The National Survey of Early Childhood Health: Parents’ Views on Preventive Care for Infants and Toddlers

Nearly every child in the United States under the age of 3 receives some well-child care, and pediatricians are the primary health care providers for this age group. The doctor’s office may be the only place that essentially all U.S. infants and toddlers have contact with professionals trained in child health and development. But do the process, content and quality of well child visits meet the needs of parents?

The National Survey of Early Childhood Health (NSECH) was conducted to address those questions. While there is an abundance of information about pediatricians’ views on this topic, very little information has been previously collected from parents’ perspective.

Parents of children ages 4 to 35 months were surveyed in 2000 about their opinion on well-child visits and health supervision. These nationally representative data gathered on more than 2,000 children provide insight into the content and quality of well-child visits as well as information on parenting practices such as reading together that can affect the development of children. The NSECH also supplies national data on which health and development issues parents want to address in well-child visits to help them raise their child in a healthy environment.

The full results of the NSECH are published in a supplement to the June 2004 issue of Pediatrics (http://pediatrics.aappublications.org). This document serves as a summary of some of the findings.

WELL-CHILD VISITS: THE BASICS

Health supervision and well-child visits are a core component of general pediatric care. Guidelines from the American Academy of Pediatrics (AAP) recommend 10-11 such visits before the age of three.¹ According to the Periodic Survey of AAP members that corresponded to the NSECH, pediatricians conduct an average of 35 health supervision visits per week with children 35 months of age and younger. Both pediatricians and parents report the physician spends an average of about 18 minutes with families during well-child visits for this age group.²

Insurance status correlates with the place where children receive preventive care. Children with private insurance are most likely to receive well-child care in a group or private practice: 86% of privately insured children, 61% of publicly insured children, and 49% of uninsured children.

Figure 1: Mean Number of Health Supervision Visits per Week Reported by Pediatricians by Patient Age (n=811)

<table>
<thead>
<tr>
<th>Patient Age</th>
<th>Mean Number Visits</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-9 months</td>
<td>15</td>
</tr>
<tr>
<td>10-18 months</td>
<td>11</td>
</tr>
<tr>
<td>19-35 months</td>
<td>9</td>
</tr>
<tr>
<td>36+ months</td>
<td>12</td>
</tr>
</tbody>
</table>

Source: AAP Periodic Survey #46, 2000
Nearly all (98%) parents report having a regular place they take their infant or toddler for well-child visits; three-quarter (73%) of these locations are a private or group practice.

Only 46% of parents indicate they see the same person at each visit; parents report 76% of these clinicians are pediatricians.

• Children who visit private group practices or community health centers are more likely to have a regular pediatric clinician (46% and 50%) than children who visit hospital clinics or urgent care or walk-in facilities (37% and 38%).
• More children with private insurance (51%) see the same clinician for well-child care compared to those who are publicly insured (37%) and uninsured (28%).
• Of those with a regular pediatric clinician for well-child care, 89% of parents report choosing the clinician themselves. About 39% of these parents who selected their child’s clinician already had another family member being cared for by the clinician, and 32% chose their clinician based on a recommendation.3

**PARENTS’ SATISFACTION WITH WELL-CHILD VISITS**

Most parents – 86% — believe well-child visits are very important for their child’s health and development. In the NSECH, parent views on their child’s care were further examined with several measures of satisfaction:4

1. Overall satisfaction: how parents rated the child’s well-child care during the prior 12 months;

### Table 1: Profile of Families with Infants and Toddlers

<table>
<thead>
<tr>
<th>Demographics</th>
<th>% of US Children Age 4-35 Months*</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Race/Ethnicity of Child</strong></td>
<td></td>
</tr>
<tr>
<td>White non-Hispanic</td>
<td>61†</td>
</tr>
<tr>
<td>Black non-Hispanic</td>
<td>15†</td>
</tr>
<tr>
<td>Other non-Hispanic</td>
<td>4†</td>
</tr>
<tr>
<td>Hispanic</td>
<td>19†</td>
</tr>
<tr>
<td><strong>Annual Household Income (1999)</strong></td>
<td></td>
</tr>
<tr>
<td>Up to $7,500</td>
<td>7</td>
</tr>
<tr>
<td>$7,501-$17,500</td>
<td>16</td>
</tr>
<tr>
<td>$17,501-$25,000</td>
<td>12</td>
</tr>
<tr>
<td>$25,001-$35,000</td>
<td>13</td>
</tr>
<tr>
<td>$35,001-$45,000</td>
<td>10</td>
</tr>
<tr>
<td>$45,001-$60,000</td>
<td>11</td>
</tr>
<tr>
<td>$60,001-$75,000</td>
<td>7</td>
</tr>
<tr>
<td>Over $75,000</td>
<td>14</td>
</tr>
<tr>
<td>Don’t know/refused</td>
<td>10</td>
</tr>
<tr>
<td><strong>Mother’s Age</strong></td>
<td></td>
</tr>
<tr>
<td>Under 20 years</td>
<td>7</td>
</tr>
<tr>
<td>20-24 years</td>
<td>22</td>
</tr>
<tr>
<td>25-29 years</td>
<td>26</td>
</tr>
<tr>
<td>30-34 years</td>
<td>25</td>
</tr>
<tr>
<td>35 years or more</td>
<td>21</td>
</tr>
<tr>
<td><strong>Mother’s Marital Status</strong></td>
<td></td>
</tr>
<tr>
<td>Married</td>
<td>69</td>
</tr>
<tr>
<td>Divorced/widowed/separated</td>
<td>9</td>
</tr>
<tr>
<td>Never married</td>
<td>22</td>
</tr>
</tbody>
</table>

Source: NSECH survey conducted in 2000. For further technical detail see http://www.cdc.gov/nchs/slaits.htm

* Percentages may not sum to 100% due to rounding. Estimates are representative of U.S. children age 4-35 months.

About the Survey

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.5 The Centers for Disease Control and Prevention’s National Center for Health Statistics (NCHS) 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% of all completed interviews. The Council of American Survey Research Organizations (CASRO) response rate was 65.6%, and the proportion of completed NSECH interviews among known age-eligible households was 79.2%. A public use NSECH micro data file can be downloaded from http://www.cdc.gov/nchs/slaits.htm.

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%. This Periodic Survey was designed and conducted to compare results to the NSECH information.

The NSECH represents a unique multi-disciplinary and multi-institution partnership. The survey was developed by the AAP and the UCLA Center for Healthier Children, Families, and Communities with primary funding from The Gerber Foundation. Additional financial support was provided by the AAP Friends of Children Fund, the Maternal and Child Health Bureau in the Health Resources and Services Administration through their funding of the National Center for Infant and Early Childhood Health Policy at UCLA, and The Commonwealth Fund. Other collaborators included researchers from the Centers for Disease Control and Prevention and the Child and Adolescent Health Measurement Initiative (CAHMI).
2. Information satisfaction: whether parents felt all of their questions were answered in the last visit;
3. Time satisfaction: if parents believed they had “about the right amount of time” rather than “not enough time” during the well-child visit; and
4. Likelihood of recommending their provider: parents who reported having a specific clinician for well-child care were asked if they would recommend this clinician to others.

About 94% of parents said all of their questions were answered at the last visit. Approximately 88% of parents reported satisfaction with the amount of time they spent during the last well-child visit, and 79% would recommend their child’s pediatric clinician to a friend or family member.

The length of the well-child visit correlated with parent satisfaction. Across all dimensions measured, parents who reported longer visits also reported greater satisfaction.

Parents’ satisfaction in one area often affected satisfaction in another area. For example, parents whose questions were answered during the last visit reported more satisfaction with the length of the visit than other parents (92% vs. 34%).

Other results of parent satisfaction included:
- White and Hispanic mothers reported higher overall satisfaction than African-American mothers.
- Hispanic mothers had lower time and information satisfaction than African-American and White mothers.
- Parents of children in poorer health reported lower overall, time and information satisfaction.
- Managed health care participants reported lower information, time and overall satisfaction.
- Parents of children with a specific clinician had higher information satisfaction than those lacking a specific clinician but did not have higher overall and time satisfaction.

CONTENT OF WELL-CHILD VISITS

Parents were asked in the NSECH which topics were discussed during well-child visits, which issues they would like to talk about that are not being addressed, and which issues not addressed they would like to discuss.³

Topics Discussed with Parents

Results from the NSECH and AAP Periodic Survey indicate parents and pediatricians both reported that traditional preventive care topics such as immunizations, feeding issues and sleep patterns were generally addressed with most children. Developmental issues, such as discipline and toilet training were less frequently discussed.

- About 94% of all parents surveyed indicated that immunizations were discussed with their child’s pediatric clinician within the last 12 months.
- In addition, feeding-related issues topped the list for most talked about topics: 92% for the 4- to 9-month-old group; 93% for the 10- to 18-

| Table 2: Usual Setting of Well Child Care for U.S. Children 4-35 Months |

<table>
<thead>
<tr>
<th>Physician or nurse practitioner in private or group practice</th>
<th>Community health center/public clinic</th>
<th>Hospital clinic</th>
<th>Urgent care or walk-in clinic</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total*</td>
<td>73%</td>
<td>17%</td>
<td>6%</td>
</tr>
<tr>
<td>Health insurance type</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Private</td>
<td>86†</td>
<td>9</td>
<td>2</td>
</tr>
<tr>
<td>Public</td>
<td>62</td>
<td>25</td>
<td>10</td>
</tr>
<tr>
<td>Private and public</td>
<td>61</td>
<td>20</td>
<td>10</td>
</tr>
<tr>
<td>Uninsured</td>
<td>49</td>
<td>38</td>
<td>7</td>
</tr>
</tbody>
</table>

Note: Percentages are weighted and adjusted for survey design effect.
* 2% of children are reported to have an “other” usual setting
† p<0.01 (chi square test of independence of health insurance type and usual setting)
Source: NSECH
month-old group; and 73% for the 19- to 35-month-old group.
• Among the youngest children, age 4-9 months, topics of child care setting and choices, burn prevention and reading were the least discussed topics.
• Toilet training, child care and discipline were the least discussed topics for the 10- to 18-month-old group.
• Child care, discipline, toilet training and bedtime routines were the least discussed issues for 19- to 35-month-olds.

Areas of Greatest Unmet Need
• Unaddressed topics most valued by parents of children 4-9 months included child care settings, reading, burn prevention, night waking and fussing and how a child communicates needs.
• For parents of children 10-18 months, priorities among unaddressed topics included toilet training, child care settings, discipline, reading, words and phrases and weaning.
• Unaddressed topics most valued by parents of children 19-35 months included toilet training, discipline, getting along with others, ways of avoiding dangerous situations and child care.

Comparing Parent and Pediatrician Views
• Parents and pediatricians generally agreed on which topics were discussed most and least often.
• Topics for which pediatricians reported greater coverage than did parents included toilet training and discipline.

Developmental Assessment
Nearly all pediatricians reported that they routinely perform developmental assessments. In contrast, just over half of parents — 57% — recalled their child age 10-35 months ever having been evaluated for developmental delays. Specifically, only 42% of parents of children in this age group
recalled ever having been told a developmental assessment was being conducted, and only 39% said their child had ever been asked to perform certain skills such as picking up small objects, stacking blocks or using a crayon.6

**Immunizations**

Although the majority of children (72%) were current with their immunization series (4:3:1:3:3), health insurance played a role in whether or not they were fully immunized. At the time of the interview, most parents (94%) indicated they have insurance for their child. Children with private insurance were more likely to be up-to-date (80%) than children with public insurance (56%). In addition, 64% of children without insurance were current with immunizations.7

**Reading**

Despite recent focus on the importance of reading for early brain development, just more than half — 52% — of parents read to their child every day. Several factors were associated with reading on a daily basis: the child being older, maternal education beyond high school, more children's books in the home, and discussion with the child’s pediatric clinician about reading. For example, 63% of children who have a mother with education beyond high school were read to every day, compared to 48% whose mothers finished high school and 35% of those whose mothers did not complete high school.

More than one-third of surveyed parents indicated they have not discussed reading with their pediatric clinician, and nearly half of that group would have found it useful for their pediatric clinician to inform them about reading.8

**Discipline**

The NSECH asked parents how often they use aversive discipline strategies such as yelling and spanking and non-aversive discipline methods such as toy removal, time-outs and explanations.

Reported spanking increased substantially with child age; 6% of parents of 4- to 9-month-old children reported ever having spanked their child, while 64% of parents of 19- to 35-month-olds said they had spanked their child. In addition, 32% of parents of the younger children stated they had used yelling for discipline compared to 67% of parents of the older children.

There were racial/ethnic differences among parents who spank, remove toys and use time-outs, but few differences in the rates of yelling and providing explanations. While teen parents were less likely than older parents to yell or use explanations, they were no more likely to use spanking.

When parents reported high frustration with parenting, they were three times as likely to report spanking and more than twice as likely to yell at their child.9

**Assessment of Family and Community Risks to Child Health**

Parents were asked whether their child’s pediatric clinician had ever asked them about their own well-being, economic issues, substance use and community violence. Most agreed that pediatric clinicians, in general, should ask about each of these family and community risks during well-child visits, but far fewer reported they themselves had been questioned about these issues.
About 94% of parents said parents should be questioned about smoking; 77% said they themselves had actually ever been asked about smoking. Parents were least interested in including community violence as a counseling topic. Only 56% thought it should be raised, and only 10% had discussed community violence with their own pediatric clinician.

In addition, 89% of parents were in favor of asking parents about alcohol and drug use in the home, while many fewer parents (44%) recalled their own pediatric clinician inquiring about substance use. Finally, only 12% of parents indicated pediatric clinicians have questioned their financial situation, yet 75% said they believe pediatric clinicians should discuss the issue.10

PRACTICE AND POLICY IMPLICATIONS

Well-child visits are a unique point of contact with families to address health and development in the first years of life. Several commentaries in the June 2004 Pediatrics volume on the NSECH were written by pediatric leaders and point to policy and practice implications from the NSECH data.

Providing continuity in preventive care. Continuity of care enables pediatric clinicians to monitor child behavior and development, as well as family issues.11 The AAP has described the medical home as a place for all children to receive comprehensive, continuous health care. Through a relationship with an established medical home, early detection and education can improve children’s health and development, and, in turn, decrease certain educational and intervention costs that result from health and behavior problems.

Improving the quality of preventive care. Measuring parent reported interests and needs is a key component to assuring high quality preventive health care. The NSECH addresses specific details about care (eg, which topics addressed), unmet needs around specific topics (eg, discipline or toilet training) and parenting practices (eg, reading or discipline). These issues should be tracked at the national level. Such data, if collected at a practice and community level could also facilitate the identification of local opportunities for improvement and measure progress in addressing them.12

Financing preventive care in the 21st century. Access to care, quality of services, and financial support are inherently linked. Pediatricians report common barriers of inadequate time and reimbursement that deserve attention. Inadequate financial coverage, such as high family out-of-pocket expenses for well-child care or exclusion of health supervision services from benefits covered in insur-

Figure 4: Satisfaction Ratings and Reports, by Length of Well Child Visits

![Figure 4: Satisfaction Ratings and Reports, by Length of Well Child Visits](image)

**Note:** Figure shows mean global satisfaction (0-100) and percentages with information and time satisfaction and percentage recommending the provider by mean length of last well child visit, in minutes. Provider recommendation includes only the 930 children with a particular provider. The p values are associated with the pairwise comparison of satisfaction ratings/reports for each increment of visit length. NS denotes pairwise comparison is not statistically significant.
ance plans, can compromise the delivery of quality care, for example through visits that are too short. Financing approaches are needed that recognize the value of preventive and developmental care, for both families and society.13

Reference List

**HIGHLIGHTS**

**NSECH Survey Results for US Children 4-35 Months of Age**

- 84% of parents report that their child is in excellent or very good health
- Compared to privately-insured children (90%), publicly-insured (77%) and uninsured (64%) are less likely to be in excellent or very good health
- Nearly every child receives some of the recommended series of well-child visits
- 86% of parents believe well-child visits are very important
- 88% report having adequate time with the pediatric clinician during the last well-child visit; for parents of uninsured children 22% reported not having enough time
- 79% of parents would recommend their child’s current pediatric clinician to others
- Parents agree with pediatricians on topics most frequently discussed during well-child visits (immunizations, feeding issues, and sleep patterns) while topics related to development and family context are less commonly addressed
- 98% of parents report a regular place for well-child visits but only 46% indicate a particular clinician; for those with particular clinician 74% report they see a pediatrician
- Almost 75% of children usually go to a private or group practice for well-child care although that number decreases for African Americans (68%) and Hispanics (54%)
- Although most parents feel that family and community topics (such as substance use and community violence) should generally be raised by pediatric clinicians fewer than half report that the topics were discussed with them
- Only 57% of parents recall their child receiving a developmental assessment
- The proportion of parents wanting but not receiving discussion of developmental topics is high for toilet training (29%), discipline (24%), and peer interaction (22%)
- About 52% of young children are reportedly read to every day by a parent and discussion of reading with the pediatric clinician is significantly correlated with reading

The NSECH is a joint project of the American Academy of Pediatrics and the UCLA Center for Healthier Children, Families and Communities. The NSECH supplement appearing in the June 2004 issue of *Pediatrics*, the peer-reviewed, scientific journal of the AAP, can be found at: http://pediatrics.aappublications.org. Inquiries may be sent to: research@aap.org.

The Center offers prevention-focused programs to improve individual and community-based health services for children; train health providers to meet today’s child and family needs; and improve public policies that affect children and families.

American Academy of Pediatrics
DEDICATED TO THE HEALTH OF ALL CHILDREN®

American Academy of Pediatrics • 141 Northwest Point Blvd. • Elk Grove Village, IL 60007
(847) 434-4000 (800) 433-9016 • (847) 434-8000 fax • E-mail: kidsdocs@aap.org • www.aap.org

The American Academy of Pediatrics is an organization of 60,000 primary care pediatricians, pediatric medical subspecialists and pediatric surgical specialists dedicated to the health, safety and well being of infants, children, adolescents, and young adults.

© 2004 American Academy of Pediatrics