

HEALTH SERVICES FINANCING AND UTILIZATION

The availability of, and access to, quality health care directly affects the health of mothers and children, especially those at high risk due to chronic medical conditions or low socio-economic status.

Children may receive health coverage through private insurance purchased by their parents or their parents' employers; or public programs, such as Medicaid or the State Children's Health Insurance Program (SCHIP). Eligibility for these programs is based on a family's income compared to the Federal Poverty Level, which was \$18,100 for a family of four in 2002. Every state has implemented a SCHIP program, expanding coverage to many uninsured children. Outreach and consumer education are key components of the expansion in health insurance for children. Despite the progress achieved through public programs such as Medicaid and SCHIP, approximately 8.5 million children remain uninsured in the United States.

The following section presents data on the utilization of health services within the maternal and child population. The most recent data are summarized by source of payment, type of care, and place of service delivery. Data are presented by age, income, race and ethnicity.



HEALTH CARE FINANCING

Nearly 12 percent (8.5 million) of children younger than 18 years of age had no insurance coverage in 2002, a proportion that has remained relatively stable since 2000.

In 2002, just over one quarter of all children (26.8 percent) were publicly insured, primarily through Medicaid, and two-thirds were covered by private insurance. By comparison, children living in families with incomes below the Federal poverty level were more likely to have

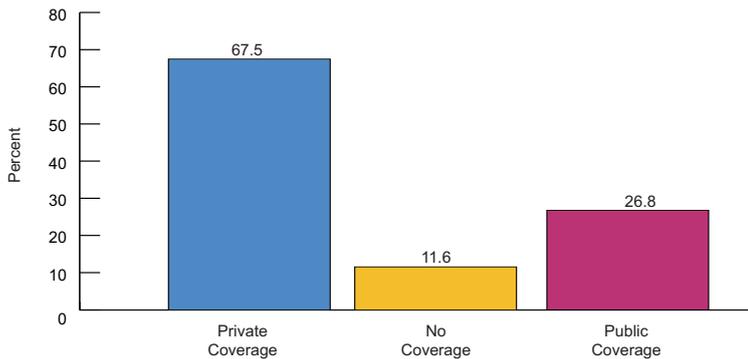
public insurance (63.8 percent) or be uninsured (20.7 percent). Only 21.6 percent of low-income children had private coverage.

In 2002, most uninsured children (64.7 percent) lived in families whose head was employed year-round, on a full-time basis. Even when parents are employed, coverage may not be offered or may be prohibitively expensive. Most privately insured children (88.7 percent) received insurance through a parent's employer.

Created in response to the growing number of uninsured children in low-income working families, the State Children's Health Insurance Program (SCHIP) has enrolled 5.8 million children through the end of Federal Fiscal Year 2003. As of 2002, children with family incomes up to 200% of the Federal poverty level were eligible for coverage through SCHIP or Medicaid in 26 states. Twelve states implemented eligibility levels exceeding 235 percent of the Federal poverty level.

Health Insurance Coverage* Among Children Under 18: 2002

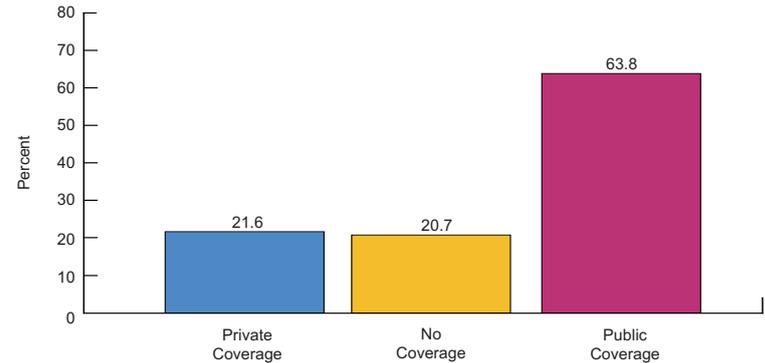
Source (IV.1): U.S. Census Bureau, Current Population Study



* Children may have more than one source of coverage.

Health Insurance Coverage* Among Children Living in Families Below 100% of Poverty Level: 2002

Source (IV.2): Employee Benefit Research Institute, Analysis of Current Population Survey



* Children may have more than one source of coverage.

HEALTH CARE FINANCING: CHILDREN WITH SPECIAL HEALTH CARE NEEDS

According to the 2001 National Survey of Children with Special Health Care Needs (CSHCN), nearly two-thirds (64.7 percent) of CSHCN have private or employment-based

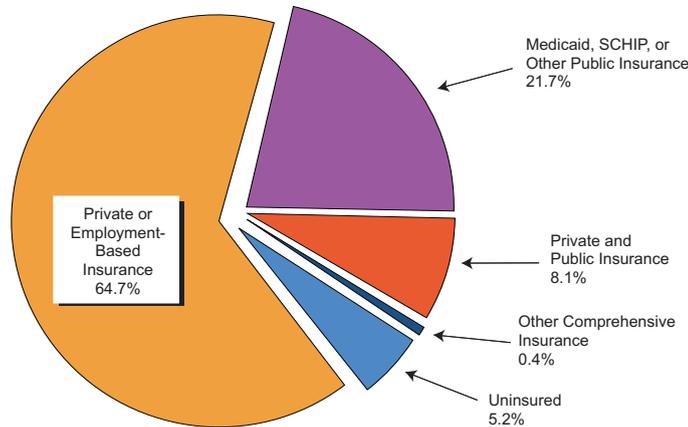
coverage, 21.7 percent had public coverage, 8.1 percent had both, and 5.2 percent reported having no insurance at the time of the interview.

However, many of the families interviewed reported that their children's coverage was not adequate to meet their needs. Twelve percent said that their plan did not usually or always

allow their children to see the providers they needed; 14.5 percent said their benefits did not meet their children's needs; and 28.4 percent reported that the costs not covered by the plan were not reasonable. In all, one-third of parents of CSHCN reported that their coverage did not usually or always meet at least one of these criteria.

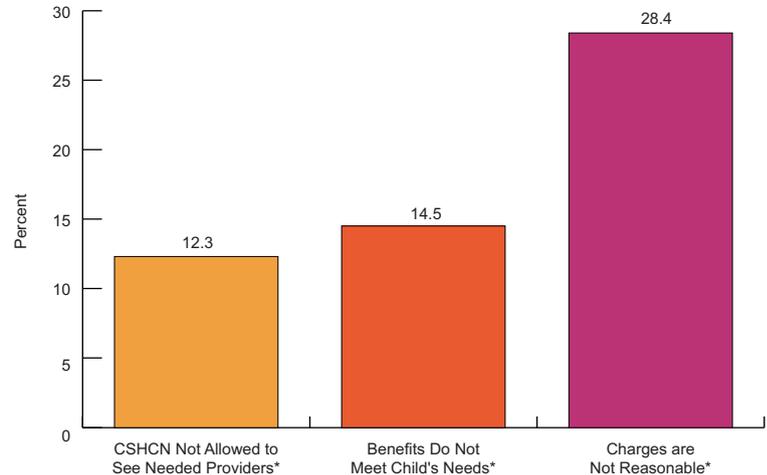
Health Insurance Coverage for Children with Special Health Care Needs: 2001

Source (I.3): Centers for Disease Control and Prevention, National Center for Health Statistics, National Survey of CSHCN



Percent of CSHCN Whose Insurance Does Not Meet Each Criterion for Adequacy

Source (I.3): Centers for Disease Control and Prevention, National Center for Health Statistics, National Survey of CSHCN



* Percent whose insurance does not usually or always meet this criterion.



VACCINATION COVERAGE

The Healthy People 2010 objective for the complete series of routinely recommended childhood vaccinations is immunization of at least 90 percent of 19- to 35-month-olds with the full series of vaccines. Data released from CDC's 2002-2003 National Immunization Survey revealed that 77.9 percent of children ages 19-35 months have received the recommended 4:3:1:3:3 series of vaccines (4 DTap, 3 polio, 1 MCV, 3 Hib, 3 hepatitis B). In the past 5 years, the greatest increases in vaccination rates have occurred with the hepatitis B vaccine and the varicella (chicken pox) vaccine, which was added to the schedule in 1996. Since 1997, the vaccination rate for hepatitis B has increased by almost 9 percent to 91.9 percent in 2002. The varicella vaccination rate rose to 82.5 percent, which represents a more than 2-fold increase since 1997. Despite this progress, approximately 900,000 children under two years of age have not received the recommended immunization series to be fully protected.¹ Among children aged 19-35 months, non-Hispanic Black children have the lowest immunization rates of any racial/ethnic group and they are consistently below the national average for each of the major vaccines.

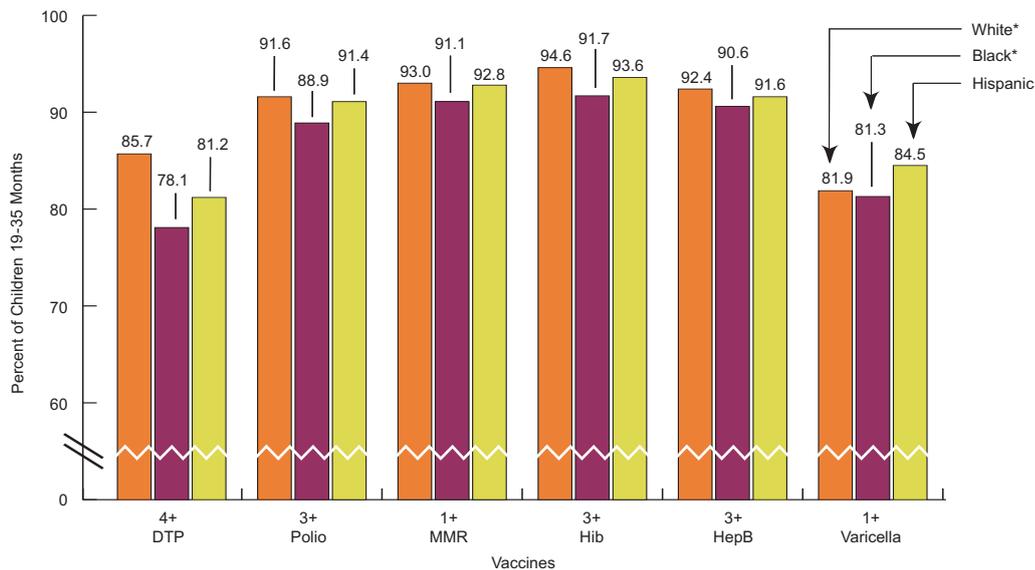
In April 2004, the CDC published an updated immunization schedule (see facing page).

The 2004 schedule continues to encourage the routine use of hepatitis B vaccine for all infants before hospital discharge and also recommends the expansion of routine influenza immunization to include all children 6 to 23 months of age.

¹ American Academy of Pediatrics. (2003). *Vaccination Fact Sheets from the Childhood Immunization Support Program (CISP)*. Elk Grove Village, Illinois: AAP.

Estimated Vaccination Rates Among Children Ages 19-35 Months, by Race/Ethnicity: 2002-2003

Source (IV.3): Centers for Disease Control and Prevention, National Immunization Survey



* Non-Hispanic

Recommended Childhood Immunization Schedule, United States, 2004

Source (IV.4): Centers for Disease Control and Prevention

VACCINE	AGE	Range of recommended ages				Catch-up vaccination				Preadolescent assessment				
		Birth	1 mo.	2 mos.	4 mos.	6 mos.	12 mos.	15 mos.	18 mos.	24 mos.	4-6 yrs.	11-12 yrs.	13-18 yrs.	
Hepatitis B ¹		Hep B #1	only if mother HBsAg(-)											
			Hep B #2				Hep B #3				Hep B series			
Diphtheria, Tetanus, Pertussis ²			DTaP	DTaP	DTaP			DTaP			DTaP	Td	Td	
<i>H. influenzae</i> type b ³			Hib	Hib	Hib	Hib								
Inactivated Poliovirus Measles, Mumps, Rubella ⁴			IPV	IPV	IPV						IPV	MMR #2		
						MMR#1								
Varicella ⁵						Varicella					Varicella			
Pneumococcal ⁶			PCV	PCV	PCV	PCV					PCV	PPV		
Influenza ⁷						Influenza (yearly)					Influenza (yearly)			
Hepatitis A ⁸		<i>Vaccines below this line are for selected populations</i>									Hepatitis A series			

This schedule indicates the recommended ages for routine administration of currently licensed childhood vaccines, as of April 1, 2004, for children through age 18 years. Any dose not given at the recommended age should be given at any subsequent visit when indicated and feasible. Graphic Indicates age groups that warrant special effort to administer those vaccines not previously given. Additional vaccines may be licensed and recommended during the year. Licensed combination vaccines may be used whenever any components of the combination are indicated and the vaccine's other components are not contraindicated. Providers should consult the manufacturers' package inserts for detailed recommendations. Clinically significant adverse events that follow vaccination should be reported to the Vaccine Adverse Event Reporting Systems (VAERS). Guidance about how to obtain and complete a VAERS form is available at <http://www.vaers.org> or by telephone, 800-822-7967.

1 Hepatitis B Vaccine (HepB). All infants should receive the first dose of HepB vaccine soon after birth and before hospital discharge; the first dose may also be given by age 2 months if the infant's mother is HBsAg-negative. Only monovalent HepB vaccine can be used for the birth dose. Monovalent or combination vaccine containing HepB may be used to complete the series. Four doses of vaccine may be administered when a birth dose is given. The second dose should be given at least 4 weeks after the first dose, except for combination vaccines, which cannot be administered before age 6 weeks. The third dose should be given at least 16 weeks after the first dose and at least 8 weeks after the second dose. The last dose in the vaccination series (third or fourth dose) should not be administered before age 6 months.

Infants born to HBsAg-positive mothers should receive HepB and 0.5 mL hepatitis B immune globulin (HBIG) within 12 hours of birth at separate sites. The second dose is recommended at age 1-2 months. The last dose in the vaccination series should not be administered before age 6 months. These infants should be tested for HBsAg and anti-HBs at 9-15 months of age.

Infants born to mothers whose HBsAg status is unknown should receive the first dose of the HepB series within 12 hours of birth. Maternal blood should be drawn as soon as possible to determine the mother's HBsAg status; if the HBsAg test is positive, the infant should receive HBIG as soon as possible (no later than age 1 week). The second dose is recommended at age 1-2 months. The last dose in the vaccination series should not be administered before age 6 months.

2 Diphtheria and tetanus toxoids and acellular pertussis vaccine (DTaP). The fourth dose of DTaP may be administered at age 12 months, provided 6 months have elapsed since the third dose and the child is unlikely to return at age 15-18 months. The final dose

in the series should be given at age ≥ 4 years. Tetanus and diphtheria toxoids (Td) is recommended at age 11-12 years if at least 5 years have elapsed since the last dose of tetanus and diphtheria toxoid-containing vaccine. Subsequent routine Td boosters are recommended every 10 years.

3 *Haemophilus influenzae* type b (Hib) conjugate vaccine. Three Hib conjugate vaccines are licensed for infant use. If PRP-OMP (PedvaxHIB® or ComVax® [Merck]) is administered at ages 2 and 4 months, a dose at age 6 months is not required. DTaP/Hib combination products should not be used for primary vaccination in infants at ages 2, 4 or 6 months, but can be used as boosters following any Hib vaccine.

4 Measles, mumps, and rubella vaccine (MMR). The second dose of MMR is recommended routinely at age 4-6 years but may be administered during any visit, provided at least 4 weeks have elapsed since the first dose and that both doses are administered beginning at or after age 12 months. Those who have not previously received the second dose should complete the schedule by the visit at age 11-12 years.

5 Varicella vaccine (VAR). Varicella vaccine is recommended at any visit at or after age 12 months for susceptible children (i.e. those who lack a reliable history of chickenpox). Susceptible persons aged ≥ 13 years should receive two doses, given at least 4 weeks apart.

6 Pneumococcal vaccine. The heptavalent pneumococcal conjugate vaccine (PCV) is recommended for all children age 2-23 months and for certain children aged 24-59 months. Pneumococcal polysaccharide vaccine (PPV) is recommended in addition to PCV for certain high-risk groups. See *MMWR* 2000;49(RR-9):1-35.

7 Hepatitis A vaccine. Hepatitis A vaccine is recommended for children and adolescents in selected states and regions, and for certain high-risk groups; consult your local public health authority and *MMWR* 1999;48(RR-12):1-37. Children and adolescents in these

states, regions, and high-risk groups who have not been immunized against hepatitis A can begin in the hepatitis A vaccination series during any year. The two doses in the series should be administered at least 6 months apart.

8 Influenza vaccine. Influenza vaccine is recommended annually for children age ≥ 6 months with certain risk factors (including but not limited to asthma, cardiac disease, sickle cell disease, HIV, diabetes), health care workers, and other persons (including household members) in close contact with persons in groups at high risk (see *MMWR* 2004;53[RR] [in press]) and can be administered to all others wishing to obtain immunity. In addition, healthy children age 6-23 and close contacts of healthy children aged 0-23 months are recommended to receive influenza vaccine, because children in this age group are at substantially increased risk for influenza-related hospitalizations. For healthy persons aged 5-49 years, the intranasally administered live, attenuated influenza vaccine (LAIV) is an acceptable alternative to the intramuscular trivalent inactivated influenza vaccine (TIV). See *MMWR* 2003;52(RR-13):1-8. Children receiving TIV should be administered a dosage appropriate for their age (0.25 mL if 6-35 months of 0.5 mL if ≥ 3 years). Children aged ≤ 8 years who are receiving influenza vaccine for the first time should receive 2 doses (separated by at least 4 weeks for TIV and at least 6 weeks for LAIV).

For additional information about vaccines, including precautions and contraindications for immunization and vaccine shortages, please visit the National Immunization Program Website at www.cdc.gov/nip or call the National Immunization Hotline at (800) 232-2522 (English) or (800) 232-0233 (Spanish).

Included above the text is the July-December 2004 recommended immunization schedule from *MMWR* 2004;53(16):2.

DENTAL CARE

According to the Surgeon General’s Report on Oral Health, dental caries (tooth decay) is the single most common chronic disease among children in the U.S., and is twice as common among poor children as those with higher family incomes. This is a preventable health problem that can significantly affect children’s health, ability to concentrate in school, and quality of life. With half of children experiencing tooth decay by the age of 8, beginning dental checkups

early in life is essential. Some professional associations recommend that a child have his or her first dental visit by age 1.

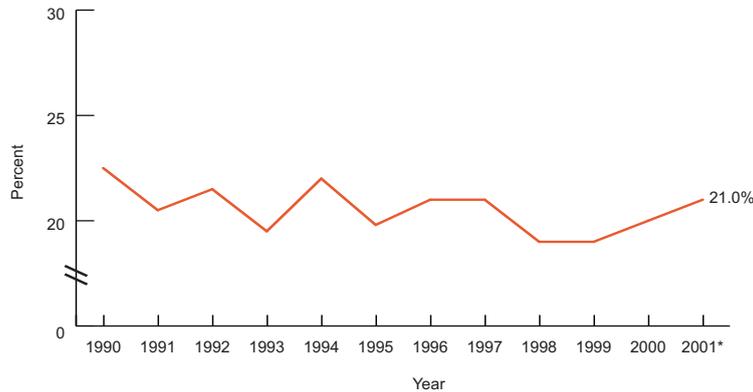
Preventive services such as regular dental health screenings may not always be available to those children who need them most; twice as many children lack dental insurance as lack medical insurance. In Federal Fiscal Year 2001, only 21 percent of children eligible for dental services under the Medicaid Early and Periodic Screening, Diagnosis, and Treatment (EPSDT)

program received a preventive dental service.

Problems related to oral health are more common among particular populations, including Black and Hispanic children, as well as children from low-income families. Analysis of the 2002 National Health Interview Survey found that 76 percent of children with family incomes at or above 200 percent of the Federal Poverty Level saw a dentist in the past year, compared to 62 percent of low-income children.

Children Receiving an EPSDT Preventive Dental Service: 1990-2001

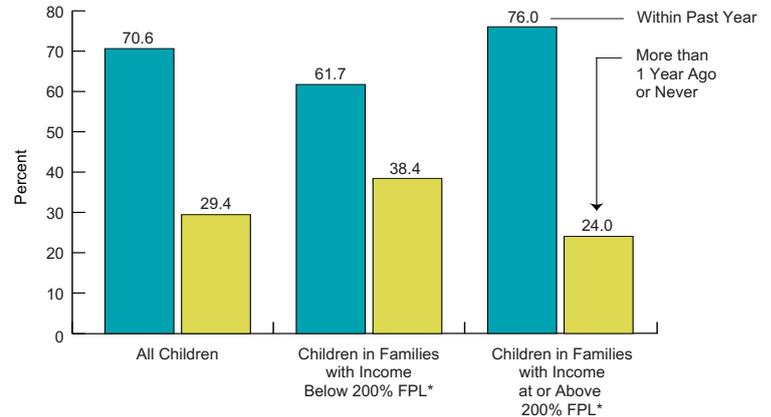
Source (IV.5): Center for Medicare and Medicaid Services



* Includes data from 47 states.

Children Receiving Dental Care in the Past 12 Months, by Income: 2002

Source (IV.5): Centers for Disease Control and Prevention, National Center for Health Statistics, National Health Interview Survey



* Federal Poverty Level



PHYSICIAN VISITS

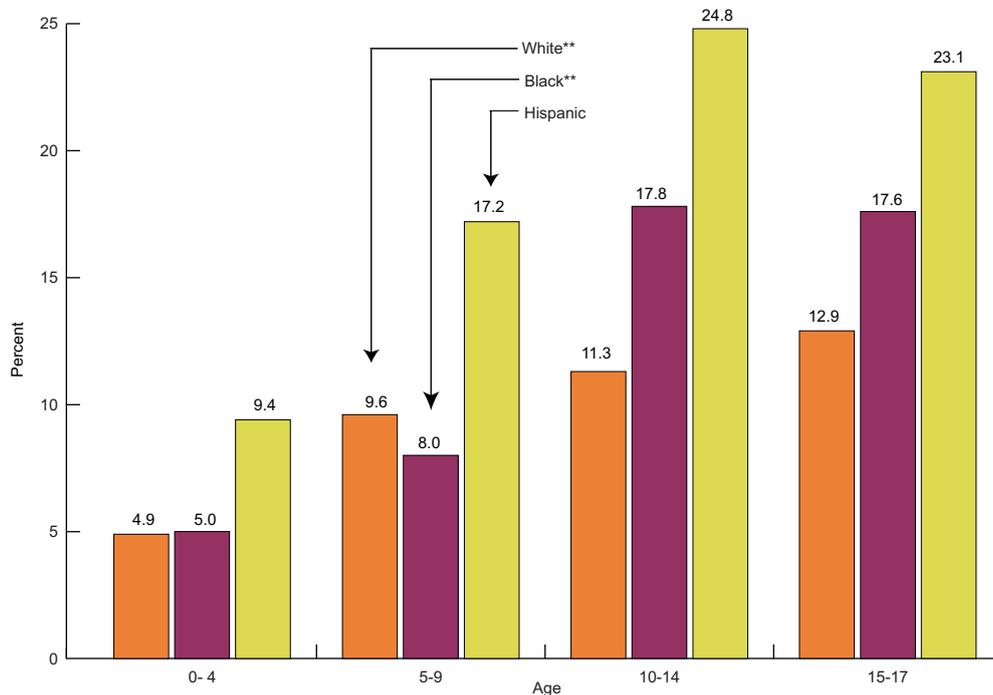
Based on data from the 2002 National Health Interview Survey, approximately 11.4 percent of children under the age of 18 had not seen a physician or other health care professional in the prior year. Older children were more likely than younger children to go without a physician visit. Nearly 16 percent of children ages 15-17 had not had a physician visit in the prior year, compared to only 5.9 percent of children under 5.

Across all age groups, Hispanic children were the least likely to have seen a physician in the prior year, compared to non-Hispanic White and non-Hispanic Black children. At every age group, Hispanic children were at least 50 percent more likely than non-Hispanic White children to have had no physician visits.

The American Academy of Pediatrics recommends that children have eight health care visits in their first year, three in their second year, and one a year, generally, from middle childhood through adolescence.

Children Reported Not to Have Seen a Physician or Other Health Professional in the Past 12 Months, by Age and Race/Ethnicity: 2002*

Source (IV.5): Centers for Disease Control and Prevention, National Center for Health Statistics, National Health Interview Survey



* Percent answering "zero" to the question: "During the past 12 months, how many times has [the child] seen a doctor or other health care professional about his or her health at a doctor's office, a clinic, or some other place?"

** Non-Hispanic



PLACE OF PHYSICIAN CONTACT

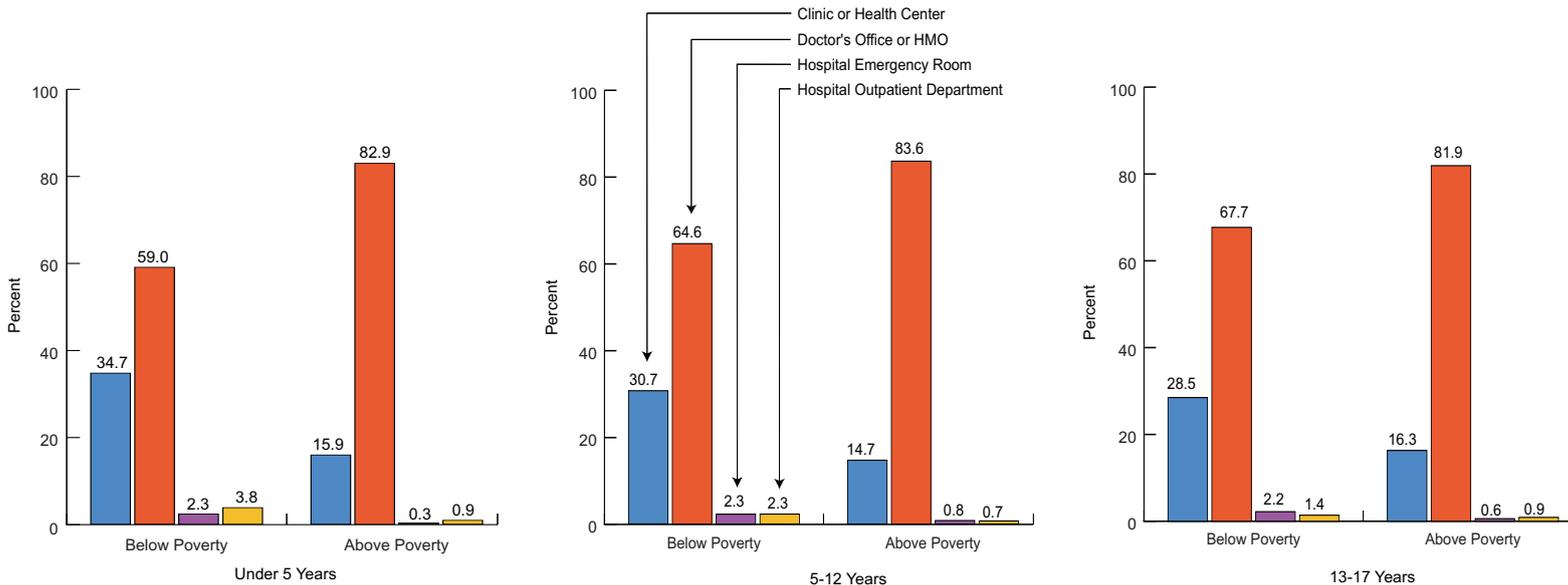
Regardless of age or family income, most children with a usual source of health care received care at either a physician's office or an

HMO in 2002. Across all age groups, 31.4 percent of children living in poverty used a clinic or health center as their usual source of acute care, compared to 15.4 percent of children not living in poverty. Children with family incomes

above poverty were less likely to obtain care at a hospital emergency department than children in poverty.

Place of Physician Contact, by Age and Poverty Status: 2002

Source (IV.5): Centers for Disease Control and Prevention, National Center for Health Statistics, National Health Interview Survey



FAMILY-CENTERED CARE FOR CHILDREN WITH SPECIAL HEALTH CARE NEEDS

The National Survey of Children With Special Health Care Needs measured families' satisfaction with their children's care using five indicators: whether or not the child's provider spends enough time with the family, listens carefully to the parents, makes the parent feel

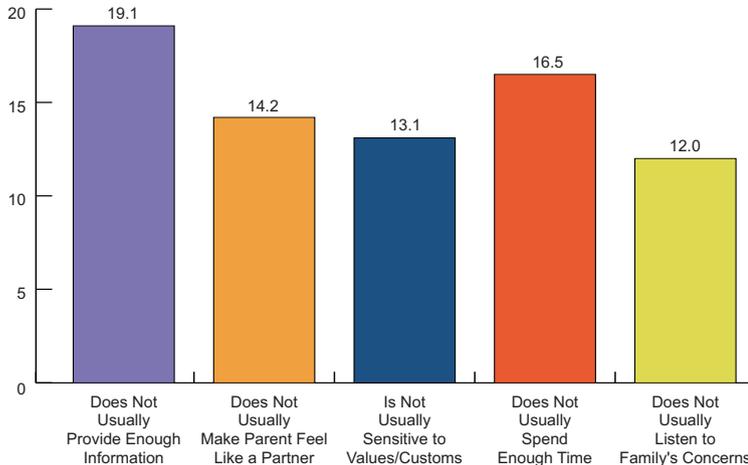
like a partner in the child's care, is sensitive to the family's values and customs, and provides the specific information that the parent needs. Taken together, these questions provide an indication of how family-centered the care that CSHCN receive is.

Approximately one-third of families reported that their children's care did not meet at least one of these five criteria. The one most commonly reported missing is the provision of

information: over 19 percent of CSHCN see providers who do not usually provide their families with the information they need. Over 16 percent said that their children's providers did not spend enough time with the family, and 14 percent said that their children's providers did not usually make them feel like a partner in their children's care.

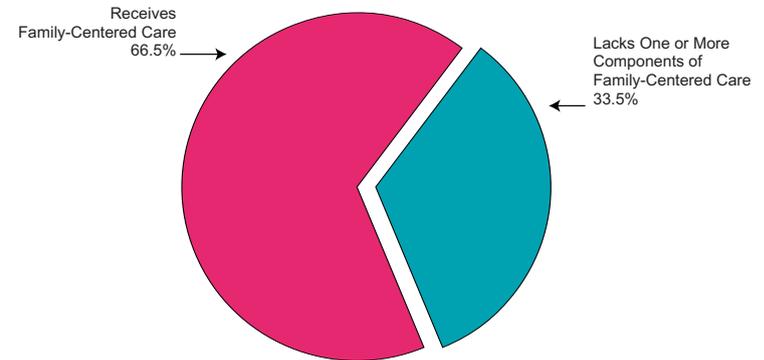
Percent of CSHCN Not Receiving Family-Centered Care

Source (I.3): Centers for Disease Control and Prevention, National Center for Health Statistics, National Survey of CSHCN



Receipt of Family-Centered Care by CSHCN

Source (I.3): Centers for Disease Control and Prevention, National Center for Health Statistics, National Survey of CSHCN

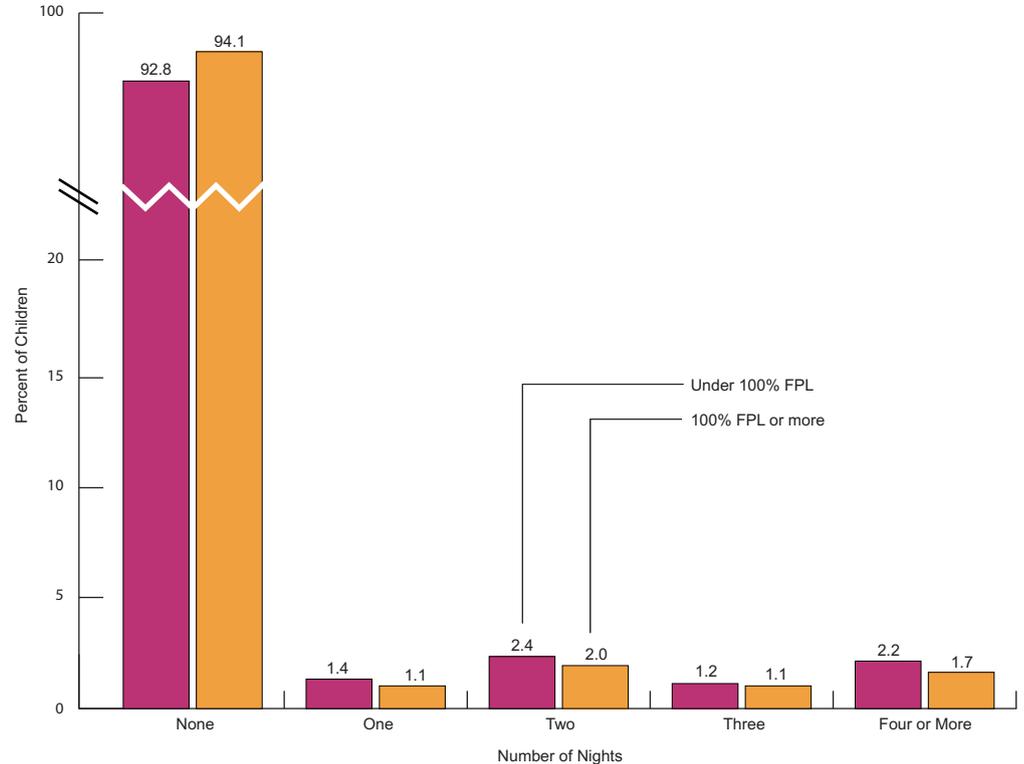


HOSPITAL UTILIZATION

In 2002, the vast majority of children were not admitted to a hospital overnight. However, children in low-income families (those with family incomes below the Federal Poverty Level) were more likely to spend at least one night in the hospital than children in higher-income families: 7.2 percent of low-income children had hospital stays of at least one night, compared to 5.9 percent of children in higher-income families. In addition, hospital stays lasting four nights or longer were more common among children in low-income families than children in higher-income families. The proportion of children staying between 1 and 3 nights was similar in the two income groups.

Number of Nights in the Hospital, by Poverty Level: 2002

Source (IV.5): Centers for Disease Control and Prevention, National Center for Health Statistics, National Health Interview Survey



FPL = Federal Poverty Level



PRENATAL CARE

Timely Prenatal Care

Receiving early and continuous prenatal care throughout pregnancy has been linked to improved pregnancy and health outcomes for mother and child. The proportion of mothers beginning prenatal care in the first trimester improved again to 83.7 percent in 2002.

In the last decade, the rate of women beginning prenatal care in the first trimester has risen steadily (by 10 percent) overall and substantially among racial and ethnic minorities. The proportion of non-Hispanic Black, Hispanic, and American Indian women receiving early prenatal care increased by 20 percent or more between

1990 and 2000. Although gains have occurred across all racial groups, racial disparities persist. On average, 88.6 percent of non-Hispanic White women, compared to 76.7 percent of Hispanic women and 75.2 percent of non-Hispanic Black women, began prenatal care in the first trimester in 2002.

A woman's age is also related to prenatal care initiation. Women younger than 20 years of age were much less likely than older women to begin prenatal care in the first trimester, although rates of early entry into care have increased in this age group.

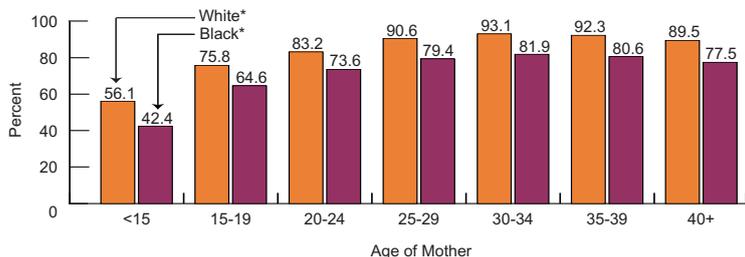
Late or No Prenatal Care

The percentage of pregnant women beginning prenatal care in the third trimester or going without prenatal care decreased slightly to 3.6 percent in 2002. Regardless of age, Black and Hispanic women were over twice as likely as White women to receive late or no prenatal care.

Other risk factors for not using prenatal care included being younger than 20 years old, being unmarried, and having low educational attainment.

Mothers Beginning Prenatal Care in the First Trimester, by Age and Race: 2002

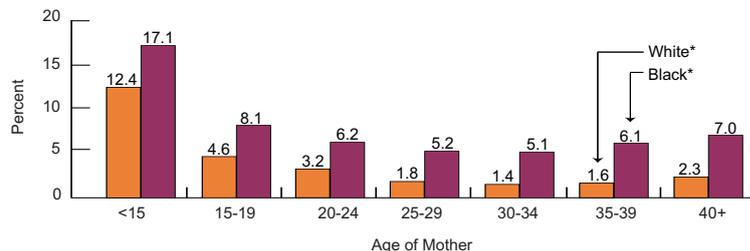
Source (I.8): Centers for Disease Control and Prevention, National Center for Health Statistics, National Vital Statistics System



* Non-Hispanic

Mothers Receiving Late or No Prenatal Care, by Age and Race: 2002

Source (I.8): Centers for Disease Control and Prevention, National Center for Health Statistics, National Vital Statistics System



* Non-Hispanic

