizations and lead screening, because of their potential contribution to early learning, healthy development, and school readiness.

Developmental services include:¹⁰

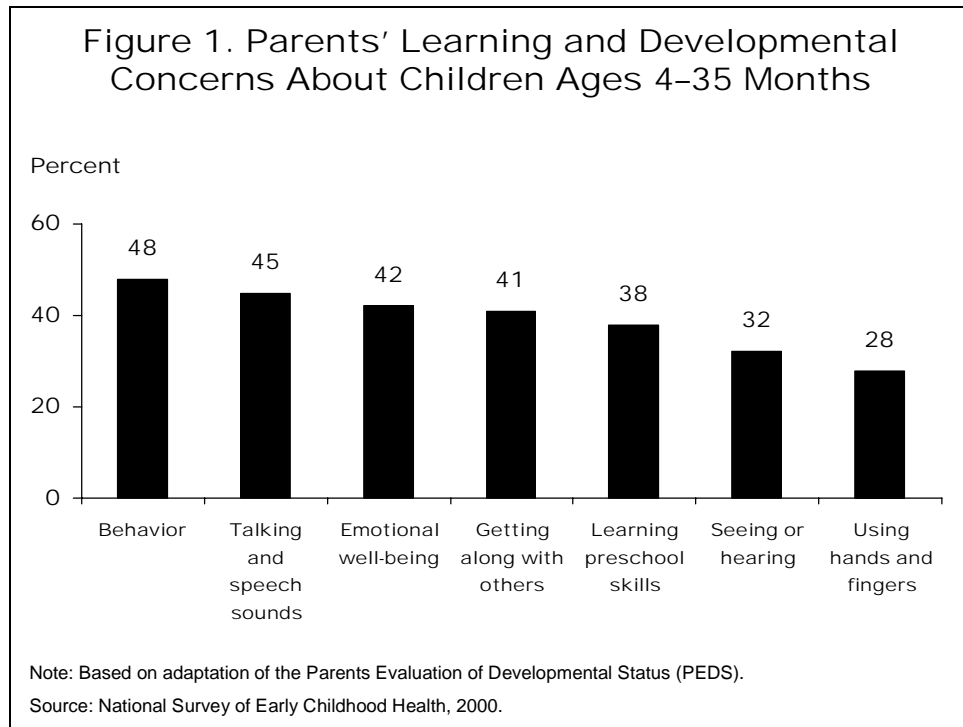
- **Assessment** to identify developmental risks and problems. Includes reviewing parental concerns, which may lead to periodic structured evaluation (often referred to as developmental screening) and diagnostic assessment, if warranted.
- **Education** for parents on child development and ways of promoting learning and growth. Also called anticipatory guidance or health supervision.
- **Intervention** for developmental concerns, either within the pediatric practice or by specialists or community programs.
- **Coordination** of intervention and treatment services, including referral and follow-up.

PARENTS' CONCERNS REGARDING CHILD DEVELOPMENT

According to the NSECH survey, when parents are questioned about their children's development, they more frequently report concerns about social and emotional functioning than they do regarding physical abilities. Such problems are often not as easily detected as physical problems. The most common concerns involve children's behavior (48%), speech (45%), and emotional well-being (42%) (Figure 1).

Parental concerns about speech or behavior are often predictive of an underlying problem or family environmental factor that can affect a child's ability to enter school ready to learn.¹¹ To promote learning and development, parents can engage in home activities like reading together, using age-appropriate discipline techniques, and establishing routines. Yet NSECH shows that parents who have speech or behavior concerns are less likely to report engaging in potentially beneficial routines and activities. For example, parents with concerns about their children's speech report lower levels of reading together, with 48 percent reading daily compared to 56 percent of parents without speech concerns.¹² They are also more likely to report using aversive discipline such as spanking, and are less likely to use recommended strategies like a time out. Eliciting concerns from parents can help providers offer more targeted counseling topics, based on the parenting practices that families report.

Parents with specific developmental concerns receive less guidance on key topics than parents without concerns. For example, parents with concerns about speech are less likely than other parents to discuss language development (74% vs. 67%) and reading (27% vs. 21%) with the child’s health care provider. In a study of parents with Medicaid-enrolled children under four years old, 40 percent of parents were not asked if they had concerns about their child’s learning, development, or behavior. Given that research shows only 30 percent to 40 percent of parents volunteer concerns without prompting,¹³ pediatric providers need to take a more proactive approach.



IDENTIFYING AND EVALUATING DEVELOPMENTAL ISSUES

The cornerstone of developmental services is developmental surveillance, a process of monitoring emerging, developmentally appropriate abilities. These include fine and gross motor skills, language and cognition, social-emotional development, and behavior. The AAP has endorsed the use of developmental surveillance as a means of identifying, monitoring, and ultimately treating developmental problems and delays, as well as targeting parenting education and counseling.¹⁴ The process, an evolving science in which both practice and terminology are still changing, includes obtaining a relevant history, making observations, and eliciting and addressing parental concerns.^{15,16} It can be facilitated by developmental screening, a brief, structured evaluation used to identify children who require further, in-depth examination. This follow-up review is also known as developmental assessment.

GAPS IN PROVISION OF DEVELOPMENTAL ASSESSMENT

Only 57 percent of parents report their child’s development ever being assessed within a pediatric visit.¹⁷ This gap in care affects a cross-section of children and families nationally. Unlike prior studies that have found income- or insurance-related disparities in children’s access to health care services like immunization rates and timely care, the NSECH data shows few such disparities for receiving developmental assessment. Rates of developmental assessment are similar for children who are uninsured (53%), publicly insured (56%), and privately insured (57%). Rates are also similar for children across different sources of care, including physician offices (59%), hospital clinics (63%), and community clinics (51%).

Some discrepancies, however, still exist. The chances of receiving an assessment are higher when children have longer preventive care visits (Table 1). Children with visits of 21 minutes or more are more likely to receive developmental assessments (64%), compared to those with 11 to 20 minute visits (59%) or visits of 10 minutes or less (48%).¹⁸ The children who do not receive developmental assessments have the same average number of visits as the children who receive them, suggesting that it is not the number of visits but the way visit time is spent that influences the assessment process. Policymakers and health care organizations should carefully examine the link between visit length and health care quality. Longer visits can mean less revenue for physicians because they are able to see fewer patients.

Table 1. Experiences with Health Care, Parents Receiving Developmental Assessment vs. Parents Not Receiving Assessments (children 10–35 months)*

Experiences with Health Care	Received Assessment	No Assessment Received
Length of last well-child visit was adequate (% yes)	*94.0	80.4
Family-centered care rating [§] (mean, 0–100)	*71.2	59.1
Satisfaction with well-child care rating (mean, 0–10)	*8.9	8.4
Number of well-child visits in past year (mean)	3.4	3.5

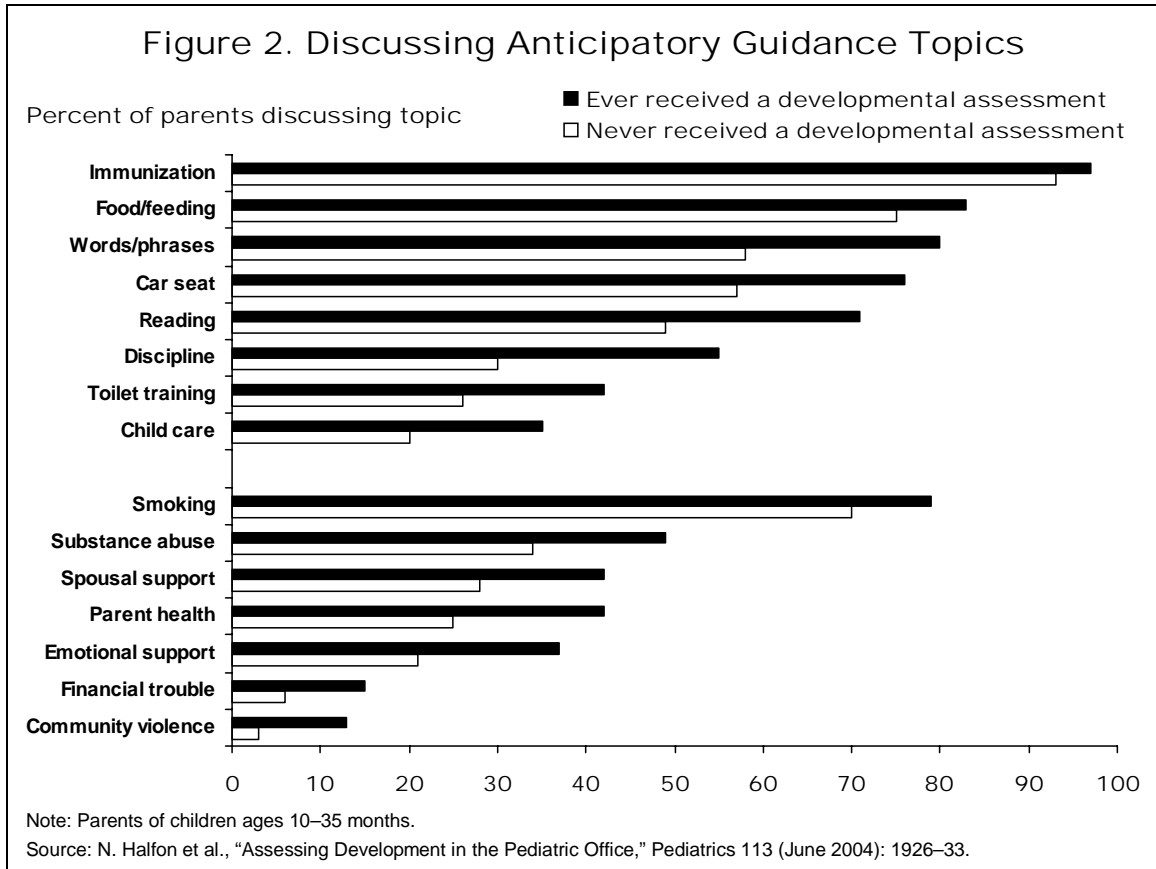
* p < 0.001 (Chi-square or ANOVA test)

§ Composite measure of four items: providers take time to understand the child’s specific needs, respect that the parent is expert on the child, ask how the parent is feeling as a parent, and understand how the family prefers to raise the child.

Source: N. Halfon et al., “Assessing Development in the Pediatric Office,” *Pediatrics* 113 (June 2004): 1926–33.

Parents who report receiving developmental assessments more frequently also report receiving advice on nearly every preventive topic (Figure 2). For example, 55 percent of parents who report a developmental assessment also receive counseling on discipline, compared to only 30 percent of those who report their child has never been assessed.¹⁹ There is a similar pattern for family and community issues. For example, spousal

support is addressed for 42 percent of parents reporting a developmental assessment, but for only 27 percent of parents without an assessment. These associations suggest that developmental assessment and guidance about developmental topics are strongly linked within practices.

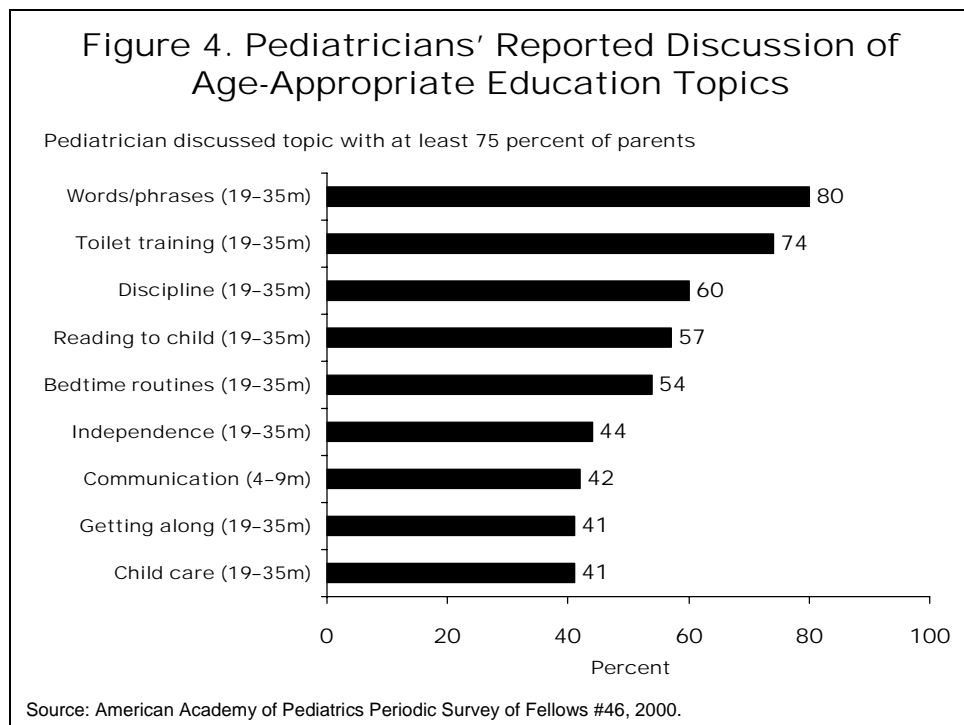
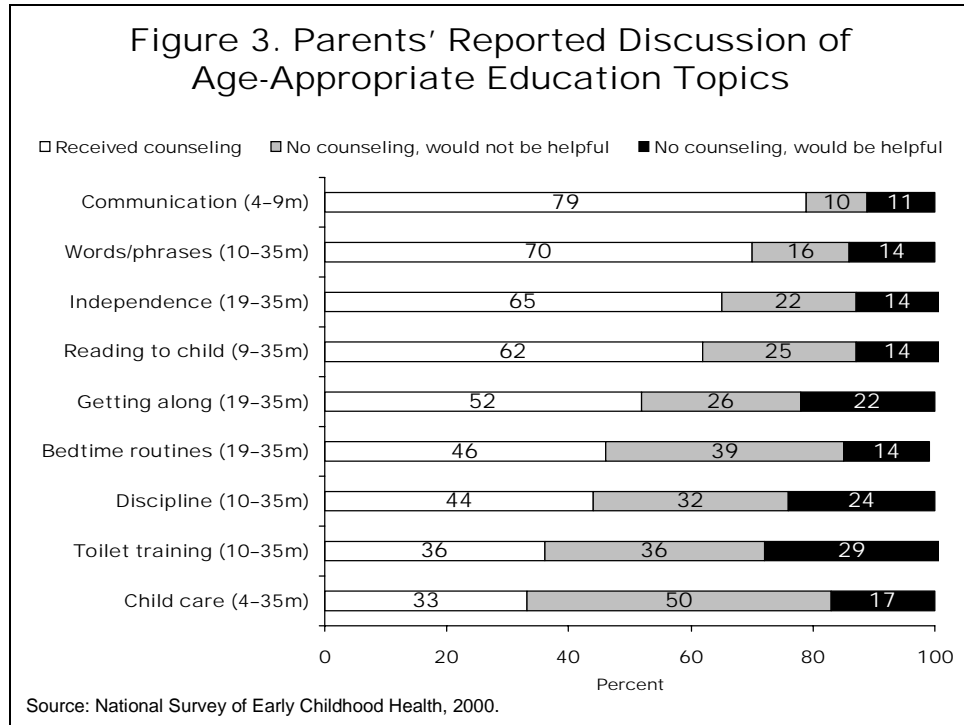


TRADITIONAL PREVENTIVE TOPICS COVERED MORE OFTEN THAN DEVELOPMENTAL AND LEARNING TOPICS

Despite their importance, developmental topics are discussed less frequently with parents than traditional topics of immunization and feeding, which are discussed with more than 90 percent of parents.²⁰ Only about three-quarters of parents discuss communication (79%) and language (70%) with their child’s doctor (Figure 3). Child care (33%), toilet training (36%), and discipline (44%) are also infrequently discussed. While these topics are more recent additions to the battery of recommended anticipatory guidance and health promotion topics, each has been part of the recommended list of topics for years.

To understand how parents’ perceptions of care compares with that of pediatricians, this study compares parents’ responses from NSECH with results from the AAP survey. Like parents, pediatricians report that topics such as child care are discussed

infrequently (Figure 4). However, while parents report discipline as among the least frequently discussed topics, pediatricians have the perception of discussing discipline more frequently.



PARENTS VALUE SOME UNADDRESSED TOPICS MORE THAN OTHERS

Most parents say they would have valued receiving guidance on the less frequently discussed topics. About one-quarter of parents of toddlers indicate that discussing unaddressed developmental topics that focus on behavior would be helpful: toilet training (29%), discipline (24%), and getting along with other children (22%) (Figure 3). Because discussing these topics may influence home routines, low rates of discussion are of concern. For example, about 35 percent of parents who would have valued, but did not receive, guidance on reading are not reading to their children daily.

Some parents may underestimate the value of discussing certain topics or believe that their child's pediatrician could not provide effective advice on the topic. Yet emphasis on reading or other developmental topics by the pediatric provider might have been useful to these parents, if offered. If parents better understand the kinds of counseling that can be offered, it can help them realize the importance of certain parenting practices and can also help shape their expectations regarding the care they receive from pediatric providers.

DISPARITIES EXIST IN GUIDANCE ON CHILD DEVELOPMENT AND HEALTH PROMOTION

Patterns of unmet need show some children are receiving fewer services designed to promote learning and development. Across all age groups, parents of African-American and Hispanic children report higher rates of unmet need (Table 2). This is particularly true of Spanish-speaking parents. Among toddlers, unmet need is associated with lower income, lower maternal education, and lack of insurance or public insurance. While unmet need is reported by some higher income parents, lower income and less educated families have the greatest missed opportunities. Time with the provider may be the key factor. In general, unmet needs increase when parents report shorter visit lengths. Parents with unmet needs more frequently report that their pediatric providers do not take enough time with the children or understand the family's parenting preferences and needs.

Table 2. Parents' Reports of Unmet Needs for Anticipatory Guidance by Family Characteristics

	4–9 Months	10–18 Months	19–35 Months
	Any unmet need* (%)	Any unmet need* (%)	Any unmet need* (%)
Unmet Needs—Total	36.5	56.3	56.5
Child's Race/Ethnicity	p < 0.001	p = 0.001	p < 0.001
Non-Hispanic white	29.1	50.3	51.3
Non-Hispanic black	37.5	64.5	63.1
Hispanic—English [†]	46.5	64.8	57.1
Hispanic—Spanish [†]	64.2	76.3	80.4
Length of Last Well-Child Care Visit (in minutes)	p < 0.05	NS	p < 0.001
Very low (0–5 min.)	61.8	77.7	88.9
Low (6–14 min.)	43.9	56.6	61.7
Medium (15–20 min.)	30.1	54.8	48.7
High (21 or more min.)	32.9	52.9	49.3

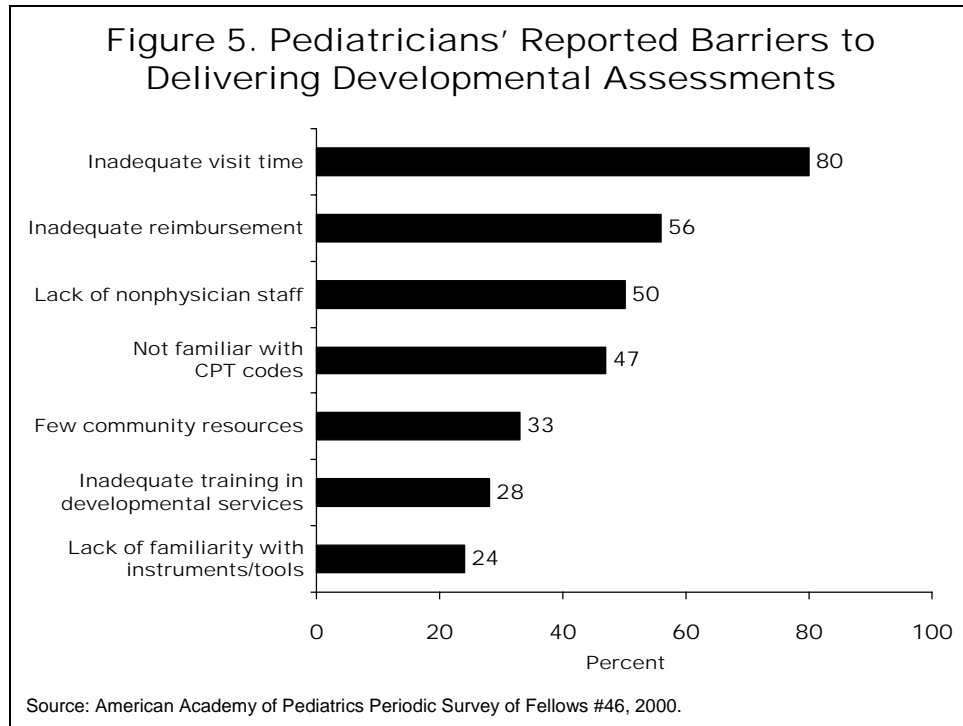
* Chi-square tests for association between each family characteristic and presence of unmet need (i.e., topic was not discussed and parent reported it would have been helpful to discuss). Percentages are weighted to the national population.

† Hispanic-English denotes Hispanic children whose parent completed the interview in English, while Hispanic-Spanish denotes Hispanic children whose parent completed the interview in Spanish.

Source: L. Olson et al., "Overview of the Content of Health Supervision for Young Children: Reports from Parents and Pediatricians," *Pediatrics* 113 (June 2004): 1907–16.

PEDIATRICIANS' PERSPECTIVES ON BARRIERS TO ASSESSING DEVELOPMENT

To devise viable improvement strategies, it is important to understand barriers to providing optimal developmental services. When asked about barriers to assessing child development, 80 percent of pediatricians in the AAP survey report inadequate visit length (Figure 5). Pediatricians also commonly report other barriers that exacerbate time constraints, including inadequate reimbursement (56%) and lack of familiarity with billing options to get reimbursement for assessments (47%). One-half of providers report insufficient non-physician staff to conduct assessments. One program, Healthy Steps for Young Children, has demonstrated the efficiency of adding a developmental specialist to practices so that physician time is used most effectively and parents receive comprehensive developmental counseling.²¹ A national experiment designed by the Boston University School of Medicine and The Commonwealth Fund, the program incorporates enhanced preventive, developmental, and behavioral services into primary care for children from birth to age 3. However, despite significantly improved outcomes from the Healthy Steps intervention, current inadequate financing and reimbursement of pediatric primary care is undermining the diffusion of this improvement strategy to practices nationwide.²²



Physicians may have significant disincentives, both practical and ethical, to detect developmental risks when resources are not available in the community to address the identified problems. About one-third of pediatricians reported limited community resources as a barrier to assessment. Not knowing how to obtain reimbursement (56%), inadequate training in assessing development (28%), and lack of familiarity with assessment tools (24%) are other barriers that must be addressed to improve the quality of preventive and developmental services provided by primary care clinicians.

STRATEGIES AND RECOMMENDATIONS

Given the high level of parental concerns, gaps in service provision, and the barriers pediatricians identify, there is a great need to improve the quality of preventive and developmental services for young children. The following strategies and targeted policy steps strive to increase the provision of developmental services, and build a health care system that meets the needs of families and young children. Recommendations call for standardized methods for identifying children at risk of developmental delays, easy access to services for children with problems, coordinated case management, and ongoing measurement to produce information to facilitate quality improvement.

Implement Routine Use of Standardized Developmental Assessment Tools

Improving early detection requires interventions at the clinician, community, and state level. In particular, it is critical to use standardized, validated tools to improve the identification of young children at risk of delay.²³

Private Sector. The AAP has endorsed the use of standardized tools, but it and other professional associations must help regulate assessment by developing standards, guidelines, and manuals for clinicians. As indicated in the AAP survey, physician residents and practicing pediatricians will need training to 1) integrate methods of eliciting parents' concerns and assessing children's abilities into their practice and 2) use those results to guide and improve their interactions with parents. For residency programs, the report of the Future of Pediatric Education Workgroup in 2000 affirmed the need to change pediatric education to develop competencies in developmental and behavioral pediatrics.²⁴ At Boston University Medical Center, Barry Zuckerman, M.D., and Steven Parker, M.D., have developed a set of residency training materials.²⁵ This represents just one example of the resources available for pediatric faculty to incorporate into the curriculum.

For pediatricians already in practice, participation in quality improvement initiatives, such as learning collaboratives focused on integrating standardized tools, could both increase the provision of developmental services and earn pediatricians credit toward recertification. Two learning collaboratives, which include a total of 30 pediatric practices, are under way in North Carolina and Vermont to improve developmental surveillance, with similar efforts planned in California. The improvement toolkit used in the collaborative is available at Web site of the National Initiative for Children's Healthcare Quality.²⁶ Other online resources about developmental screening are also available for physicians. Medscape, for instance, offers an archived Webcast on the early detection of developmental problems, with continuing medical education credit available for physicians and nurses.²⁷ Additionally, providers may use a learning module available on the developmental behavioral pediatrics online site.²⁸ This site is closely connected with the AAP Section on Developmental and Behavioral Pediatrics.

Public Sector. NSECH results show that low-income parents of publicly insured or minority children are more likely than other parents to have concerns about their child's development and unmet developmental health care needs. Many of these children are covered under Medicaid, which is uniquely positioned to promote young children's healthy development, since it covers nearly one-half of all low-income children under age six.²⁹ The Early and Periodic Screening, Diagnosis, and Treatment program, the child health component of Medicaid, specifies developmental assessment as an expected

service.³⁰ The term *developmental assessment* combines two discrete functions: developmental screening, an initial assessment to identify children at risk of delay, and diagnostic assessment, a follow-up, in-depth assessment to diagnose problems. State Medicaid programs should clarify the difference between developmental screening and diagnostic assessment to outline the range of services expected from its providers, as Kay Johnson and Neva Kaye suggest in a report on children's healthy mental development.³¹

In collaboration with state AAP chapters and other professional organizations, Medicaid should also insist that clinicians use professionally recommended tools. This could be articulated through state regulation, provider manuals, Medicaid managed care contracts, or protocols for participating clinicians. Effective July 2004, new policy in North Carolina mandates that all pediatric clinicians serving Medicaid-enrolled children under age six must use a formal, standardized developmental screening tool at selected well-child visits.³²

While Medicaid is the major payer of health services for low-income young children, other state and local agencies also have an opportunity to screen for potential developmental problems. States should aim to adopt a unified vision, vocabulary, and set of tools across multiple sectors (i.e., medical, public health, public welfare, community). State-funded programs, including Head Start, Early Head Start, Women, Infants, and Children (WIC) centers, public health clinics, child care centers, job placement programs/Temporary Assistance for Needy Family offices, and family resource centers, could use federal, state, and county resources to train early childhood professionals in the principles of child development, standardized tools (particularly those used to elicit parents' concerns), and referral. Vermont trained more than 900 physicians, public health providers, child care providers, and government officials in Touchpoints, a curriculum that emphasizes building supportive alliances between parents and professionals around key points in children's development. Although the Touchpoints curriculum does not focus on standardized development screening, a similar system-wide approach could be adopted to focus on eliciting parents' concerns, developmental surveillance, and referral.

Create a Communitywide, Comprehensive Infrastructure

Identifying potential developmental problems is meaningless without an effective system to conduct follow-up assessments and provide therapeutic services. Results from the AAP survey suggest that creating such a system would provide pediatricians with an incentive to screen for developmental issues.

Every state or community can use state and other funds to establish a comprehensive system that easily connects providers and families to appropriate services.³³ Help Me Grow, a statewide referral and service network in Connecticut, is one example of such a system. Program components include a statewide, toll-free telephone number and partnerships with community-based agencies that provide services. Child development community liaisons serve as the conduit between the community-based services and the telephone entry point and find the right group of programs or services based on need and family eligibility considerations.³⁴

A key step in making a referral system work is convincing pediatric professionals, especially pediatricians, to use it. Pediatric providers must be aware of resources and confident in the services provided before they will readily refer their patients. Putting together a directory of available agencies is not enough; building trusting relationships between medical and community providers is critical to a communitywide system's success. State AAP chapters and managed care companies, among other entities, could convene various stakeholders and physicians to help forge these relationships.

Financing such a system would likely require combining dollars from multiple resources. Indiana, Ohio, and Florida have tested financing strategies to improve coordination of care for children with mental health problems. These strategies include “blending funds,” in which stakeholders pool dollars from multiple sources and make them indistinguishable and “braiding funds,” in which funding streams remain distinct but are used collectively for greater strength and efficiency.³⁵ The Help Me Grow program, an example of a braided funds program, brings together funds from various state health and education agencies. States can also tap resources from Medicaid, Title V Maternal and Child Health Services Block Grants, and the federal Children's Mental Health Services Initiative.

All states should explore expanding the eligibility criteria of Part C programs to include young children at risk of experiencing a substantial developmental delay. Under the federal Individuals with Disabilities Education Act (IDEA) Part C program, states must provide early intervention services for infants and toddlers, regardless of income, who are either experiencing a developmental delay or have a diagnosis that puts them at risk for developing a delay. Typical services include physical, occupational, and speech-language therapies. The Denver Health System has used IDEA to support referral and coordination functions that otherwise would have been unavailable. However, each state sets its own eligibility criteria within broad federal guidelines. Children at risk of emotional and behavioral problems are not always eligible for services through Part C. Eight states,

including Indiana, Maryland and North Carolina, currently provide extensive coverage for at-risk children and, as a result, serve a greater proportion of young children than the national average.

Measure and Compare Quality of Developmental Services

The NSECH and AAP surveys provide valuable information often overlooked by health care surveys and quality measures. Without this kind of data and other reliable information about the quality of care provided, preventive and developmental health care services cannot be improved. Measuring performance can help clinicians, parents, payers, and policymakers monitor progress and make adjustments. For instance, the National Survey of Children's Health conducted by the National Center for Health Statistics in 2003–2004 uses several quality measures derived from NSECH and will provide state-level estimates of early childhood measures, including parents' concerns about development. Repeating NSECH in future years would provide useful trend information about the quality of care provided to young children in the United States.

The NSECH includes content derived from the Promoting Healthy Development Survey (PHDS), a survey of parents of children, ages 3 to 48 months, developed by the Child and Adolescent Health Measurement Initiative.³⁶ To date, nine state Medicaid agencies, three External Quality Review Organizations, and three managed care plans have used the PHDS to assess and shape quality improvement initiatives. Continued, repeated, and expanded use of both the NSECH and the PHDS would enable states and plans to design quality improvement initiatives and policies—such as incentive payments or bonuses—to encourage higher quality well child care and to permit comparison to national performance averages. The PHDS results can also be analyzed at the physician practice or individual clinician level, so pediatricians could use the results to implement innovations in their clinics or offices.

Create Public–Private Quality Improvement Partnerships

While quality performance data offers useful information about developmental services, pediatric clinicians need tangible strategies and assistance to improve the quality of care they provide. One approach involves state or community partnerships of pediatric clinicians collaboratively engaging in quality improvement activities under the guidance of experts. For example, in the Vermont Children's Health Improvement Program (VCHIP), all pediatric practices in the state engage in evidence-based, measurement-driven, quality improvement projects on topics ranging from asthma to preventive services. Senior partners of VCHIP include Medicaid, public health and human services agencies; the University of Vermont's College of Medicine, and the state chapters of AAP and the

American Academy of Family Physicians. The partnership between state agencies and pediatric practices creates a cooperative relationship, provides a forum to establish a quality improvement agenda, and facilitates financing. Three other states (New Mexico, North Carolina, and Utah) have also established quality improvement partnerships.

Provide Adequate Reimbursement for Developmental Services

At least one-half of the pediatricians surveyed by the AAP cite inadequate visit time, inadequate reimbursement, and a shortage of non-physician staff as major barriers to delivering developmental services. In particular, shorter office visits—often a by-product of trying to increase patient volume—seem to compromise quality of care. NSECH results show that shorter office visits are associated with lower chances of receiving a developmental assessment, less psychosocial screening, and more unmet needs. Increasing reimbursement for well child care could relieve some of the current cost pressure on pediatricians and allow them to spend time providing developmental services.

In addition to increased reimbursement from both public and private payers, there are other strategies that could improve quality and positively affect revenues for well child care. First, rethinking how pediatricians spend their time during the well child visit could increase the focus on developmental services.³⁷ For example, using a structured tool or developmental checklist could engage parents and pediatricians in addressing parents' concerns—making the discussion more relevant and efficient. Second, reorganizing the current office system (e.g., paperwork flow, use of office staff) could reveal ways to more efficiently use existing resources.³⁸ Third, managed care plans could use incentives to encourage pediatricians to provide higher-quality care, such as increasing reimbursement for pediatricians who use standardized tools.

For state Medicaid programs that contract with health plans, states could reward or penalize plans based on the quality of developmental services provided. In New York, plans that perform well on certain measures are rewarded by an increase in their allocation of beneficiaries. Utah and Wisconsin withhold some portion of a health plan's compensation if it does not meet screening standards for lead exposure or vision. If state Medicaid programs differentiate between developmental screening and diagnostic assessment, then separate billing and payment rates could be established for these distinct services.

Raise Parents' Expectations

Another quality improvement strategy is to increase parents' demand for developmental services. According to the NSECH survey, many parents report that they do not discuss age-appropriate education topics with their pediatric providers, but would find this

practice helpful. To help raise appropriate issues for discussion during well child care visits, parents should be required to complete questionnaires regarding their child's health and development. Additionally, parents should receive educational materials prior to well child care visits to help prepare them and to provide tips on how to broach child development topics with providers. The combination of written and verbal guidance is often most effective at changing parents' behavior. Written brochures and videos can provide details not addressed during the office visit and can reinforce messages. Several organizations—such as the AAP's Bright Futures initiative and The Commonwealth Fund's Healthy Steps for Young Children Program—have developed family-friendly information to help parents discuss issues at each stage of development.³⁹ Making such materials available to families with diverse cultures and language needs could reduce current health care disparities. Sharing quality performance results with parents in an accessible and timely manner can also raise awareness and prompt parents to seek higher quality care. Because physician–parent communication is the foundation of effective health supervision, encouraging parents to ask questions could lead to better long-term outcomes for young children and their families.

CONCLUSION

While many families with young children are receiving assessment and guidance about health and developmental issues from their pediatric providers, a substantial portion are not. Some disparities exist due to income and ethnicity, but the provision of many developmental services does not appear to be linked to a particular type or place of care or to the form of reimbursement that the provider receives. Strategies that can reach all provider types and settings are clearly required. Fortunately, there are feasible, pragmatic steps that can be taken. Several states and local communities have initiated innovative programs and policy initiatives to address barriers; close gaps in knowledge, skills, motivation; and institute quality improvement efforts. There are policy options to support these efforts and ultimately improve both care and outcomes for young children.

METHODOLOGY

The National Survey of Early Childhood Health (NSECH) provides nationally representative, parent-reported estimates of quality of developmental services. NSECH content builds upon the 1996 Commonwealth Fund Survey of Parents of Young Children⁴⁰ and the Child and Adolescent Health Measurement Initiative Promoting Development Survey.⁴¹ The NSECH surveyed parents of 2,068 children, ages 4 to 35 months, in 2000, and asked parents about the receipt of developmental assessments and discussion of health supervision topics.

Supplemental data is available from the American Academy of Pediatrics (AAP) Periodic Survey of Fellows #46, conducted between March and August 2000. The survey was developed to complement parent report questions in the NSECH. Parallel questions about the content of anticipatory guidance topics were constructed for the Periodic Survey #46 to permit comparisons of the NSECH data with a national sample of pediatric providers. The Periodic Survey was an eight-page, self-administered, forced-choice questionnaire sent to a random sample of 1,640 U.S. members of the AAP. Pediatric residents were included in the sampling but retired and emeritus members were excluded. After six mailings, a response rate of 67 percent was achieved. Results presented in this study are limited to the 811 responding pediatricians who provide health supervision to children, ages 0 to 35 months.

To assess the receipt of a developmental assessment, parents in the NSECH were asked: 1) whether the doctor or other provider told the parent he or she was carrying out a “developmental assessment” and 2) if the doctor or other provider ever had the child pick up small objects, stack blocks, throw a ball, or recognize different colors—common tasks asked of children during an assessment. Answering yes to either question reflects receipt of the service. In the AAP survey, pediatricians reported the percentage of children to whom they provided a developmental assessment.

In the NSECH, parents were asked whether in the past year they had received health supervision on eight to 10 age-appropriate topics. Missed developmental services were measured by asking parents who had not discussed a health supervision topic if they would have found the discussion helpful. In the AAP survey, pediatricians reported the percentage of parents with whom they discussed health supervision topics.

NOTES

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RELATED PUBLICATIONS

Publications listed below can be found on The Commonwealth Fund's Web site at www.cmwf.org.

#787 [*Dialing for Help: State Telephone Hotlines as Vital Resources for Parents of Young Children*](#) (November 2004). Meg Booth, Treeby Brown, and Malia Richmond-Crum, Association of Maternal and Child Health Programs. According to the authors of this issue brief, toll-free telephone hotlines operated by the states are increasingly being used by families to obtain reliable advice on their young children's health and well-being. Originally created for prenatal-care assistance alone, these lines now cover a wide range of early-childhood issues.

#785 [*A Need for Faculty Development in Developmental and Behavioral Pediatrics*](#) (November 2004). Edward L. Schor and Caren Elfenbein. The authors of this issue brief argue that identifying and managing issues of child development and behavior is a crucial part of primary care pediatrics, yet despite its importance, many pediatricians do not receive adequate training in developmental and behavioral pediatrics.

#778 [*Early Child Development in Social Context: A Chartbook*](#) (September 2004). Brett Brown, Michael Weitzman et al. This chartbook reviews more than 30 key indicators of development and health for children up to age 6, as well as social factors in families and communities that affect these outcomes. It also offers practical implications for practitioners and parents.

#757 [*Rethinking Well Child Care*](#) (July 2004). Edward L. Schor. *Pediatrics*, vol. 114, no. 1 (*In the Literature* summary). According to this article's author, the nation's system of preventive pediatric care requires major revisions if chronic health problems and unmet behavioral and developmental needs among American children are to be addressed.

#705 [*Using Medicaid to Support Young Children's Healthy Mental Development*](#) (Sept. 2003, revised Jan. 2004). Kay Johnson and Neva Kaye. This report examines both why and how Medicaid can support children's healthy mental development, including a discussion of how states can use Medicaid to better support young children's social/emotional development even in the current economic climate.

#706 [*ABCD: Lessons from a Four-State Consortium*](#) (December 2003). Helen Pelletier and Melinda Abrams. This report examines the work of Medicaid agencies in four states—North Carolina, Utah, Vermont, and Washington—that were selected to participate in the first phase of the Fund's Assuring Better Child Health and Development initiative.

#697 [*A Practice-Based Intervention to Enhance Quality of Care in the First 3 Years of Life*](#) (December 17, 2003). Cynthia S. Minkovitz et al. *Journal of the American Medical Association*, vol. 290, no. 23 (*In the Literature* summary). In this national evaluation of the Fund's Healthy Steps for Young Children Program, the authors report that physician practices with childhood developmental specialists on staff showed "significant improvements" in parental satisfaction with the services they received; timelier preventive care such as immunizations; and receipt of more developmental services.

#689 [*Developmental Specialists in Pediatric Practices: Perspectives of Clinicians and Staff*](#) (November/December 2003). Cynthia S. Minkovitz et al. *Ambulatory Pediatrics*, vol. 3, no. 6 (*In the Literature*

summary). As part of the Fund's [Healthy Steps for Young Children](#) initiative, 15 pediatric practices across the country incorporated early child development specialists into their teams; these "Healthy Steps Specialists" meet with families in offices and conduct home visits, address behavioral concerns, and make referrals. This article reports on a survey of clinicians and staff at the 15 practices finds that the specialists have become well integrated into pediatric practice, are a trusted source of information, and are being consulted for a variety of developmental concerns.

#564 [Building a Bridge from Birth to School: Improving Developmental and Behavioral Health Services for Young Children](#) (May 2003). Neal Halfon, Michael Regalado, Kathryn Taaffe McLearn, Alice A. Kuo, and Kynna Wright. The authors review existing guidelines for developmental care of young children and assess the effectiveness of providing such care in primary care settings.

#481 [Using the Title V Maternal and Child Health Services Block Grant to Support Child Development Services](#) (January 2002). Sara Rosenbaum, Michelle Proser, Andy Schneider, and Colleen Sonosky, George Washington University. This report, the fourth in a series of analyses exploring federal and state health policy in the area of early childhood development, notes that states have the policy flexibility to use Title V funds to improve the provision of preventive health services to low-income children under age 3 who are eligible for Medicaid or CHIP (as well as those who are not). The report presents four approaches state Title V agencies can take to coordinate with their state Medicaid and CHIP programs.

#480 [Child Development Programs in Community Health Centers](#) (January 2002). Sara Rosenbaum, Michelle Proser, Peter Shin, Sara E. Wilensky, and Colleen Sonosky, George Washington University. This report, the third in a series of analyses exploring federal and state health policy in the area of early childhood development, argues that states can potentially increase reimbursements to CHCs under a change enacted in the Benefits Improvement and Protection Act (BIPA) of 2000. CHCs served 4.5 million low-income children in 1998, including 1.3 million under age 6.

#451 [Room to Grow: The Role of Medicaid and CHIP in Aiding Child Development Through Preventive Health Services](#) (July 2001). Sara Rosenbaum, Michelle Proser, Andy Schneider, and Colleen Sonosky, George Washington University. This report, the second in a series of analyses exploring federal and state health policy in the area of early childhood development, examines how public insurance programs covering low-income children—namely, Medicaid and the State Children's Health Insurance Program (CHIP)—can be used to support and foster optimal child development interventions.

#450 [Health Policy and Early Child Development: An Overview](#) (July 2001). Sara Rosenbaum, Michelle Proser, and Colleen Sonosky, George Washington University. This report is the first in a series of analyses exploring federal and state health policy in the area of early childhood development. It provides an overview of the evolution of federal health policy related to the financing and provision of preventive health services for young children.

