

A Guide for State Legislators

Quality Health Care for Children in SCHIP

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New Directions for Policy

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About Strategic Health Policy International, Inc. (SHPI)

SHPI is a Philadelphia- and Washington-based firm that assists businesses and governments in addressing policy and political issues in health care. SHPI clients include pharmaceutical, biotechnology and medical device companies; health providers; venture firms; trade associations and governments in North America, Europe and Africa. SHPI's purpose is to integrate the 21st century world of policy and politics into R&D, strategic planning, marketing, sales, public affairs, legislation and regulation to achieve the client's mission in providing and shaping healthcare products and services.

About New Directions for Policy (NDP)

NDP is a Washington-based firm that assists business, purchasers and providers of health care, and government through policy research and analysis, strategic planning, and program evaluation. NDP's purposes are to promote more effective operation of the health care system, and to aid the development of sound public policy on health care and welfare reform issues. NDP analyzes the forces driving health care spending, designs innovative strategies to improve financing and delivery systems, and evaluates major reform proposals. NDP also develops new policies to reduce unemployment and improve the social welfare system.

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What the Experts Are Saying About Health Care & Quality for Children

“All children should have high quality health care available to them, whatever their economic status and wherever they live in this country.”

– *Richard B. Johnston, Jr., M.D., Medical Director, March of Dimes Birth Defects Foundation. Former President, American Pediatric Society.*

“The provision of financially accessible, quality health care for all children must be a top priority for our nation.”

– *Joseph Zanga, M.D., President, American Academy of Pediatrics*

“We must begin the next millenium with high quality health care available to all of America’s children.”

– *George Dover, M.D., Professor and Chair of Pediatrics, Johns Hopkins University School of Medicine. Pediatrician-in-Chief, The Johns Hopkins Children’s Center.*

Executive Summary & Recommendations

Overview and Purpose of this Guide

This is a guide to measuring the quality of health care delivered to children newly enrolled in the State Children's Health Insurance program (SCHIP) enacted by Congress in 1997. It was developed to assist state legislators and others begin the process of evaluating the performance of health care plans providing care to children enrolled in SCHIP.

SCHIP represents a significant step in improving access to health care for millions of children. Federal block grants provided to states for ten years are intended to expand insurance coverage for children in lower-income families who do not qualify for Medicaid or private insurance. The flexibility allowed in crafting the programs within the states holds the potential to create new ways of providing care and better health outcomes for children. It can also yield new ways of measuring health plan performance and assuring accountability.

The purpose of this guide is to assist the states in developing more specific measures of quality care for children that can be applied to contracts and other relationships with providers and plans. In May 1998, New Directions for Policy reviewed nineteen state plans submitted to the Health Care Financing Administration (HCFA) and interviewed several state officials to determine how states intended to implement various aspects of the legislation -- including the measurement of quality. This guide was developed by New Directions for Policy and Strategic Health Policy International, Inc to build on and extend that work.

In plans submitted to HCFA, states indicated intentions to measure:

- Good preventive care;
- Good primary care; and
- Patient satisfaction.

States plan to rely on the usual requirements for licensing and certification of health plans, grievance resolutions and provider network adequacy, as well as report cards showing overall health plan performance, to select quality health plans and providers. Some of the most common measures of quality that states intend to use include:

- Immunization, well child care and adolescent well visits;
- Delivery of Early and Periodic Screening, Detection, and Treatment (EPSDT) services;
- Establishment of a "medical home" (i.e., linking children with a primary care physician and a designated provider site that assumes responsibility for the delivery of care);

- Measures showing the extent to which available services are actually used;
- Utilization reviews of the extent, intensity and appropriateness of services;
- Disease management for some conditions, such as asthma and diabetes;
- Outcomes of low birth weight, infant mortality and lead poisoning; and
- Plans to develop quality improvement within provider groups.

Current Status of SCHIP Quality Measurement

Three major efforts are underway to develop better measures of quality for application to SCHIP. The first is a joint project of the National Committee for Quality Assurance (NCQA) and the Foundation for Accountability (FAACT). The guidelines will be structured on the basis of consumer-friendly criteria. They include:

- Getting the basics of good care, such as access, convenience and hassle-free care.
- Staying healthy by avoiding illness, detecting it early and treating it correctly.
- Getting better by using the most appropriate treatments.
- Living with illnesses when they are chronic and disabling.
- Coping with changes when health fails.

Over the next two years, FACCT/NCQA will identify the key measures for assessing quality and selecting providers and plans. These measures will include the structure, process and outcome measures of care.

The second effort grows out of a May 1998 conference sponsored by the American Academy of Pediatrics (AAP). This conference identified quality indicators that could be used to make consistent estimates of quality from state to state. These indicators would be tailored to the specific needs and health conditions of the population to be served under SCHIP.

The third initiative is led by the U.S. Health Care Financing Administration (HCFA). HCFA has formed a Data Group with the states to move in the direction of uniform data collection and reporting.

Recommendations

Our research has led to a number of recommendations for states as they move forward with SCHIP implementation and quality measurement.

1. The SCHIP program needs an early warning system to identify potential trouble spots during the first year of operation. As evaluations are set up, it would be a mistake to design multi-year assessments with no interim results. In conducting research on the impact of SCHIP, we should not “make the perfect the enemy of the good.”
2. There is a need for some preliminary indicators of success or problems in the quality of care delivered to children under SCHIP.

3. States should establish initial baselines against which to measure future progress. These could include everything from the number of uninsured children, to the current rate of preventive services, follow-up care, outcomes, and assessments of children's health status.
4. Once baselines have been developed, the states should establish explicit, reasonable quality improvement goals. They should realize that this is an evolving process and not expect "overnight miracles."
5. In the short-run, we will not have much information on health outcomes, so it will be important to have timely "process" indicators measuring the extent to which effective preventive and primary care services are actually being received.
6. As states begin to contract with health plans, they should not "reinvent the wheel." States need to coordinate their efforts with other purchasers and to plug into the most advanced measurement tools. States should not embark, in isolation, on the development of a whole new set of quality indicators in a way that ignores developments in their own markets. They should also look at what some of the more innovative states are doing to measure and improve the quality of children's health care.
 - A good resource for states is the Quality Measurement Advisory Service (QMAS). QMAS is a nonprofit national consulting and educational service assisting state and local health care coalitions, purchasing groups, and health information organizations in their efforts to measure health care quality for value-based purchasing and other purposes.
7. States should develop quality indicators related to children's health on which they want the plans to report periodically and regularly. This list could include:
 - immunization rates;
 - timely follow-up care for low-birth-weight babies discharged from the hospital;
 - tracking "ambulatory-sensitive hospital admissions" (i.e. those that are avoidable);
 - dental, hearing and vision tests;
 - screening for lead-based paint and appropriate follow-up where it is detected; and
 - management of pediatric asthma and diabetes, and appropriate care for anemia.
8. State agencies and legislative oversight committees should review this type of information annually, and benchmark it to "best practices" based on national and regional standards.

9. Upon observing that a plan is performing below expectations, the state should have a procedure, specified in the contract, for addressing problem areas with corrective action plans.
10. Plans should be given a reasonable amount of time to improve performance.
11. If plans fail to improve after such a period, however, appropriate action should be taken.
12. On the other hand, if plans are doing a good job, they should be fairly paid; arbitrary rate cuts for high-quality plans will turn out to be penny-wise, but pound foolish as these plans refuse to participate in SCHIP.
13. Plans should be held accountable for having an adequate network of physicians and other providers to meet the needs of children, particularly in under-served areas.
14. The states should be willing to make mid-course changes in their program designs based on “danger signals” observed in the first year.
15. States should develop quality initiatives unique to primary care clinicians (PCCs).
16. States should consider piloting the latest patient satisfaction surveys geared to children (e.g., CAHPS).
17. States should require annual plan-level Asthma Reports, and Emergency Services Utilization Reports.
18. Health plans should periodically conduct provider-profiling to assess quality.
19. Since a variety of risk factors affect -- both directly and indirectly -- the overall health status of children, states should take a holistic approach that goes beyond the traditional medical model. In particular, SCHIP implementation should be coordinated with existing social services programs that address issues ranging from improving childhood nutrition, to preventing violence, teen pregnancy and substance abuse.
 - States should build explicit requirements into SCHIP contracts to make sure health plans work with these programs to deliver needed services.
20. States should develop strategies to assist children with special needs (i.e., chronic or disabling medical conditions) that go beyond simply enrolling them into managed care plans. Examples of ways to help these children receive optimal care include:
 - Requiring that health plans perform an initial assessment -- within a specified time -- to identify special needs children;
 - Allowing specialists to serve as PCPs (e.g., assigning a pulmonologist rather than a pediatrician to act as case manager for children with chronic asthma); and
 - Ensuring that health plans have quality assurance and disease state management programs.

21. The impact of welfare reform could pose significant challenges for the SCHIP program. As more families move from welfare to work, many will be eligible for transitional Medicaid -- and many more will become eligible for SCHIP over time. States should make sure that families receive transitional Medicaid when appropriate, and allocate the resources necessary for SCHIP to cover growing numbers of program eligibles.

Using this Guide

This guide is structured to provide information in several key areas:

Child Health Status. We have included a review of child health to focus attention on the ultimate objectives of health care -- live and healthy children. The background in this chapter addresses the major threats to good health. Reviewing similar data at the state level will help state officials set priorities that should be addressed by providers and measured by the states.

Quality Measurement. This is a primer on quality measurement -- it is not as easy as it appears at first glance. This guide will provide legislators with a working knowledge of the organizations that measure quality and the methods they use to do it. Tabs provide greater depth and can be used to prepare similar programs, to prepare for oversight hearings and to engage in discussions with others interested in quality.

Child Health Quality Measurement. This chapter describes the particular approaches to quality that focus on children and are now in use or in development. Tab O is a chart that lists the measures of each of the eleven systems currently used to measure quality in child health care. This chart can be used in quality program development and assessment. We add a word of caution to the use and interpretation of this Tab. Compared to quality measurements for the care of adults, children have been relatively neglected in the quality measurement business. Only recently have any more than a few -- in particular the American Academy of Pediatrics, the American Medical Association (for adolescent care) and the Bright Futures Project -- addressed the quality care measures for children. As a result, there are not very clear and explicit guidelines for quality measures. As you review Tab O you may see some differences of opinion about when certain measures of childhood growth and development should take place or when certain issues should be raised with parents during the visit. The differences between various measures and definitions are unimportant at this time and we expect that over time the professionals in this field will work out those fine distinctions and achieve consensus on whatever minor differences they have. What is important about what you will see in Tab O is the degree of agreement about certain measures of quality across the groups: that well-child visits are important, that immunizations are key in early life, that addressing the nutritional, social, family and learning challenges of childhood are important parts of healthcare during a child's life.

References. This section contains useful contacts and other information for additional research and follow-up, a list of organizations with SCHIP-related web sites and a summary table detailing the approaches states are taking to quality in SCHIP.

Next Steps for State Legislators

State legislators can become more active in monitoring the quality of care delivered to children enrolled in SCHIP through the following steps:

1. Becoming familiar with the best quality measurement practices.
2. Assuring that the lead SCHIP agency uses these measurement tools to track and evaluate health plan performance.
3. Directing the lead SCHIP agency to file amendments in their state health plans to address quality components and problems.
4. Requiring periodic reports on quality from the agency to the legislature.
5. Assuring that legislators are in a “feedback loop” with the lead SCHIP agency for information on quality and health outcomes under SCHIP.
6. Holding hearings to review progress on improvements in quality of care and access for children.
7. Working with the lead SCHIP agency to develop a set of positive rewards for good quality and outcomes, and corrections when poor quality is discovered.
8. Working with key groups that are trying to establish consistent quality/evaluation measures for monitoring children’s health across the states, including a joint venture by NCQA/FACCT; the American Academy of Pediatrics; and the Data Group set up by HCFA and the states.

Chapter One: Improving Child Health

Quality Health Care and the Status of Children's Health

No examination of quality health care for children would be complete without a look at the status of children's health in the United States. What is the goal of quality health care, after all, if not the improvement of health? What is the status of children's health in the US and what should the nation, as purchasers and regulators of health care, expect health care providers to deliver?

It will be clear to anyone who reads this -- there is a great need to improve children's health in the US. As a developed nation, we lag behind in the care of our youngest citizens. Death of our youngest is still too common. Diseases we can prevent are still a constant and increasing risk. Accidents, injuries and violence occur far too often. The data we present here are the most recent of the national data available on children's health. Each State will have information from State data systems that will be useful in developing target quality measures to improve child health outcomes. That data will be available in:

- Vital statistics registries;
- Newborn screening systems;
- Immunization registries;
- Disease control and reporting systems;
- Medicaid claims filings (or Medicaid reports from managed care plans);
- WIC projects;
- Cancer registries;
- Child welfare reporting;
- Law enforcement reporting; and
- Hospital patient discharge systems.

Status of Children's Health

Children's health has improved substantially since the Victorian Era when parents were advised not to become "too attached" to their children until the age of six. If children lived to the sixth birthday, it was likely that they would survive childhood. Infectious diseases and the lack of medical care in general and emergency care for accidents and injuries specifically,

made life very risky for the most vulnerable of the population -- the very young and the very old.

Childhood Death

Mortality rates have improved substantially since that time, but the picture has not improved enough for the nation to pride itself on the care of the young. American infants *still die* at higher rates than do infants in 23 other developed nations. Although death rates are declining steadily, in 1996 (the most recent year for which data is available) there was still an average of 7.3 deaths for every 1000 live births. Among some groups the rates are higher. The death rates per 1000 live births for

- African American babies is 14.7;
- Native Americans is 12.6;
- Puerto Ricans is 10.4;
- Hawaiians is 9.0;
- Whites is 6.1;
- Cubans is 6.2; and for
- Chinese is 5.1.

These infant deaths principally are the result of three factors:

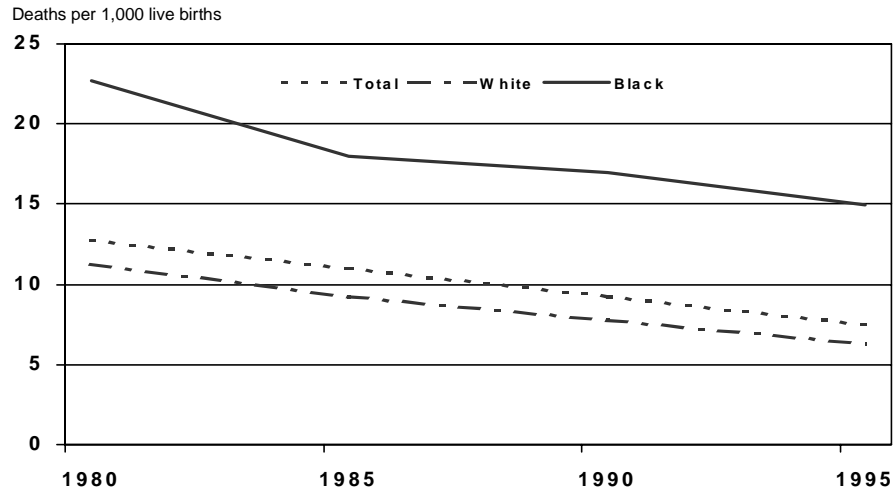
- births to teenage mothers;
- poverty; and
- the lack of prenatal care.

When babies are born to young girls who are poor and/or do not get prenatal care, not only are the babies more likely to die, but when they are born they are very tiny. This is one of the principle reasons for the high costs of caring for very tiny babies in neonatal intensive care units. In 1995, the rate of low-birth weights was 7.3 per 1000 live births, the highest since 1976. In addition to low birth weight, infant deaths are the result of:

- other complications in birth;
- congenital conditions; and
- unintentional injuries (such as automobile accidents).

Infant Mortality

Infant mortality rate by race, selected years 1980-95



1995 rate is preliminary.

Note: Deaths per 1,000 live births in specified group.

Source: Centers for Disease Control and Prevention, National Center for Health Statistics, National Vital Statistics System

Deaths in young children ages 1-4 have declined steadily and by 1996 were one-third lower than in 1980, but boys are still three times as likely to die as girls. Although African American death rates among very young children are declining at twice the rate of deaths among White children, African American children are still twice as likely to die as whites (77 deaths per 1000 vs. 39 per 1000 in 1996). Deaths among these 1-4 year old children principally result from:

- accidental and unintentional injuries;
- congenital conditions;
- cancer; and
- homicide.

Once past the infancy and childhood period, the outlook for young children improves substantially. Children ages 5-14 have the lowest death rates of any age group in the nation. But this is not true for all children. Boys are still twice as likely to die as girls and African American children are twice as likely to die as white children. Deaths among 5-14 year old children are due to:

- accidents and unintentional injuries;
- cancer;
- homicides; and
- suicides.

These deaths among older children are the result of disturbing trends:

- the spread of HIV/AIDS;
- a 200% increase in homicides;
- a 300% increase in suicides;
- a 66% increase in teen violent crime arrest rates; and
- an increase in the availability of firearms.

In 1995, a child under the age of 19 was killed every 100 minutes by a firearm.

Childhood Illness

In addition to deaths among children, a number of diseases cause serious illness. There are several of increasing concern:

- infectious (or contagious) diseases;
- illnesses that come from "common sources" such as E.coli 1057:H7 in hamburger and hepatitis A from restaurants;
- vaccine-preventable illnesses, such as measles and pertussis;
- day care illnesses spread from child to child;
- new diseases, such as Legionnaire's Disease in the 1970's, AIDS in the 1980's, and E.Bola in the 1990's;
- environmental contaminants and hazards, such as lead;
- poor nutrition; and
- fetal alcohol syndrome, from mothers who drink.

There are several key issues in childhood illness and disability:

Day care illness. Nearly 80% of mothers of young children work outside the home. The larger number of children (13 million children under age 6) being cared for in one day care center (vs. the child's home) leads to the spread of infectious diseases and results in \$1.8 billion in costs. Some of the diseases create lasting effects of retardation and hearing loss in infected children.

Injuries. 20% of total visits to emergency rooms are to treat falls from playground equipment and 70% of auto deaths are among unrestrained children. Poor children living in urban areas "dart out" into traffic and are 2-3 times more likely to suffer pedestrian injuries. But even children in other areas are at risk of pedestrian injury deaths. In 1996, 23 children were killed by airbags, but 837 children were killed in pedestrian accidents. The ten states with the highest rates (per 1000 children) of pedestrian accidents were New Mexico, Arizona, Florida, District of Columbia, Nevada, Louisiana, North Carolina, Delaware, South Carolina and Texas. Wider, straighter roads with higher speeds in towns and rural areas contributes to these deaths.

Nutrition. Some children, particularly Asian and Hispanic children, are increasingly overweight, African American children suffer from anemia at higher rates and 10% of young children are growth stunted. Seventeen percent of poor adolescents are overweight compared to nine percent of middle and high-income adolescents.

Infectious diseases. HIV/AIDS accounts for a growing number of childhood illnesses, as do conditions such as parasitic diseases, malaria, tuberculosis, and the transmission of vaccine preventable diseases in the immigrant populations.

Other Factors in Child Health

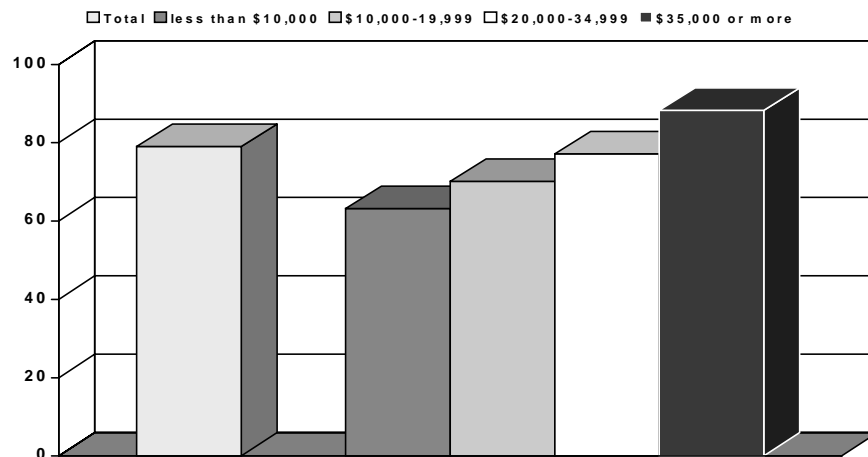
The health of children and the deaths of children are the result of not only the child's own personal physical status, but also family and community factors (Tab A). These include:

- the ability of the family to feed, support and care for the child;
- the ability of the community to provide a safe environment;
- good public health practices such as immunizations and fluoridated water;
- adequate housing and employment;
- safe neighborhoods and schools; and
- health care services.

Each of these affects whether the child will grow well, remain physically active and be able to learn.

Summary Health Measure

Children 0 to 17 years of age in very good or excellent health, by family income, 1994



Source: Centers for Disease Control and Prevention, National Center for Health Statistics, National Health Interview Survey, 1994.

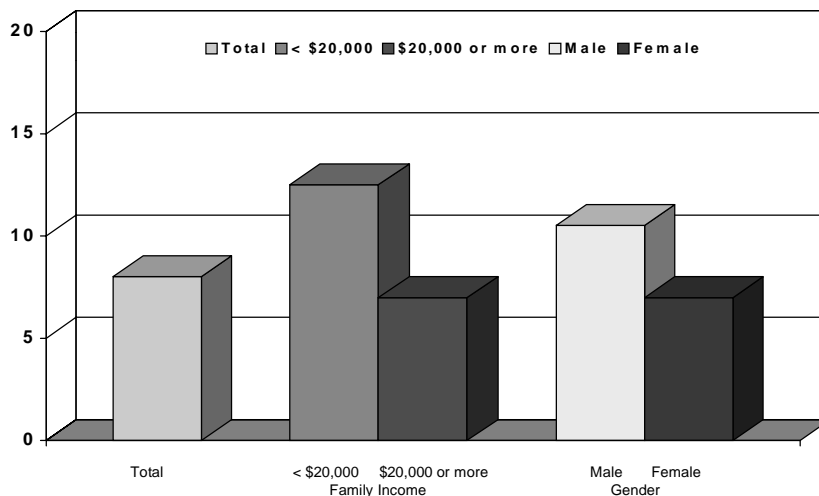
Overall, the health of children is affected by:

- poverty;
- education;
- isolation in rural areas; and
- divorce or single parenting.

The overall health of both girls and boys is likely to be affected by the incomes of the family, with those in lower-income groups more likely to suffer from health conditions that create limitations to their levels of activity in daily life.

Activity Limitation

Percent of children ages 5 to 17 with any limitation in activity resulting from chronic conditions, by family income and gender, 1993-94*



*Estimates are based on data from 1993 and 1994 combined.

Note: Chronic conditions are those conditions that usually have a duration of more than 3 months, e.g. asthma, hearing impairment, diabetes.
Source: Centers for Disease Control and Prevention, National Center for Health Interview Surveys, 1993-94.

Opportunity for SCHIP

Disturbingly, prenatal care rates are down and the rates of insurance coverage and access to care are also down. Many children are medically "homeless" and are increasingly uninsured. One million children were added to the rolls of the uninsured between 1987 and 1993, creating a total of from 7.5 to 10.5 million uninsured children, depending on the analyses from various sources.

SCHIP is an opportunity to reverse the trend, particularly since three-quarters of the states experienced a decline in employer-based health care coverage for dependents in the past year. Not only through access to care, but also through careful planning for quality care, SCHIP has the potential to improve the health status of children in great need.

Chapter Two: Assessing Quality Health Care

Introduction to Quality

Public policy in health care has traditionally focused on three features of a health care system -- access to care, the cost of care and quality of care. In the 1960s and early 1970s, we improved access in this country. We built hospitals with federal and state funds, expanded medical schools to generate a larger pool of medical manpower, established major health insurance programs to assist the elderly, the disabled, and the poor, and invested more heavily in biomedical research.

By the mid-1970s more Americans than ever had access to clinicians and hospitals. With the health care infrastructure in place, improving the quality of care that patients received became the principal focus. The earliest approaches to ensuring quality dealt with licensing of health care professionals and certification of health care facilities. These approaches assumed that if the professionals were well-trained and the facilities well-staffed, good quality would be the result. Comfortable in believing that licensing and certification would keep poorly educated personnel and poorly staffed facilities out of the health care market, policy makers turned their attention to further expanding access to care.

Expanded access, technological innovations, and economic growth contributed to increasing costs. Early strategies to reduce costs focused on both local health planning to limit the supply of facilities and restrictions on utilization. These limits created anecdotal and other evidence that quality was beginning to suffer. Furthermore, a growing body of research evidence pointed to disturbing and inexplicable variations in both provider practice patterns and health outcomes across providers and across communities. There was mounting evidence of inappropriate care. As a result, new organizations emerged to address quality improvements and new methods for measuring quality in health care emerged to support the effort. Drawing on the quality improvement trends in the business sector, health care providers, purchasers and consumers entered the quality assessment arena.

Types of Quality Measures

Those who assess quality in any industry or organization generally consider measurements in one or more of three areas:

Structure Measures. First introduced to health care in the early 1970s, structure measures assess the basic components of a health care system, and determine if they

support the provision of high-quality care. Structure measures include the “bricks and mortar” of facilities, as well as staffing, equipment and supplies (e.g., building capacity; board-certified physicians; appropriate number and mix of physicians, specialists and support staff in the network; availability of necessary equipment; linkages with child and state health agencies; sufficient financial resources).

Process Measures. In the 1980s, it became apparent that more information was needed about the actual delivery of care. This gave rise to process measures, which assess whether exams, treatments or procedures are provided as appropriate and within accepted practice standards. Process measures also include such patient-oriented concerns as time spent waiting for appointments, access to specialists, and administrative processes.

Outcome Measures. Since the mid-1990s, purchasers and providers have been working on new quality assessment tools to track the actual results of care, and to ensure that they fall in line with best practices. Outcome measures are designed to evaluate the performance of providers and plans in achieving positive results (e.g., rates of successful recoveries, lower mortality rates, better health status, improved quality of life, reduction in the number or recurrence of illnesses, etc..

Example: Breast Cancer Screening

Structure Measure: Is the hospital or physician office equipped to perform a mammography (i.e., does it have the machine and a qualified technician)?

Process Measure: Is a protocol in place to ensure target population of women received a mammography exam? What proportion of this group actually receives the test?

Outcome Measure: What is the breast cancer (early) detection and survival rate for this population of women?

Key Groups Assessing Quality and the Measures They Use

There are a number of public, private and joint public-private sector groups assessing quality at the national, regional and local levels. Some are coalitions, others are single purchasers. Some are federal government agencies or agents.

National and Regional Groups Assessing Health Care Quality

The most influential national and regional groups are:

- **The National Committee for Quality Assurance (NCQA)** is a non-profit entity that promotes quality improvement in managed care plans. NCQA developed and continues to refine the Health Plan Employer Data and Information Set (HEDIS) -- the most widely used set of standardized measures to assess health plan performance. NCQA also accredits health care organizations, and licenses independent vendors to audit HEDIS measures (Tab B).

- **The Foundation for Accountability (FACCT)** is a not-for-profit organization that is developing more “outcomes-based” quality measures to track patients’ experience across an entire episode of care. FACCT is also collaborating with NCQA to develop a set of pediatric measures, and has created a report card format with a series of indicators that purchasers can use to assess plan performance (Tab C).
- **The Agency for Health Care Policy and Research (AHCPR)** operates under the aegis of the U.S. Department of Health and Human Services, and is the lead agency supporting improvements in health care quality. AHCPR has developed a comprehensive consumer satisfaction survey (known as “CAHPS”) that complements HEDIS and other clinical assessment tools, includes both “core” and “specialized” questions tailored to vulnerable populations, and enables consumers to compare the performance of health plans and providers. CAHPS has also designed separate survey modules for managed care and fee-for-service plans (Chapter 3 and Tab D).

AHCPR has also developed the Healthcare Cost and Utilization Project (HCUP-3), which covers all health care payers and provides data continuously over time. HCUP-3 is built on administrative data, rather than surveys, and can be used to study subpopulations, such as children and rare events. It will permit state-by-state comparison of children’s health and allow for demographic breakdowns. Quality indicators specific to pediatrics include low birth weight and very low birth weight births, and hospitalization for asthma. HCUP-3 also provides concrete examples of and methods by which other pediatric quality indicators may be developed. Users can adapt this format to the special needs of children in their communities (Tab E).

- **Quality Improvement Organization (QIOs).** Physician-owned quality improvement organizations primarily contract with HCFA to assess structural and procedural processes for the Medicare program. First developed in the 1970s, these groups pioneered many of the methodologies used by independent auditors today (Tab F).
- **The Health Care Financing Administration (HCFA)** has formed a Data Group with the states. This group will recommend steps to move in the direction of uniform data collection and reporting under SCHIP.

Purchaser Groups

Both public and private sector purchasers of health care are measuring quality and incorporating quality into contracting and buying decisions, including through contracting and RFP mechanisms:

- **The Dallas-Fort Worth Business Group on Health (DFWBCH)** is a coalition of area employers that is working with local providers to measure and improve quality by developing best practices, standardized measurement systems,

and uniform value indicators. Its first pilot study is focusing on pregnancy and childbirth (Tab G).

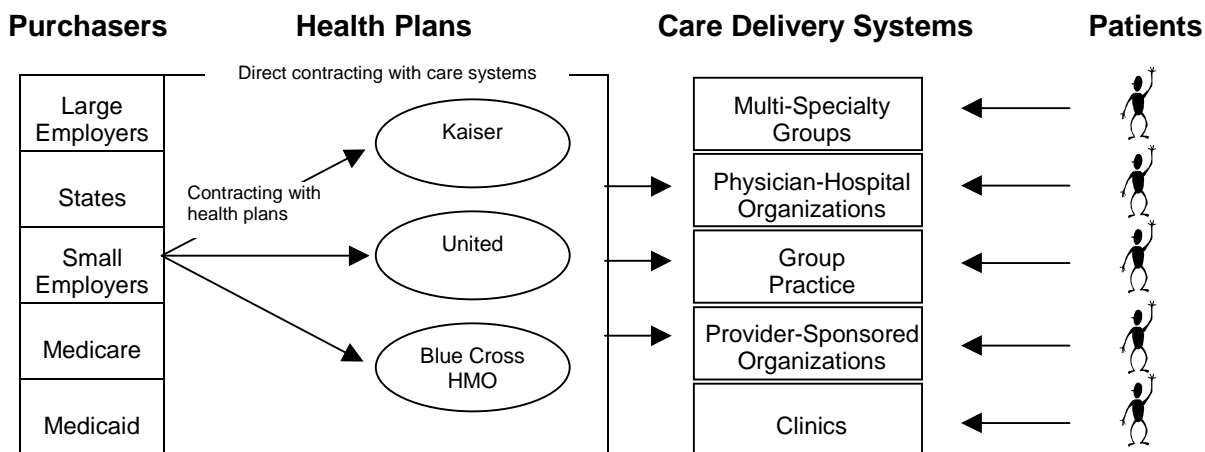
- **The North Central Texas HEDIS Coalition (NCTHC)** is a cooperative effort by health plans and employers to improve the delivery of care. It uses HEDIS indicators to produce local benchmarks and performance measures to compare individual plans. The coalition also establishes quality improvement teams for selected medical conditions (e.g., working with school districts to improve the management of childhood asthma) (Tab H).
- **General Motors** has developed an initiative to encourage the enrollment of salaried employees into high-quality health plans. This includes identifying higher-value and benchmark plans, disseminating report cards on comparative plan performance, and creating financial incentives to steer salaried employees to preferred plans (Tab I).
- **The California Public Employees Retirement System (CalPERS) and the Pacific Business Group on Health (PBGH)** represents 33 major employers, including the organization that purchases health care for state employees. PBGH analyzes plan-specific performance using selected HEDIS indicators. Both entities issue report cards that contain audited results of quality-related data (Tab J).
- **The Missouri Consolidated Health Care Plan (MCHCP)** acts as a purchasing cooperative for state and local government employees. It is collaborating with the Gateway Purchasers for Health (a coalition of St. Louis' 30 largest employers) and has begun publishing report cards using selected, audited HEDIS measures and NCQA satisfaction data to assess health plan performance (Tab K).
- **The Massachusetts Medicaid Program** represents one of the first state efforts to collect HEDIS data and administer patient satisfaction surveys, which are then used to establish benchmarks and score health plans. The program also sets performance standards, does provider profiling, and is currently pilot testing two of the CAHPS pediatric survey instruments (Tab L).
- **The Appleton Wisconsin Business Health Care Alliance, Inc (BHCA)** is a coalition of major employers in Appleton, Wisconsin. In 1993, it introduced a value-based purchasing model in which BHCA reviewed competing health plan proposals, and then signed a long-term contract with the one deemed to offer the greatest value. The initiative has reduced costs and utilization, and has produced quality improvement in such areas as diabetes and asthma management, C-Section rates, and access to preventive care (Tab M).
- **The Buyers Health Care Action Group (BHCAG)** is a coalition of about two dozen employers in Minneapolis-St. Paul, Minnesota. The state of Minnesota is affiliated with BHCAG. This group contracts directly with care delivery

systems, evaluates their performance and publishes the results, and creates incentives for employees to use cost-effective, top-quality care systems (Tab N).

Contracting for Quality

An emerging approach to health care purchasing involves the use of a request for proposals (RFP) leading to contracting with health plans or health care systems. Increasingly, health care purchasers—individual employers, business coalitions, states—are building quality indicators into their RFPs and contracts. Under this approach, the purchaser spends time at the front end determining just what it wants to purchase; developing detailed specifications into an RFP; and taking competing bids from health plans or health care delivery systems. The purchaser then selects one or several plans/care systems and creates incentives for employees/ beneficiaries to use the “winner(s).” Contractors are held accountable for cost and quality. To the degree that quality goals are built into the RFP, the health plan is more easily held accountable for providing the specific type of quality requested. "You get what you measure," is not just a cliché in this process, it is very likely the reality. Purchasers are well-advised and increasingly cognizant of that fact.

Employer Purchasing



The Need for Reliability and Verification

Recent studies by HCFA, NCQA and other organizations underscore the challenges facing the use of HEDIS measures in producing reliable and comparable quality measures. A majority of health plans provide at least some HEDIS data, though most do not undergo independent audits of their results. Indeed, even when databases are audited by outside vendors, different data collection and verification methodologies are used, **which make comparisons across plans very difficult**. Both NCQA and HCFA have taken action to mandate independent review of HEDIS data, and a growing number of purchasers require plans to use the same outside vendor. They have also been pressing for standardized audit

methodologies that would enable consumers to more accurately compare health plan performance.

In response to these concerns, NCQA introduced a standardized audit instrument in 1996 to validate the integrity of HEDIS data collection, calculation, and reporting processes (i.e., the NCQA HEDIS Compliance Audit, described below). It is important to note, however, that the principal goal of the NCQA audit is to verify compliance with HEDIS specifications and production processes. It does *not* establish the accuracy of HEDIS results, though the audit does examine a sample of HEDIS measures to assess the accuracy of source information.

Auditing Quality

The NCQA Compliance Audit determines whether a managed care organization has adequate capabilities to process the medical, member, and provider information needed to produce accurate performance measurements and HEDIS reporting. The Audit addresses functions in the following categories:

- information practices and control procedures;
- sampling methods and procedures;
- data integrity;
- compliance with HEDIS specifications;
- analytic file production; or
- reporting and documentation.

For more detailed information on how audits are done (Tab B).

Risks in Assessing Quality

There are a number of risks health plans encounter when assessing quality. These relate to difficulties in measurement, the costs of the audits and the dangers of premature publication of unfiltered audit information.

Measurement Challenges

Even when health plans audit their HEDIS data, numerous studies indicate the reports may often still be deficient, and contain misleading or inaccurate information. There are often problems with capturing service data, or there are structural and procedural problems in health plans' data management systems that seriously affect the completeness, timeliness and validity of quality measures. Some of the most common problem areas include:

- Outdated or immature management information systems (MIS) that cannot support the collection, analysis and reporting of HEDIS data;
- Multiple or different administrative databases used by health plans;

- Ambiguous measurement specifications (this is according to plans, not NCQA)
- Varying claims management systems for hospitals and physician services, as well as differences among plans in diagnosis and procedure coding;
- Widespread reliance on paper claim forms;
- Inadequate historical data submitted by capitated or salaried providers who lack financial incentives to report accurate and complete encounter data;
- Unidentified services or procedures bundled into uniform billing codes;
- Inaccurate, incomplete or incompatible data submitted by vendors, who contract to provide specific services, such as mental health and substance abuse providers, pharmacies or laboratories;
- Multiple claims or encounter data processing and enrollment systems that occur when health plans merge, enroll large employer groups mid-year, or market new product lines;
- Variants from the technical specifications in terms of calculating continuous enrollment; and
- Inappropriate coding used to identify numerator events.

Costs of Measurement

The costs of a HEDIS audit can range from \$15,000 to \$70,000, depending on the size of the plan and the extent of the audit. A large managed care organization with multiple satellites would probably pay close to \$70,000, but most average-sized commercial plans should be able to get a certified audit for \$25,000 to \$35,000. Since various health payers (including state purchasers) each want audits to assure quality, plans must often duplicate time and expense to collect similar information for similar purposes. In some communities, health plans and payers are beginning to coordinate audit requests, a reasonable solution to reducing overall costs. This will be enhanced when NCQA completes standardization of its HEDIS Compliance Audit program, which is intended to spare health plans from having to perform expensive multiple audits for multiple purchasers.

Premature Publication of Data

Even audited HEDIS data may sometimes produce incomplete or inaccurate results. If a health plan's data collection, analysis, and reporting systems meet technical specifications, it is still possible that a significant amount of information is missing, or that other mitigating factors are not reflected in the rate calculations. Consequently, health plans and providers should be given the opportunity to review, adjust, or put information into the proper context before HEDIS data are published.

In particular, it is essential that clinical measures and outcomes be risk-adjusted prior to publication of any provider-specific data. The most obvious example is the higher

mortality and morbidity rates for providers that specialize in high-risk conditions and procedures (e.g., tertiary care and teaching hospitals often treat the sickest patients, cardiologists known to excel in heart transplant surgery treat a disproportionate share of serious cardiac cases, etc.)

For example, auditors and health plans acknowledge that childhood immunizations are especially difficult to measure, resulting in more “Not Report” designations than most other HEDIS indicators. Experts attribute this to a variety of factors, including:

- Extensive HEDIS specifications and variables;
- Two-year continuous enrollment criteria used to calculate results;
- Immunizations frequently not captured in the plan’s administrative database (e.g., rolled into the code for well-child visits); and
- Children may receive vaccinations at non-affiliated public health clinics, so the health plan has no record of services and cannot retrieve the information through medical record audits.

Another example is cervical cancer screening. Some health plans have an artificially low rate for cervical cancer screenings because the clinical code for pap smears does not show up in a plan’s database when the procedure is routinely administered after childbirth. Chart reviews of women who meet the criteria for pap smears will often change the results, but this approach also has its limits since many OB/GYNs do not document pap smears after childbirth in patients’ medical records.

Chapter Three: Quality Indicators for Children

Quality indicators developed for the health care of children are similar to those developed for adults. As in the case of quality indicators overall,

- some of the indicators for child health quality define the *structure* needed to produce quality care;
- some define the *process* of providing quality care; and
- some define the desired *outcomes* of care.

One quality indicator is currently being developed by the National Committee for Quality Assurance (NCQA) and the Foundation for Accountability (FACCT) specifically for the State Children's Health Insurance (SCHIP) program. We will discuss each of these in this chapter. A summary of each of these quality indicators is contained in Tab O.

Measuring the Structure of Health Care for Children

There are two sets of standards that describe the important *structural* characteristics of health care organizations delivering quality care to children. These structural characteristics can be important. The financial solvency of an organization will determine whether it will be able to continue to provide care to patients for the life of the contract, for example. Whether the organization has the correct number and type of physicians and other providers should be central to the assessment of the organization's capabilities, as well. In a recent report on managed care contracts completed by the Children's Defense Fund (CDF), none of the 23 state contracts with managed care organizations examined by the CDF contained any requirement that pediatricians be available to care for children. In addition, none required coordination with school health programs or social programs. This issue of pediatrician availability for care is an important one. Years ago there were not enough trained pediatricians to care for all the children in the country. Family physicians frequently filled the gap. Today, however, there are adequate numbers of pediatricians in most parts of the country and where possible, children should be treated by pediatricians to assure that they have the highest quality of primary care. In addition, access to specialist pediatricians (such as in cardiology, orthopedics, ophthalmology and neurology) is also important when referrals are needed to address special problems.

State Interagency Collaboration: Assuring Quality Care for Mothers and Children in Medicaid Risk-Based Managed Care, produced in 1995 by the National Academy of State Health Policy (NASHP). This guide describes the opportunity for state regulatory agencies to collaborate to assure that contracting, access, marketing, enrollment and disenrollment, licensing, solvency monitoring, and complaint handling operations result in quality care.

Insurance, Health Licensure and Medicaid agencies as well as Maternal and Child Health, Education, Mental Retardation/Developmental Disability, Mental Health/Substance Abuse, Rural Health and Foster Care agencies are those with interests in assuring that health plans provide quality care. The NASHP quality care document provides suggestions for states regarding the criteria for determining the quality of the provider through contracting and licensing. It does not describe the level of the standard that should be set in order to assure quality. For example, it suggests a review of utilization review programs, governance structure, networking and financial solvency, but stops short of directing what constitutes quality in those areas.

ASHP Guidelines for Providing Pediatric Pharmaceutical Services in Organized Health Care Systems were produced in 1994 by the American Society of Hospital Pharmacists, Inc., (the organization is now known as the American Society of Healthcare Pharmacists). These guidelines describe the structure of a quality program of pharmaceutical care for children as related to orientation and training programs, inpatient and outpatient services, drug information and monitoring, patient and caregiver education, management of medication errors and adverse drug reactions, research and other technical aspects of pharmacy practice. The guidelines are specific to the use of medicines by children, which is particularly important because so few drugs (to date) have been tested and formulated for children. As a result, pharmacists are required to make adjustments in adult medicines to make them safe and effective in children, to monitor drug use and to educate caregivers.

Measuring the Process of Health Care for Children

The majority of quality child health care indicators are measures of the *process* of delivering care. These have been produced by both private and public sector groups, as well as by partnerships between the public and private sectors.

Bright Futures, Guidelines for Health Supervision of Infants, Children and Adolescents, was produced in 1994 by the National Center for Education in Maternal and Child Health with the support of public and private sector funding and working groups. This is the most comprehensive of the quality guidelines. It covers the infancy, early childhood, middle childhood and adolescent ages and describes the issues and implications for the child, the family and the community as care is provided. It lists the screening, examination, guidance and follow-up referral care

that children need at each stage of their lives, provides educational materials for providers and parents and a health record for each of the care visits.

RAND Quality Care Measurement System for Children and Adolescents

is a set of indicators developed for 21 pediatric clinical topics for children from birth-18 years old. These indicators deal with prevention, acute care and chronic care conditions and rely on administrative and medical records information. The intention is to develop a quality tool. Since the tool is still in development, it has little practical use in measuring current contracts, but may be of value in the future.

Early and Periodic Screening Diagnosis and Treatment (EPSDT)

is a comprehensive child health program that assures and coordinates health care resources for Medicaid recipients and their parents or guardians. In this program, children are identified, informed of eligibility, assisted with gaining health care resources, assessed for health care needs and assured quality through a "case management" approach to their health care.

The Health Plan Employer Data Information Set (HEDIS)

was developed by the National Committee for Quality Assurance principally as an evaluation tool for adult health care, but some measures for children are included. Maternity care, immunizations, access to well-child care and annual visits are the current key HEDIS measures. Under consideration for future versions of HEDIS are measures of low birth weight rates, treatment of otitis media (ear infections), appropriate medications for asthmatics and monitoring of diabetics and family visits with children receiving mental health care.

US Preventive Services Task Force

is an independent task force panel of prominent primary care and preventive health specialists, backed up by over 100 outside experts in medicine, nursing, public health, epidemiology and health promotion and education. Housed administratively within the Agency for Health Care Policy and Research of the US Department of Health and Human Services, it produces guidelines for preventive services for children and adults, drawing on the experts in public health and clinical medicine and in collaboration with a similar Task Force in Canada. The guidelines reflect the known aspects of care which prevent disease in the most cost-effective ways, including immunizations, diet and exercise, substance abuse prevention, dental health and community health issues such as water fluoridation, education on skin cancer and environmental lead contamination.

Standards of Medical Care for Patients with Diabetes Mellitus

was produced in 1997 by the American Diabetes Association. The guidelines describe care for the types of diabetes, including the history, physical examination, laboratory evaluations and management plans. Special consideration is given to children and adolescents, in particular related to the social, emotional and psychological factors that interfere with adherence to the diet, exercise and medicine regimens required for careful management of diabetes and its complications.

Clinical Practice Guidelines on Acute Pain Management: Operative or Medical Procedures and Trauma were produced by the Agency for Health Care Policy and Research. The guidelines include an extensive treatment of the acute, chronic and surgical procedures that cause pain in infants, children and adolescents and discuss the appropriate management of pain in children. Included are social, emotional and family issues that should guide the choice of pain-relieving methods. This is an important contribution to quality health care. Pain is acknowledged by health care professionals and patient advocate groups to be under-treated in both adults and children. Particularly since so many pain-relieving methods are pharmaceuticals (which are largely untested in children), the analysis of the literature and expert guidance contained in these guidelines are helpful for parents and clinicians alike.

Clinical Practice Guidelines on Asthma are under development by the Agency for Health Care Policy and Research. The guidelines will specify the cost-effective methods for reducing asthma morbidity among children.

Guidelines for Adolescent Preventive Services were developed by the American Medical Association in 1994. The guidelines specify 24 recommendations organized to address health guidance to teens and their parents on issues related to growth and development, immunizations, injuries, diet and exercise, sexual behavior, hypertension and heart disease, smoking, drugs and alcohol, depression and violence.

Measuring the Outcomes of Health Care for Children

The assessment of the *outcomes* of quality care for children are no more advanced than those for adults. They are still largely in development, with two exceptions -- one that focuses on consumer satisfaction and one that measures public health outcomes for the nation.

Consumer Assessment of Health Plans (CAHPS) was developed by Harvard Medical School, RAND and the Research Triangle Institute under a grant from the Agency for Health Care Policy and Research as a tool for measuring consumer satisfaction with health care. Consumer satisfaction is a relatively new approach to measuring quality. A specific CAHPS for children's care has been developed which addresses how quickly care is received, how well physicians communicate, the courtesy of the office staff, the ease of finding a personal physician or nurse caregiver, processing of billing claims and overall customer service. In addition, it addresses immunization rates, well-child visits, dental care, and care for depression. Several CAHPS surveys have been geared to children. A CAHPS survey for special needs children addresses the needs of children with chronic/ongoing medical conditions or disabilities covering primarily physical conditions, with plans to add pediatric behavioral problems in the future. A CAHPS Adolescent Survey, now being field-tested in Washington State, will cover children 12-18 and will be filled out by the children themselves, rather than the parents.

Healthy People 2000 was developed in 1990 and updated in 1995 and is a program of the US Department of Health and Human Services that creates goals for health practices that will improve the quality of life and health for people of all ages. The indicators are selected from demographic and disease information in the US and special indicators are set for children's health. These indicators include a set of outcome measures -- for example, setting targets for the reduction of infant mortality and low birth weight. Many of the indicators are process measures, however -- for example, setting targets for the percent of women who will receive early prenatal care, adequate diets during pregnancy and who will stop smoking during pregnancy, all of which are known to affect birth weight and infant death.

Quality Indicators for Children with Special Needs

As important as quality care is for children, it is even more critical for children with special needs. Diseases such as asthma, diabetes and other chronic conditions, which are increasingly common among children and which interfere with their growth, development and learning, demand special consideration.

Asthma

Asthma is the most common chronic disease in the United States. It is more prevalent among children than among adults and is 1.5-3 times more common among inner-city and minority youth than among others. The nearly 5 million American children and adolescents who suffer from asthma account for more than 150,000 hospitalizations each year. Of major importance is the fact that these hospital stays last an average of nearly 3.5 days: Days when the children must be away from school. The cost of such time away from school and the impact on the learning process cannot be accurately estimated, but it is a major issue for children with asthma, their families, and our society in general.

The severity of asthma in the urban population of children and adolescents has increased as the prevalence has increased. Thus, the death rate from asthma among all ages has more than doubled in the past decade and a half and the frequency of emergency department visits for asthma has increased. Of interest is the fact that, while persons under 18 years of age are about 30% of those affected with asthma, more than half of the cost of emergency care for asthma is expended on them.

There are a number of risk factors associated with asthma:

- Poverty;
- Low birth weight;
- Infant feeding, with breast-fed babies less likely to have asthma as children; and
- Environmental pollutants with irritants causing and leading to asthmatic attacks. Concentrated auto exhausts/factory emissions are more common in urban settings. Cigarette smoke, including second-hand smoke, is a major irritant, especially in poverty households;

- Allergies, in particular to mites, cat dander, cockroaches, and ragweed, some of which are more prevalent in poverty environments, may predispose children to the most severe attacks; and
- Psychosocial factors may be critical. Tension of urban life creates anxiety and aggression-triggers of attacks, Parental stress may lead to lack of attention to child's impending attack. Teens and pre-teens may use attacks as a form of manipulative behavior.

Challenges in Health Care for Children with Asthma

- Providers must be educated on the appropriate use of medications, especially in the most severe cases.
- Patients must have access to providers, drugs and devices to treat the disease.
- Patients and families must be able to comply with prescribed regimens, and know the warning signs of impending severe attacks.
- Treatment costs must be covered and uninterrupted as patients transfer to new coverage or managed care organizations.
- Families must eliminate allergens and irritants, including smoking, and control the micro-environment in an urban setting, and care must be integrated into schools and after-school programs.

Diabetes

Childhood, or Type 1, diabetes differs from Adult, or Type 2, diabetes in several ways. In Type 1 disease, the cells in the pancreas that produce insulin are destroyed. In Type 2 disease, which usually occurs later in life, other factors are involved, such as insufficient insulin secretion by the cells or a resistance of the body's response to insulin that is produced normally. The increase of Type 2 disease in children is much greater today than ever before.

The goal of early detection and careful treatment of diabetes of either type is to normalize insulin and glucose metabolism for the well-being of the patient and to prevent serious, sometimes fatal, late side effects of the disease. The serious side effects are mainly blindness, hypertension, kidney failure, heart disease, circulatory problems and neurological impairment. It is now known that maintaining normal blood sugar with therapy is of critical importance in the prevention of these conditions.

The treatment of Type 1 diabetes always involves the use of insulin injections. The treatment of Type 2 diabetes may rely upon dietary control, oral medications and/or insulin injections.

Challenges in Health Care for Children with Diabetes

There are a number of problems in the proper management of children with diabetes:

- There are few programs that detect the disease early so that treatment can be initiated.
- Many children have the obesity-related Type 2 diabetes, but the oral medications for Type 2 disease have not been tested and approved for use in children.
- Children and family members must be trained and well-motivated to have regular medical visits to monitor progress, monitor blood glucose regularly at home and use insulin products correctly.
- Children who are not properly managed can miss school days.
- Treatment requires a team approach, with physicians, nurses, dieticians, educators, social workers and psychologists. Particularly in the case of adolescents, when disease can become a battleground for other life and family conflicts, the team approach to management is important.

Assessing the Assessment Measures

We have been able to locate eleven different organizations that have advised providers, payers and consumers about what constitutes quality in health care for children. What are the advantages and disadvantages of each of the measures that they have produced?

Structure Measures	Advantages	Disadvantages
National Academy of State Health Policy Interagency Collaboration to Assure Quality	<ul style="list-style-type: none"> • Builds on existing resources and relationships in states • Comprehensive set of structure measures • Provides good check list tools • Involves agencies other than health care, whose activities nonetheless effect health 	<ul style="list-style-type: none"> • Does not address how high the structure measure of quality should be to assure quality care • Does not address process or outcome measures of quality
American Society of Healthcare Pharmacists Pediatric Pharmaceutical Services	<ul style="list-style-type: none"> • Good structure measures for developing comprehensive quality pharmaceutical care programs 	<ul style="list-style-type: none"> • Does not address outcome or quality measures

Process Measures	Advantages	Disadvantages
Bright Futures	<ul style="list-style-type: none"> • The most comprehensive checklist of age-specific process measures of quality • Recognizes importance of public health measures and family life in good health • Includes role of the parent as a participant with health providers 	<ul style="list-style-type: none"> • Does not address structure or outcome measures
RAND Quality Care Measurement System	<ul style="list-style-type: none"> • Contains preventive, acute and chronic process measures 	<ul style="list-style-type: none"> • Not yet completed, still in development
Early and Periodic Screening Diagnosis and Treatment (EPSDT)	<ul style="list-style-type: none"> • Comprehensive list of process measures for pediatric examinations 	<ul style="list-style-type: none"> • Does not address structure or outcome measures
Health Employer Data Information Set (HEDIS)	<ul style="list-style-type: none"> • Includes some measures that are essential to child health • Most widely-used measure of quality in the private sector 	<ul style="list-style-type: none"> • Limited number of measures for pediatrics • Includes only a few structure or outcome measures
US Preventive Services Task Force	<ul style="list-style-type: none"> • Constructed by an outstanding panel of public health experts • Most comprehensive list of preventive services 	<ul style="list-style-type: none"> • Contains only measures related to prevention services delivered in primary care

Process Measures	Advantages	Disadvantages
Standards of Medical Care for Patients with Diabetes Mellitus	<ul style="list-style-type: none"> • Most comprehensive set of measures for care of patients with Diabetes Mellitus • Deals with issues related to social and psychological complications of the disease 	<ul style="list-style-type: none"> • Contains only measures for a single disease
Clinical Guidelines on Acute Pain Management	<ul style="list-style-type: none"> • Most comprehensive set of measures for care of children with pain. • Recognizes special issues in pediatric pain management 	
Clinical Practice Guidelines on Asthma	<ul style="list-style-type: none"> • Most comprehensive set of measures for care of patients with Asthma 	<ul style="list-style-type: none"> • Contains only measures for a single disease
Guidelines for Adolescent Preventive Medicine	<ul style="list-style-type: none"> • Comprehensive list of process measures for preventive care in adolescence • Recognizes social and psychological issues in care for adolescents 	

Outcome Measures	Advantages	Disadvantages
Consumer Assessment of Health Plans	<ul style="list-style-type: none"> • New approach to measuring quality • Most comprehensive measure of patient and parent satisfaction • Includes both objective and subjective measures • Adolescent measures currently being developed 	
Healthy People 2000	<ul style="list-style-type: none"> • Most comprehensive set of health outcome measures • Includes some structure and process measures of quality • Extensive information systems in place to monitor progress • Desired outcomes updates every ten years 	

New Measures	Advantages	Disadvantages
NCQA/FACCT Quality Measures for SCHIP	<ul style="list-style-type: none"> • Will coordinate measures from two major sources to produce a single, comprehensive set of measures • Will address specific needs of children in SCHIP • Being developed by coalition of providers and experts 	<ul style="list-style-type: none"> • Still in development, completion anticipated in two years • Interim quality measures needed immediately to monitor care

Children with Chronic Diseases and Disabilities

Children with special needs face challenges and barriers at every turn. It is difficult to generalize because each of these children's needs is individual, but there are common barriers and issues that require solutions beyond what most health care plans can offer:

- There are few generalist physicians and pediatric sub-specialists trained to deal with the variety of problems these children face, and those who are involved face the challenges of mobilizing interdisciplinary teams to manage the needs of the child.
- Few plans cover "pre-existing conditions" and "lifetime caps" for the cost of care are often exceeded.
- "Medically Necessary" care is frequently disputed by carriers and plans.
- Physicians are rarely reimbursed adequately for the extra requirements of care for special needs children.
- At-home care is becoming increasingly common, complex, expensive and unreimbursed.
- Family life and siblings suffer from the family's need to attend to the special needs child.
- Schools are unprepared to meet the nursing and other special support service requirements.
- Communities sometimes do not provide for summer camps, day care, transportation, ramps, grab bars, and the electrical circuits for ventilators that improve access and mobility.

SCHIP Quality Indicators in Development

The Foundation for Accountability (FACCT) in cooperation with the National Committee for Quality Assurance (NCQA) and a number of other public and private sector groups is currently developing a set of quality guidelines for the SCHIP program. The guidelines will be structured on the basis of consumer-friendly criteria. Tab C contains a detailed description of this initiative.

Recruiting Top-Quality Health Plans for SCHIP

The early emphasis in the SCHIP program has been on how children will be recruited into health plans. While this is very important, it takes for granted that good health plans will be recruited—and retained—to serve them. There is mounting evidence, however, that a number of the leading health plans are reconsidering their participation in public programs and that payments by states deemed wholly inadequate by plans will trigger their non-participation.

- We now have several years of experience under Medicaid with the challenge of recruiting good health plans to serve lower-income populations.
- Enrollment in Medicaid managed care has surged from only one of ten Medicaid enrollees at the beginning of this decade to at least half today. Most of that enrollment has occurred among mothers and young children.
- We are learning that enrollment in an HMO does not assure that the appropriate preventive and primary care services will be delivered in a timely way. HMOs vary widely in their willingness and their ability to serve a low-income population.
- In the past year, a number of the leading HMOs have withdrawn from the Medicaid program in various regions of the country, particularly in large urban areas. This is exacerbating the access problems of low-income families.
- A key reason why HMOs are withdrawing from Medicaid is that states' payment rates, which were very tight even at the outset, have been held down or cut substantially.
- For example, HMOs report that they signed Medicaid contracts in a given state at rates that permitted a small surplus or profit, but that such slim margins turned into substantial losses when the initial payment rates were cut 10 or even 20 percent after one or two years.

In a large number of diseases threatening adults, disease management programs have been developed, principally to improve health outcomes and to reduce costs and create efficiencies through the appropriate use of pharmaceuticals. This is not true of pediatrics, however. The American Academy of Pediatrics (AAP) has developed a few -- in the areas of asthma, simple febrile seizure, gastroenteritis hyperbilirubinemia and otitis media. These programs are fewer in number than those in the adult medicine arena.

Disease management programs in the private practice and managed care sector are very rare in pediatrics. One program, developed by a pharmaceutical company, applies disease management principles to the management of anti-infective costs in managed care. Over 30 million prescriptions are written each year for the treatment of otitis media at a cost of over \$2 billion to treat ear infections in children. In addition to the cost, continued overuse and inappropriate use of antibiotics has resulted in increased resistance and side effects. The program outlines step-by-step the most cost-effective way to treat several key illnesses, including otitis media for physicians selecting antibiotic drugs. Included in this program is a parent's guide to understanding otitis media and assistance to managed care to review national patterns for drug-resistant pathogens which occur in the disease.

- States must also be concerned with the adequacy of primary care physicians, clinics, and allied medical personnel in under-served areas. This is a particular problem in inner-city and rural communities.
- In evaluating a plan's capacity to serve children newly enrolled in SCHIP, states should assess the plan's provider network, with a strong emphasis on primary care. Are "safety net providers" such as certain community health centers included in the plan's network? Are pediatricians who accept government-subsidized patients participating in adequate numbers? Do these providers have "24-hour" coverage? Does the plan provide adequate language translation services to meet the needs of the SCHIP enrollees? States need to seek answers to these questions, and hold plans accountable. By the same token, if the plan does a good job against these criteria, it must be fairly paid for its services.

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Approach to Quality Measurement in State Children's Health Insurance Programs

State	Credentialing and Certification ¹		Comprehensive Evaluation System	External Audit or In-depth Review	Reporting Requirement		Performance Objectives and Standards ²	Continuous Quality Improvement Process ³	Enrollee Satisfaction	
	Plan	Provider			Data Collection or Claims-Based	Periodic or Episodic Reporting			Enrollment Surveys or Monitoring	Grievance/ Complaint Process
<i>AL</i>										
<i>AK</i>										
AZ	X		QARI, HEDIS	X		X	c, d	b, d	X	
<i>AR</i>					X					
CA	X		HEDIS, FACCT	X	X	X	a, c, d	a, d, e	X	
CO	X	X	HEDIS, CAHPS	X		X	a, b, c, d	d, e		X
CT		X	HEDIS	X		X	a, d	d, e	X	
<i>D.C.</i>										
DE										
FL	X	X	State's System	X		X	d	a		
GA	X	X	State's System	X		X	d	a	X	
HA										
<i>ID</i>										
<i>IL</i>										
<i>IN</i>										
<i>IA</i>										
KS	X		State's System	X		X	d	d		X
KY	X		HEDIS, CAHPS	X			c, d	d		X
LA										
ME	X	X	State's System	X		X	c, d		X	
<i>MD</i>										
MA	X	X	State's System, HEDIS	X			a, c	a, b, d	X	
MI			HEDIS, CAHPS	X		X	a, c, d	d	X	X
<i>MN</i>			HEDIS							

FOOTNOTES

¹Comprehensive Evaluation System:

- a) HEDIS
- b) QARI
- c) FACCT
- d) CAHPS
- e) State's own system
- f) Other (specify)

²Performance Objectives and Standards

- a) Access and accessibility
- b) Appropriateness
- c) Adequacy
- d) Child health
- e) Perinatal care
- f) Specified conditions
- g) National standards
- h) To be defined

³Continuous Quality Improvement Process:

- a) Health plan CQI/TQM plan required
- b) State-level CQI/TQM process
- c) Community-level quality oversight/advisory mechanism
- d) Feedback, censure or education mechanism
- e) Consumer report card

Italics denote those states that have expanded Medicaid or merged CHIP with an 1115 waiver.

State	Credentialing and Certification		Comprehensive Evaluation System	External Audit or In-depth Review	Reporting Requirement		Performance Objectives and Standards	Continuous Quality Improvement Process	Enrollee Satisfaction	
	Plan	Provider			Data Collection or Claims-Based	Periodic or Episodic Reporting			Enrollment Surveys or Monitoring	Grievance/ Complaint Process
MS			HEDIS	X			b, c, d		X	
MO	X	X	HEDIS	X		X		d		
MT			HEDIS	X			a, d	d		X
<i>NE</i>										
NV	X		HEDIS	X		X	c, d	b	X	X
NH	X		HEDIS, State's System	X	X	X	d	a	X	
NJ	X		State's System, CAHPS	X		X	a, c, d, e	a, e	X	
<i>NM</i>										
NY	X	X	State's System	X	X	X	c, d, e	a	X	
NC			HEDIS				c, d		X	
<i>ND</i>										
<i>OH</i>				X		X				
<i>OK</i>										
OR	X	X	HEDIS, QARI, FACCT	X		X	c, d		X	
PA	X		HEDIS	X	X	X	a, c, d	a	X	X
RI	X	X	QARI	X			a	c, d	X	X
<i>SC</i>										
<i>SD</i>										
TN		X	State's System	X				a	X	X
TX			HEDIS	X			b			
UT	X	X	HEDIS, CAHPS	X	X	X	a, c, d	b, d	X	X
<i>VT</i>										
VA			QARI			X	d, e		X	X
WA										
<i>WV</i>										
<i>WI</i>							a	a		X
WY										

- FOOTNOTES
- ¹Comprehensive Evaluation System:
- a) HEDIS
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 - d) CAHPS
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Italics denote those states that have expanded Medicaid or merged CHIP with an 1115 waiver.

Source: National Conference of State Legislatures

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<p style="text-align: center;">ISSUES DURING INFANCY (0-12 Months)</p>		
INFANT	FAMILY	COMMUNITY
Prematurity	Dysfunctional parents or other family members (depressed, mentally ill, abusive, disinterested, overly critical, overprotective, incarcerated)	Poverty
Congenital disabilities		Inadequate housing
Feeding problems, food intolerances	Marital problems	Environmental hazards (e.g., lead)
Sleep problems	Domestic violence (verbal, physical or sexual abuse)	Unsafe neighborhood
Sleeping with bottle	Frequently absent parent	Community violence
Baby bottle tooth decay	Rotating "parents" (parents' girlfriends or boyfriends)	Poor opportunities for employment
Fussing, crying, colic, irritability	Inadequate child care arrangements	Lack of affordable, high-quality child care
Infections, illnesses	Family health problems (illness, chronic illness or disability)	Lack of programs for families with special needs (WIC, early intervention)
Constipation, diarrhea	Substance use (alcohol, drugs, tobacco)	Lack of social support
Failure to thrive	Financial insecurity/homelessness	Isolation in a rural community
Iron deficiency anemia	Family transitions (move, births, divorce, remarriage, incarceration, death)	Lack of educational programs and social services for adolescent parents
Chronic illness	Lack of knowledge about infant development	Lack of social, educational, cultural, and recreational opportunities
Developmental delay	Lack of parenting skills or parental self-esteem, especially for adolescent parent	Discrimination and prejudice
	Sleep deprivation	Lack of access to medical/dental services
	Intrusive family members	Inadequate public services (transportation, garbage removal, lighting, repair of public facilities, police and fire protection)
	Lack of social support/help with newborn and siblings	
	Neglect or rejection of child	Inadequate fluoride levels in community drinking water

Green M. (Ed.). 1994. Bright Futures: Guidelines for Health Supervision of Infants, Children, and Adolescents. Arlington, VA: National Center for Education in Maternal and Child Health.

ISSUES DURING EARLY CHILDHOOD (1-5 Years)

CHILD	FAMILY	COMMUNITY
Sleeping concerns (resistance to going to bed, night awakening, sleeping with bottle, nightmares, and night terrors)	Dysfunctional parents or other family members (depressed, mentally ill, abusive, disinterested, overly critical, overprotective, incarcerated)	Poverty
Eating concerns (decreased appetite, "picky" eating, food jags, pica)	Marital problems	Inadequate housing
Behavioral concerns (distractibility, lack of control, demanding or aggressive behavior, biting, hitting, temper tantrums, breath-holding spells, impulsiveness)	Domestic violence (verbal, physical or sexual abuse)	Environmental hazards (e.g., lead)
Emotional concerns (shyness, fears, separation problems and anxiety)	Frequently absent parent	Unsafe neighborhood
Speech or language concerns (speech delay, unintelligibility, dysfluency)	Rotating "parents" (parents' girlfriends or boyfriends)	Community violence
Autism	Inadequate child care arrangements	Poor opportunities for employment
Undersocialization; few or poor peer relationships	Family health problems (illness, chronic illness or disability)	Lack of affordable, high-quality child care and preschool programs
Infections, illnesses	Substance use (alcohol, drugs, tobacco)	Lack of programs for families with special needs (early intervention, Head Start)
Baby bottle tooth decay	Financial insecurity/homelessness	Lack of social support
Lead poisoning	Family transitions (move, births, divorce, remarriage, incarceration, death)	Isolation in a rural community
Iron deficiency anemia	Lack of knowledge about child development	Lack of educational programs and social services for adolescent parents
Chronic illness	Lack of parenting skills, parental self-esteem, or self-efficacy	Lack of social, educational, cultural and recreational opportunities
Developmental delay	Intrusive family members	Discrimination and prejudice
	Social isolation and lack of support	Lack of access to medical/dental services
	Neglect or rejection of child	Inadequate public services (transportation, garbage removal, lighting, repair of public facilities, police and fire protection)
		Inadequate fluoride levels in community drinking water

Green M. (Ed.). 1994. Bright Futures: Guidelines for Health Supervision of Infants, Children, and Adolescents. Arlington, VA: National Center for Education in Maternal and Child Health.

ISSUES DURING MIDDLE CHILDHOOD (5-11 Years)

CHILD	FAMILY	COMMUNITY
School concerns (learning disabilities, underachievement, failure to do homework, frequent school absence or tardiness/ school avoidance, lack of motivation)	Dysfunctional parents or other family members (depressed, mentally ill, abusive, disinterested, overly critical, overprotective, incarcerated)	Poverty
Behavioral concerns (hyperactivity, distractibility, disobedience, temper outbursts, lying, aggression, fighting, stealing, vandalism, fire setting, violence)	Marital problems	Inadequate housing
Peer concerns (inability to get along with other children, shyness, lack of friends)	Domestic violence (verbal, physical or sexual abuse)	Environmental hazards
Emotional concerns (separation problems, depression, anxiety, low self-esteem, threat of suicide)	Frequently absent parent	Unsafe neighborhood
Risk-taking behavior (smoking, sexual activity, use of alcohol, drugs, or tobacco)	Rotating "parents" (parents' girlfriends or boyfriends)	Community violence
Weight and height concerns (short stature, obesity, eating disorders)	Inadequate child care arrangements	Poor opportunities for employment
Failure to exercise	Family health problems (illness, chronic illness or disability)	Low-quality or unsafe schools
Chronic illness	Substance use (alcohol, drugs, tobacco)	Lack of supervised programs before and after school
Somatic complaints	Financial insecurity/homelessness	Lack of programs for families with special needs (i.e., school breakfast and lunch)
Tics	Family transitions (move, births, divorce, remarriage, incarceration, death)	Lack of social support
Enuresis, encopresis	Lack of knowledge about child development	Isolation in a rural community
Developmental delay	Lack of parental self-esteem, or self-efficacy	Lack of social, educational, cultural, and recreational opportunities
	Poor family communication	Discrimination and prejudice
	Social isolation and lack of support	Lack of access to medical/dental services
	Rejection of child	Inadequate public services (transportation, garbage removal, lighting, repair of public facilities, police and fire protection)
		Inadequate fluoride levels in community drinking water

Green M. (Ed.). 1994. Bright Futures: Guidelines for Health Supervision of Infants, Children, and Adolescents. Arlington, VA: National Center for Education in Maternal and Child Health.

ISSUES DURING ADOLESCENCE (11-21 Years)

ADOLESCENT	FAMILY	COMMUNITY
School concerns (poor grades, underachievement, disinterest, truancy)	Dysfunctional parents or other family members (depressed, mentally ill, abusive, disinterested, overly critical, overprotective, incarcerated)	Poverty
Vocational concerns		Inadequate housing
Behavioral concerns (disobedience, aggression, violence, homicide)	Marital problems	Environmental hazards
Social concerns (lack of friends, negative peer influence, withdrawal from family)	Domestic violence (verbal, physical or sexual abuse)	Unsafe neighborhood
Emotional concerns (depression, anxiety, schizophrenia, confusion about sexual orientation, low self-esteem, threat of suicide, suicide)	Frequently absent parent	Community violence
Early sexual activity, inappropriate sexual behavior, pregnancy, sexually transmitted diseases, HIV infection	Rotating "parents" (parents' girlfriends or boyfriends)	Poor opportunities for vocational training and employment
Substance abuse (alcohol, drugs, tobacco, steroids)	Inadequate child care arrangements	Low-quality or unsafe schools
Poor safety behaviors (drunk driving, failure to use seat belts or helmets)	Family health problems (illness, siblings or parents with chronic illness or disability)	Lack of supervised programs before and after school
Medical concerns (acne, myopia, scoliosis, problems with menstruation, hyperlipidemia, hypertension)	Substance use (alcohol, drugs, tobacco)	Lack of programs for families with special needs
Weight and height concerns, poor nutrition, eating disorders (obesity, anorexia, bulimia)	Financial insecurity/homelessness	Isolation in a rural community
Failure to exercise	Family transitions (move, births, divorce, remarriage, incarceration, death)	Lack of social, educational, cultural, and recreational opportunities
Multiple somatic complaints	Lack of knowledge about adolescent development	Discrimination and prejudice
Chronic illness or disability	Lack of parental self-esteem and self-efficacy	Lack of access to medical/dental services
	Poor family communication	Inadequate public services (transportation, garbage removal, lighting, repair of public facilities, police and fire protection)
	Social isolation and lack of support	Inadequate fluoride levels in community drinking water
	Rejection of adolescent	

Green M. (Ed.). 1994. Bright Futures: Guidelines for Health Supervision of Infants, Children, and Adolescents. Arlington, VA: National Center for Education in Maternal and Child Health.

The National Committee for Quality Assurance

The National Committee for Quality Assurance (NCQA) is a non-profit organization, located in Washington DC, that evaluates and publicly reports on the quality of managed care plans. In 1992, NCQA developed the nation's first standardized set of performance measures (called "HEDIS") to help consumers assess the relative value of health plans. The HEDIS instrument is refined each year and NCQA has also established standards and methodologies to support the production of audited, comparable HEDIS data.

In response to public and private purchasers' requests for standardized and objective information about the quality of health plans, NCQA also accredits MCOs based on more than 60 standards that fall into six broad categories:

- Quality Management and Improvement (accounts for 40% of a plan's score);
- Credentialing and Recredentialing (10%);
- Members' Rights and Responsibilities (17.5%);
- Preventive Health Services (10%);
- Utilization Management (17.5%); and
- Medical Records (5%).

NCQA collects HEDIS data and accreditation information in a national database called "Quality Compass," which helps purchasers identify high-value plans. It allows NCQA to generate national and regional averages, and to identify benchmarks for comparative purposes and other analyses.

HEDIS

HEDIS is the Health Plan Employer Data and Information Set. It is a set of integrated performance measures designed to provide purchasers with information to document and compare the quality of managed care plans. The HEDIS instrument has become the "gold standard" of quality measurement throughout the health care industry, and surveys indicate that almost 90 percent of health plans collect and report at least some HEDIS data. HEDIS measures are used by many Fortune 500 companies to make comparative assessments of health plan performance.

HEDIS measures track a range of health plan services and processes. The most recent data set (HEDIS 3.0) is comprised of more than 70 health plan performance measures in the following domains:

- Effectiveness of care;
- Use of services;
- Costs of care;
- Availability and access to services;

- Informed health care choices;
- Health plan stability and descriptive information; and
- Member satisfaction survey (a component of HEDIS, but not considered one of the domains).

Selecting HEDIS Measures

NCQA's Committee on Performance Measures (CPM) is comprised of public health officials, private and public purchasers including Medicaid, Medicare, organized labor and major corporations, consumer representatives, and medical providers. The CPM selects measures for inclusion in HEDIS according to the following criteria:

- Relevance to purchasers
 - whether the measured item is meaningful
 - whether the measured item is important to health
 - whether the measured item is financially important
 - whether the measured item is a cost-effective practice
 - whether what is being measured is controllable
- Whether there is variability in performance
 - potential for improvement
- Scientific soundness -- that is, the measures must be:
 - evidence-based
 - valid, reliable, and accurate
 - comparable
- Feasibility
 - measure must be precisely specified
 - measurement can be done at a reasonable cost
 - confidentiality must be safeguarded
 - measuring must be logistically feasible
 - measurement process must be auditable

Auditing HEDIS Measures

Early experience with HEDIS uncovered wide variations, inconsistencies and problems with information systems that made assessments difficult and compromised the validity of health plan data. To maximize the accuracy and comparability of HEDIS information, NCQA developed strict audit methodologies and standards (i.e., the "HEDIS Compliance Audit") to verify the integrity of HEDIS data collection and reporting processes. It has licensed approximately 15 auditing organizations that must be used in order for plans' HEDIS results to receive the NCQA's "seal of approval."

Health plans can choose between two different types of NCQA-Certified HEDIS Audits:

Partial Audit. A subset of HEDIS measures are selected, and the auditor tracks how the data flow through the plan's information systems, beginning at the site where a service is rendered to where the data is ultimately pulled to determine the HEDIS result. The final report only refers to the specified measures.

Full Audit. A minimum of 15 core-group measures are selected that cover all domains, populations, and products. Conclusions are then extrapolated and applied to the remaining measures. The final report refers to all measures and, thereby, allows for more detailed comparisons among plans.

Regardless of whether a plan chooses a full or partial audit, it must comply with NCQA's two-part audit program, which consists of the following components:

- IS (Information System) Standards: an overall assessment of a plan's underlying information systems capabilities and validity of data used to produce HEDIS measurements (e.g., coding, collecting and processing medical, claims, member, and provider information).
- HD (Health Data) Standards: an evaluation of the plan's ability to comply with HEDIS specifications. Reviews data collection tools and reliability of practices used by health plan personnel performing chart reviews. This phase also assesses compliance with conventional reporting practices and measure-specific standards related to the HEDIS domains (e.g., source codes or computer language used to pull specific measures out of overall database).

HD Standard Audit Options

Within the context of the HD Standard audit component, health plans may choose among two options: the "Administrative/Claims" or the "Hybrid" approach:

- Administrative/Claims Method: The auditor reviews a plan's administrative system, the accuracy of source codes, compliance with HEDIS requirements, and whether its computer programs capture appropriate claims data. The goal is to ensure that information is pulled accurately from claims data for both the denominator (i.e., population or condition under consideration), and the numerator. This method is relatively less costly, complex, and intrusive. Experts have found, however, that the data is often incomplete, especially among capitated provider organizations (e.g., lack of detailed encounter/claims data, no incentives for physicians to fill out paperwork correctly, procedures rolled up into uniform billing codes).
- Hybrid Method: The denominator is calculated by pulling from claims data system, as described above, but the numerator is calculated by using a combination of claims data, and onsite medical chart review. The auditor samples plan's administrative data, derives a series of rates, and health plan staff then visit physicians' offices to

determine whether the medical records support the claims data. Plans are also required to submit copies of the medical records to show that information was abstracted and interpreted correctly. Since the claims method often produces misleading results and, thus, lower performance measures, many plans opt for the hybrid audit because information gained by reviewing medical charts can explain and improve seemingly poor quality identified through the administrative audit. This method provides more reliable information, but it is also more expensive and time-consuming, and physicians find the process intrusive.

Health plans are responsible for calculating the HEDIS data and pulling medical charts, whereas vendors audit the processes used to arrive at performance rates. This includes looking at how plans identify eligible members to create the denominator/population of a particular measure, or how they create the sample of patients for medical record reviews. Auditors also assess record-review training processes and the reliability-testing methods used to produce HEDIS measures.

Since the cost of reviewing *all* patient data would be prohibitive, auditors spot-check a sample of measures and patient records by literally standing at the desk of the person who is creating the numerator and denominator lists. Auditors randomly sample records, review claims and membership information, and compare how this shows up in the HEDIS measures.

For example, a health plan using the hybrid method for immunizations produces a sample that includes members who are eligible for immunizations but do not appear to have received them. The auditor selects a number of charts for patients and has the health plan staff pull up the claims files, check birth dates and last year's claims information to make sure they belong on the medical record review list. Conversely, when the plan identifies people within the sample who have claims for immunizations, the auditor will spot-check a number of these patients, and ask the health plan staff to show evidence in the claims system that support the findings.

Reporting Designations

Auditors assign one of three designations to each measure they review:

- “Report” (R). The plan produced a reportable rate for the measure and followed HEDIS technical specifications. The health plan may use results for marketing and comparisons with other plans.
- “Not Report” (NR). The plan either did not calculate the measure in accordance with technical specifications, chose not to report its findings, or a significant amount of bias went into the measure.
- “Not Applicable” (NA). The plan's population (i.e., denominator) was too small to calculate a valid rate, or the health plan did not offer the benefit.

Who Does It

Health plan staff are responsible for collecting claims and encounter data from management information systems, as well as performing chart reviews. As described previously, the role of an outside auditor is to evaluate whether the health plan's processes and procedures meet NCQA specifications. Since 1997, NCQA has licensed approximately 15 organizations to perform HEDIS audits, and has certified more than 50 selected employees from these firms to conduct NCQA-approved audits as well. The first certified auditors began their work early this year.

How Often It Is Done

Health plans generally collect and assess HEDIS information on an annual basis. The independent vendors also audit plan results annually. There is often a one or two-year lag, however, between the time when the data is collected to time when performance results are made available. This raises valid concerns among providers that the HEDIS reports will not reflect quality improvements made in the previous year, and consumers may select a health plan based on outdated measures.

HEDIS 3.0 Reporting and Testing Set Measures

Effectiveness of Care

- Reporting Set Measures
 - Advising smokers to quit (in Member Satisfaction Survey)
 - Beta blocker treatment after a heart attack
 - The health of seniors
 - Eye exams for people with diabetes
 - Flu shots for older adults
 - Cervical cancer screening
 - Breast cancer screening
 - Childhood immunization status
 - Adolescent immunization status
 - Treating children's ear infections
 - Prenatal care in the first trimester
 - Low birth-weight babies
 - Check ups after delivery
 - Follow-up after hospitalization for mental illness
- Testing Set Measures:
 - Number of people in the plan who smoke
 - Smokers who quit
 - Flu shots for high-risk adults
 - Cholesterol management of patients hospitalized after coronary artery disease

- Aspirin treatment after a heart attack
- Outpatient care of patients hospitalized for heart failure
- Controlling high blood pressure
- Prevention of stroke in people with atrial fibrillation
- Colorectal cancer screening
- Follow-up after an abnormal pap smear
- Follow-up after an abnormal mammogram
- Stage at which breast cancer was detected
- Assessment of how breast cancer therapy affects the patient’s ability to function
- Continuity of care for substance abuse patients
- Substance abuse counseling for adolescents
- Availability of medication management and psychotherapy for patients with schizophrenia
- Patient satisfaction with mental health care
- Family visits for children 12 years of age or younger
- Failure of substance abuse treatment
- Screening for chemical dependency
- Appropriate use of psychotherapeutic medications
- Continuation of depression treatment
- Monitoring diabetes patients
- Chlamydia screening
- Prescription of antibiotics for the prevention of HIV-related pneumonia
- Use of appropriate medications for people with asthma

Access/Availability of Care

- Reporting Set Measures
 - Availability of primary care providers
 - Children’s access to primary care providers
 - Availability of mental health/chemical dependency providers (phased in)
 - Annual dental visit
 - Availability of dentists
 - Adults’ access to preventive/ambulatory health services
 - Initiation of prenatal care (phased in)
 - Availability of obstetrical/prenatal care providers (phased in)
 - Low birth-weight deliveries at facilities for high-risk deliveries and neonates
 - Availability of language interpretation services
- Testing Set Measures
 - Problems with obtaining care

Satisfaction with the Experience of Care

- Reporting Set
 - The member satisfaction survey (numerous measures)
 - Survey descriptive information
- Testing Set
 - Consumer Assessments of Health Plan Study (CAPHS)
 - Disenrollment survey
 - Satisfaction with breast cancer treatment

Health Plan Stability

- Reporting Set
 - Disenrollment
 - Provider turnover
 - Narrative information on rate trends, financial stability, and insolvency protection
 - Indicators of financial stability
 - Years in business/total membership

Use of Services

- Reporting Set
 - Well-child visits in the first 15 months of life (phased in)
 - Well-child visits in the third, fourth, fifth and sixth year of life (phased in)
 - Adolescent well-care visit (phased in)
 - Frequency of selected procedures
 - Inpatient utilization -- non-acute care
 - Inpatient utilization -- general hospitalization/acute care
 - Ambulatory care
 - Cesarean section and vaginal birth after cesarean rate (VBAC-rate)
 - Discharge and average length of stay for females in maternity care
 - Births and average length of stay, newborns
 - Frequency of ongoing prenatal care
 - Mental health utilization -- percentage of members receiving inpatient day/night and ambulatory services
 - Readmission for specified mental health disorders
 - Chemical dependency utilization -- inpatient discharges and average length of stay
 - Chemical dependency utilization -- percentage of members receiving inpatient, day/night care and ambulatory services
 - Mental health utilization -- inpatient discharges and average length of stay

- Readmission for chemical dependency
- Outpatient drug utilization
- Testing Set
 - Use of Behavioral Services

Cost of Care

- Reporting Set
 - High-occurrence/high-cost DRGs
 - Rate trends
 - Testing Set
 - Health plan costs per member per month
 - Informed Health Care Choices
 - Reporting Set
 - Language translation Services
 - New member orientation/education
- Testing Set
 - Counseling women about hormone replacement therapy

Health Plan Descriptive Information

- Reporting Set
- Board certification/residency completion
- Provider compensation
- Physicians under capitation
- Recredentialing
- Pediatric mental health network
- Chemical dependency services
- Arrangement with public health, educational, and social service organizations
- Weeks of pregnancy at time of enrollment
- Family planning services
- Preventive care and health promotion
- Quality assessment and improvement
- Case management
- Utilization management
- Risk management
- Diversity of Medicaid membership
- Unduplicated count of Medicaid members
- Enrollment by payer (member years/months)
- Total enrollment

The Foundation for Accountability

Though HEDIS is by far the most widely used quality assessment tool for managed care plans, there is a growing demand for more comprehensive tools that focus on outcomes as well as process measures, track plan performance across a range of conditions and procedures, and allow for comparison of HMOs and non-HMOs.

While NCQA has responded by developing more outcomes-focused measures for inclusion in HEDIS 1999, FACCT—The Foundation for Accountability—has already spent several years developing new tools designed to meet these broader measurement objectives.

FACCT Consumer Information Framework

FACCT has created a framework that organizes comparative information about quality into five categories based on how consumers think about their health care. The FACCT Consumer Information Framework helps focus and simplify performance measurement and consumer reporting.

The framework has three key components:

- messages
- model
- measures

The framework's messages help people think about quality and the health care system in a new way. The messages are designed to:

- cut through common misunderstandings about quality with the facts;
- educate and motivate consumers to think about quality when making decisions; and
- explain and support the use of comparative information.

The framework's model organizes comparative information about quality performance into five categories based on how consumers think about their care:

- **The Basics.** Delivering the basics of good care—doctor care, rules for getting care, information and service, satisfaction.
- **Staying Healthy.** Screening for problems, immunizations, checkups, help for healthier living.
- **Getting Better.** Helping people recover when they're sick or injured through appropriate treatment and follow-up.
- **Living With Illness.** Appropriate care, education and teamwork, help for daily living.

- **Changing Needs.** Caring for people and their families when needs change dramatically because of disability or terminal illness—with comprehensive services, caregiver support, hospice care.

The framework incorporates relevant measures from a range of sources—including HEDIS, FACCT measurement sets, the CAHPS satisfaction survey and public health databases—to create scores for consumer reporting. FACCT has designed an eight-step process for scaling, standardizing, weighting and combining quality measures to create composite scores for the model’s categories and subcategories. The process can also be used to create condition-specific performance scores.

Consumer-Focused Quality Measures

The two most widespread systems—CAHPS and HEDIS—provide measures that fall primarily in the framework’s first two categories—The Basics and Staying Healthy. FACCT’s priority is to develop new measures to fill gaps in the remaining three categories.

To address gaps in Living With Illness, FACCT has created the first module of FACCT|ONE, a survey tool that gathers information directly from patients about important aspects of their health care. The Living With Illness module gathers information from patients with asthma, coronary artery disease and diabetes. The guiding principle behind the FACCT|ONE approach is to identify and measure health system/provider competencies that are central to the care of people with a variety of conditions. Additional FACCT|ONE modules will address Getting Better and Changing Needs.

Another major measures development focus, the Child and Adolescent Health Measurement Initiative, is a collaborative effort to create comprehensive measures for care of children and adolescents. CAHMI, co-directed by FACCT and NCQA, will generate a range of new tools to measure and report performance in all five categories of the FACCT Consumer Information Framework. The CAHMI tools are being designed for a variety of uses—including health plan comparisons and consumer reporting, state CHIP program evaluation and health system quality improvement.

In addition to these initiatives, FACCT is developing measures for HIV/AIDS and end of life. These new measurement sets will join endorsed sets for adult asthma, alcohol misuse, breast cancer, diabetes, major depressive disorder, health risks, health status of people over 65, health status of people under 65 and consumer satisfaction.

To develop measures, FACCT conducts focus groups and other research to understand the aspects of quality that are important to consumers. FACCT combines these patient expectations with the best available clinical knowledge and scientific research to create measures that hold the health system accountable for high-quality care. FACCT works with health care systems, health plans and medical group practices to field test measures for feasibility, reliability and validity before endorsement by the FACCT board of trustees.

Consumer Reporting

FACCT is helping major corporate and government purchasers organize existing data into the framework, set measurement priorities and undertake data collection and reporting efforts.

To create effective consumer reports, FACCT has developed and tested scoring and grading approaches, report card language and data displays. FACCT worked with the State of Florida to develop its first HMO report card, published in fall 1998. Other data collection and reporting projects are under way with coalitions and state governments in Indiana, Iowa, Michigan, Minnesota and Washington. Most of these projects incorporate data from a variety of sources—HEDIS, CAHPS, FACCT—and feature performance measurement and reporting across multiple plan types—HMO, PPO and fee-for-service.

The FACCT-NCQA Child and Adolescent Health Measurement Initiative

The Child and Adolescent Health Measurement Initiative (CAHMI) is a collaborative effort of the Foundation for Accountability (FACCT) and the National Committee for Quality Assurance (NCQA). The primary objective of the project is to develop a “master set” of quality measures for children’s health care to enable families, purchasers of health care and health care professionals to evaluate and improve the care delivered by physicians, children’s hospitals, health plans and other care providers. The project builds on other independent initiatives targeted to improving children’s health and combines multiple funding sources, including grants to FACCT from The David and Lucille Packard Foundation, The Robert Wood Johnson Foundation, and The Commonwealth Fund, and a grant to NCQA from the federal Agency for Health Care Policy and Research (AHCPR).

Although CAHMI is co-directed by FACCT and NCQA, other major players in the area of children’s health will participate in the project. These include private purchasers, consumer advocates, policy organizations, state and federal government, providers, plans and health systems. Work on CAHMI, which began in March 1998, is expected to last nearly two years. FACCT recently announced that the first field tests of three quality measurement sets (promoting Healthy Development, Adolescent Preventive Care, and Living with Illness, in combination with Pediatric CAHPS), will be implemented in collaboration with health plans around the country in Winter 1999.

There are two primary oversight bodies to monitor the CAHMI project. The Project Steering Committee, comprised of FACCT, NCQA, AHCPR, The Packard Foundation, the Health Care Financing Administration (HCFA), and the American Academy of Pediatrics (AAP), will establish policies, assess the progress of the initiative and approve the recommendations of the other committees and task forces. The Child and Adolescent Health Measurement Advisory Committee, comprising child health clinicians and researchers, consumer representatives, public and private purchasers, providers and plans, will provide additional oversight by making sure the measures and tools that are developed are relevant and based on scientific and clinical evidence.

Three task forces are responsible for the actual development of the child-specific quality measures. The first is The Basics/Staying Healthy Task Force, which will focus on how well providers/plans deliver the basics of good care (such as access, skill, communication, coordination of care and follow-up). It will also focus on preventive care measures. This task force has two committees - Promoting Healthy Development and Adolescent Preventive Care. The Getting Better Task Force will concentrate on how well providers/plans help children recover from acute problems, such as infections and injuries. The Living With Illness/Changing Needs Task Force will focus on how well providers/plans help families cope with chronic illnesses that affect children.

NCQA will coordinate a fourth task force, called the Health Plan Assessment Task Force, which will review and evaluate the measures and recommend specific measures for inclusion in the 1999 Health Plan Employer Data and Information Set (HEDIS). The quality measures for children and consumer information tools created by CAHMI also will be useful in the Medicaid program, SCHIP, Title V programs and other initiatives to improve the health of children.

A variety of products will be developed as a result of the work of CAHMI. These include policy briefs and memos, measurement recommendations and proposals, an overall project report, public education materials, media releases, technical specifications of core measures, quality improvement application of core measures, and community-wide applications of core measures.

The Agency for Health Care Policy and Research

The Agency for Health Care Policy Research (AHCPR) was established in 1989 under the aegis of the U.S. Department of Health and Human Services. It is currently the lead agency charged with supporting research to improve the quality of care, reduce its cost, and broaden access to essential services.

AHCPR's goals are to:

- help consumers make better informed choices;
- determine what works best in clinical practice;
- measure and improve quality of care;
- monitor and evaluate health care delivery;
- improve the cost-effective use of health care resources;
- assist health care policymakers; and
- build and sustain the health services research infrastructure.

AHCPR works to benefit patients and consumers, health care organizations, public and private health plans, purchasers, policymakers, and other researchers. It supports and conducts research and evaluation projects in eight major interrelated health care issues:

- Consumer choice
 - Consumer Assessment of Health Plans (CAHPS)
 - Consumer polls
 - Consumer products
- Clinical Improvement
 - Evidence-based practice centers
 - National guideline database
 - Research and evaluation
- Health Care Cost, Financing, and Access
 - Medical Expenditure Panel Survey (MEPS)
 - HIV Cost and Services Utilization Study (HCSUS)
 - Healthcare Cost and Utilization Project (HCUP-3) (See Tab E)
- Health Information Technology
 - Computerized decision-support systems
- Outcomes and Effectiveness of Health Care
 - Cost effectiveness
 - Appropriateness of different clinical approaches to a specific disease or condition
- Health Care Organization and Delivery
 - Covers the external factors affecting
Health care organizations and delivery systems

Delivery system structures and organization
Organizational behavior within changing institutions and markets

- Quality Measurement and Improvement
 - Computerized Needs-Oriented QUality Measurement Evaluation SysTem (CONQUEST)
 - Quality Measurement Network (QMNET)
- Technology Assessment
 - Evaluates the safety, efficacy, and cost effectiveness of diagnostic and treatment devices, procedures, and other technologies

AHCPR works in partnership with private-sector and public organizations to identify research priorities, design and conduct studies, and implement and disseminate information products. Its partners include:

- The National Committee on Quality Assurance
- Foundation for Accountability
- Joint Commission on the Accreditation of Healthcare Organizations
- The American Medical Association
- The American Association of Health Plans
- The Health Insurance Association of America
- The Washington Business Group on Health

The Consumer Assessment of Health Plans (CAHPS) Project

To address purchaser demands, AHCPR funded a five-year patient survey in 1995 to help consumers determine which health care plans best meet their individual needs. The Consumer Assessment of Health Plans Survey (CAHPS) is a state-of-the-art instrument that goes beyond previous efforts to assess overall satisfaction and, instead, measures and reports consumer satisfaction with specific aspects of care. The CAHPS tool is designed to:

- Focus on information that consumers want when choosing a plan, presented in easily understood formats.
- Address consumers' need for more detailed information by covering specific plan features, such as access to specialists, quality of patient/physician interaction, and the coordination of care.
- Include questions that are targeted to persons with chronic conditions or disabilities, children, and Medicaid and Medicare beneficiaries.
- Provide standardized questionnaires for assessing experience across different populations and care delivery systems.
- Improve the utility, reliability, and comparability of survey results through ongoing research and field testing.

The CAHPS survey aggregates questions into two sets: 1) a *core* set of indicators that includes questions applicable across populations and health care delivery systems, and 2) a *supplemental* set of measures that can be used on an as-needed basis.

Core Set of Survey Topics

- Enrollment/Coverage: Covered by which insurance plan; insurance used for all care; length of coverage.
- Access: Ease of finding doctor; easy to get referral; how often received help; received phone help without long wait; see doctor for illness/injury as soon as wanted; wait more than 30 minutes in doctor's office; doctor spend enough time; and, received necessary treatment/tests.
- Provider relationship: See personal doctor.
- Continuity/Coordination: See someone other than personal doctor; doctor knew medical history.
- Overall rating: Rating of personal doctor; rating of specialist; rating of health care; and rating of health insurance plan.
- Utilization: How often specialist seen; time visited emergency room; times visited doctor's office for care; and, patient in hospital.
- Preventive care: Insurance encouraged preventive health steps.
- Communication/Interaction: Doctor's staff courteous, respectful and helpful; doctor listens carefully and explains things clearly; doctor respects your comments; involved in health care decisions.
- Plan administration: Too many forms to fill out; plan approved/paid without taking much time; customer service without long wait; get all information from customer service; and, customer service helpful.
- Health status: Medical condition for at least three months; seen doctor at least two times for condition; prescription for condition for at least three months; and, rate overall health.
- Demographics: What is your age now; are you male or female; highest grade level completed; Hispanic or Spanish; describe race.
- Verification: Received help completing survey; how did that person help you.

Supplemental Set of Measures:

- Pregnancy care;
- Well-child care;
- Chronic conditions and mental health care;
- Prescription medicine;
- Dental care;

- Communication and use of an interpreter;
- Transportation;
- Claims processing;
- Medicare, and Medicaid enrollment; and
- Cost sharing/coverage by multiple plans/relation to policy holder.

The CAHPS survey kit also contains prepackaged questionnaires to use when conducting surveys about health care for specific cohorts, *such as children in privately insured or Medicaid programs*, or other areas of interest.

Computerized Needs-Oriented Quality Measurement Evaluation System (Conquest)

AHCPR provides funding for the Computerized Needs-Oriented Quality Measurement Evaluation System (CONQUEST) Project, a quality improvement software tool introduced in 1996 to help users identify and evaluate measures related to clinical care. A unique feature of CONQUEST is that it provides consumers with a user-friendly way to search out their own answers about the appropriate type of health care for various medical problems. CONQUEST is comprised of two separate but interlinked databases:

- A database of 53 sets of measures that cover more than 1,200 clinical performance indicators; and
- A second database that contains information on 52 of the most common or costly medical conditions and procedures.

CONQUEST helps users understand the characteristics of individual quality measures, compare them against a common set of factors, and determine which measures best address their needs. The system also summarizes recommendations from AHCPR-supported clinical practice guidelines, and findings from the agency's Patient Outcomes Research Team projects, in which interdisciplinary teams produce medical practice guidelines for various types of medical procedures.

Specific characteristics associated with each quality measure are coded within the system, and users can search based on a clinical condition, age group/cohorts, type of data (e.g., claims, medical record or survey data), level or setting of care (e.g., emergency, hospital, ambulatory or long-term care), analysis considerations (e.g., whether the measure is risk-adjusted), and the extent of reliability and validity of testing completed.

This free publicly accessible data system links condition-specific treatment and service recommendations from guidelines related to measures in the database. Health care providers, for example, can assess their performance on a condition-specific basis by looking for measures related to treatment of such common conditions as diabetes, hypertension, heart attacks, and pregnancy. Health care purchasers can gain access to performance measures specifically developed for external comparisons (e.g., between plans) to evaluate and select plans with the best track records.

Healthcare Cost and Utilization Project (HCUP-3)

AHCPR established a public-private partnership with states and hospital associations to create the Healthcare Cost and Utilization Project (HCUP-3) -- an all-payer, longitudinal database that is built on inpatient administrative data rather than survey samples. It enables users to review patterns and changes of utilization, costs, and access to health services. HCUP-3 can also be used to make state-by-state comparisons, demographic breakdowns, and studies of selected populations and relatively rare events. Some of its key features include:

- The ability to target subpopulations, which will allow SCHIP planners to assess child-related measures and track changes over time;
- The ability to produce regional or state data on the use and cost of hospital services, effectiveness of medical treatment, practice variations, and utilization of services by children or other subpopulations; and
- Quality Indicators (QIs) that can be applied to HCUP-3 or states' own administrative databases to improve the delivery of care. The QI tools are designed to produce uniform measures using standardized data collection methods. Thus far, QI measures have been developed in the following areas:
 - access to care in the community
 - appropriateness of care
 - outcomes of inpatient care
 - cost and utilization of specific inpatient procedures.

Among other things, the quality indicators will help SCHIP planners develop benchmarks, assess the program's impact on children's health status, and enrollees' ability to access and utilize services. QIs specific to pediatrics currently include low birth weight and very low birth weight births, and hospitalization for asthma. HCUP-3 also provides concrete examples of and methods by which other pediatric QIs may be developed. Users can adapt this format to the special needs of children in their communities.

HCUP-3 maintains information on hospital stays from 1988-1996 for all payers and patients in two separate databases, which can then be linked to databases from other sources:

- The National Inpatient Sample (NIS) contains data collected from a 20% sample of hospitals from 19 states. It can be used to produce national, regional and state information on the use and cost of hospital services, medical practice variations, medical treatment effectiveness, utilization of health services by special populations, and the impact of health reform initiatives.

- The State Independent Database (SID) contains additional state-specific discharge information from all community hospitals in 19 participating states, and ambulatory surgery from 9 states. The data are organized into a uniform format to support comparative analyses (e.g., access to care, hospital markets, and local provider variations).

Quality Improvement Organizations (QIOs)

Dating from the mid-1970s, the federal Health Care Financing Administration (HCFA) was interested in independent medical quality review primarily for the Medicare program. Over the years, it has contracted with a series of regional organizations that evolved to perform this function. These organizations formerly called Professional Review Organizations (PROs), are now referred to as Quality Improvement Organizations (QIOs).

QIOs essentially function as federal contractors, though they are usually 501c3 organizations run by physicians in the private sector. In recent years, QIOs have also begun contracting with state Medicaid programs and private insurance carriers. In addition, they are no longer small regional entities; QIOs have now consolidated to become statewide or multi-state organizations.

Professional review organizations were among the first entities to perform quality assessment, and they piloted many of the techniques currently used by NCQA and organizations described in this report. PROs' "real-time" utilization review, for example, has evolved into prior approval for hospitalizations. Moreover, when auditors pull 40 medical charts or deal with data coding issues, they are piggy-backing on methodologies developed by the PROs.

There are several sources for QIO Quality Studies:

- HCFA: uncovers variations in some condition or procedure when reviewing its national data. Contracts with a QIO to study the issue and submit comparable data that becomes the basis for a corrective action plan.
- Regional Issues: potential problem areas identified by local physicians through a review of the most common medical procedures and conditions, or data that indicate possible over- or under-utilization of services.

Dallas-Fort Worth Business Group on Health (DFWBCH)

In January 1995, the DFWBCH introduced its Health Care Value Initiative (HCVI) -- a collaborative effort of purchasers and providers to measure and improve both the quality and cost-effectiveness of health care in the Dallas/Fort Worth area. Some of HCVI's goals are to:

- Identify fair and uniform value indicators;
- Develop a standardized measurement system;
- Encourage continuous quality improvement and cost-effectiveness of care; and
- Reward providers that deliver value.

Through the HCVI project, the group will develop best practices for selected medical conditions that members identify as top concerns (i.e., pregnancy and childbirth, cardiovascular disease, musculoskeletal problems, mental health and substance abuse, and cancer.) The process will involve:

- Measuring quality across an entire episode of care;
- Integrating data from hospitals, physicians' offices, and employees;
- Using this information to improve performance;
- Remeasuring at subsequent intervals to assess improvement; and
- Rewarding such improvement when it occurs.

Pilot Study

The coalition is currently working with providers on a pilot study that focuses on pregnancy and childbirth to develop a standardized measurement system, encourage CQI and cost-effectiveness, and reward providers that deliver the best value. The study has two phases:

- Data measurement to select, measure, and track appropriate, risk-adjusted value indicators across an entire episode of care.
- Performance optimization to improve the delivery of services, establish local standards of practice, and demonstrate value in terms of quality and cost-effectiveness.

Data Measurement Components

The coalition is working with the Texas Medical Foundation and 45 area hospitals to define proper clinical indicators for pregnancy and childbirth, and to collect and analyze quality indicators using existing data sources. Data measurement is comprised of three phases:

- Hospital-based measurements;
- Physician-office-based measurements; and
- Patient satisfaction and functional status measurements.

The study will also use risk-adjusted “value” indicators, which include:

- Maternal, neonatal, and postoperative mortality rates;
- C-section rates (primary, repeat, and vaginal birth after cesarean);
- Postoperative surgical site (infection rate);
- Uterine rupture rate; and
- Unplanned neonatal readmission.

The Texas Medical Foundation, (the PRO for HCFA), will help define proper clinical indicators to collect and analyze the quality data. These indicators also will be combined with the results of a patient satisfaction survey.

Encouraging Data Use

DFWBGH and the provider organizations will employ several different tools to ensure the new study information is actually used:

- Confidential report cards that indicate a provider’s performance relative to its baseline, its peers, and local benchmarks;
- Training workshops to help providers and employee benefit managers correctly interpret and use report card information; and
- Employee education programs and public forums to help consumers become more informed purchasers of care.

Initial baseline data submitted to employers will be blinded, but purchasers will receive subsequent data on a provider-specific basis. It is hoped that employers will pressure health plans to incorporate the practice guidelines, and steer employees to high-value providers.

The North Central Texas HEDIS Coalition (NCTHC)

The NCTHC is a cooperative effort by health plans, employers, and health care consultants to consistently measure and improve the quality of care in the Dallas/Fort Worth area. Its initiatives include publicly reporting verified HEDIS, and establishing clinical health improvement teams.

Reporting HEDIS Data

The coalition uses HEDIS indicators to produce local benchmarks and performance measures that participating health plans can use to develop and share best practices. Its most recent HEDIS Data Verification Project reports plan-specific results for indicators listed by HEDIS category:

- Effectiveness of Care
 - Adolescent immunization status;
 - Advising smokers to quit;
 - Breast cancer screening;
 - Cervical cancer screening;
 - Prenatal care in the first trimester;
 - Check-ups after delivery;
 - Treating children's' ear infections;
 - Beta blocker treatment after heart attack;
 - Eye exams for diabetics;
 - Follow-up after hospitalizations for mental illness.
- Access and Use of Services
 - Adults' access to preventive/ambulatory services;
 - Cesarean section rate;
 - Hysterectomy rate;
 - Acute hospital days/1000;
 - Maternity average length of stay.

The most recent coalition study also included plan-reported data from the HEDIS 3.0 Member Satisfaction Survey. Each health plan selected an outside vendor to administer the survey according to NCQA guidelines.

Clinical Improvement Teams – Focus on Children with Asthma

NCTHC sponsors various clinical teams to study and improve outcomes in childhood immunization, diabetic education, asthma, women's health issues, and cardiovascular

conditions. In 1996, for example, the coalition established a committee to develop quality improvement initiatives in the management of asthma. Since children have the highest incidence of the disease, a survey of the greater Metroplex Independent School Districts (ISDs) was undertaken. The purposes of the survey were to:

- Determine the number of school nurses and other health care professionals available to interface with asthmatic children;
- Determine how schools identify/register children with asthma;
- Assess the school policies concerning student accessibility to medications and the availability of peak flow meters for monitoring;
- Review school smoking rules since cigarette smoke is a major trigger factor; and
- Learn how school nurses are trained, in-serviced, and updated on the management of asthma.

Altogether, 29 ISDs -- representing 855 schools and a total enrollment of nearly 750,000 students -- responded to the survey either by telephone or by filling out a faxed copy. Each ISD was assessed according the criteria above, which will form the basis for future efforts to reduce the negative impact of asthma.

General Motors

General Motors has adopted a two-part strategy to encourage the migration of salaried employees into higher-value health plans: 1) dissemination of report cards that reflect the performance of HMOs relative to national standards and local norms; and 2) the use of a financial incentive program that links the premium contributions of salaried employees to health plan cost and quality information.

Report Cards

First introduced in Fall 1996, the report cards are based on HEDIS results, GM staff and consultants' assessments, site visits, and enrollee survey responses. The report card rates plan performance in eight areas:

- NCQA accreditation (yes or no);
- Designated benchmark HMO (yes or no);
- Operational performance, which reflects GM staff and consultants' evaluations of the plan's internal ability to manage and improve health status and ensure access to care;
- Preventive care, which considers the plan's approach to preventing diseases through screening programs and other wellness initiatives;
- Medical/surgical care, which rates the plan's performance in caring for patients with serious chronic conditions and offering treatment that avoids unnecessary surgical procedures;
- Women's health, which assesses programs related to such issues as breast and cervical cancer screenings, and cesarean-section and hysterectomy rates;
- Access to care, which addresses issues such as appointment waiting time and access to mental health services; and
- Patient satisfaction, which assesses enrollee satisfaction with the HMO's physicians, responsiveness to inquiries, and overall care.

GM also has developed a survey for PPOs and indemnity plans, based on NCQA's member satisfaction survey instrument, and it is working with insurers to create quality indicators similar to those in HEDIS.

Financial Incentive Program

General Motors calculates a composite score by weighting cost and quality performance for each HMO. Those that score the highest are designated as "benchmark" plans, against which contribution levels are calculated. The financial incentive program links salaried employees' monthly premium contribution to the relative performance of HMOs. Employees pay more if they select a lower-quality HMO, and they pay less if they choose a plan whose performance approaches or exceeds the benchmarks for cost and quality. Thus, a relatively high-priced

plan could be inexpensive to an employee if its overall value is superior to that of its competitors. A plan that falls too far below standards may be dropped or have its enrollment frozen.

Impact on Plan Selection

When salaried employees changed plans during the 1998 enrollment period, poor-performing HMOs lost 51 percent of their market share.

After factoring out plans that were dropped or had their enrollment frozen, poor performers lost 16 percent of their market share, average plans gained 10 percent, above-average plans gained about 17 percent, and benchmark plans gained nearly 13 percent.

In some markets, the “average plan” is the only available option because GM dropped a large competing plan that had been poorly rated. If those markets are removed from the equation, then all growth occurred in above-average and benchmark plans, there was no change in average plans, and enrollment in below average and poor plans decreased.

GM believes many more employees would have migrated to benchmark plans, but they are not available in the areas where most of the employees are based.

California Public Employees Retirement System and the Pacific Business Group on Health

The Pacific Business Group on Health (PBGH) is a coalition of 33 major employers that collects and reports consumer satisfaction data. About six years ago, PBGH launched its California Cooperative Healthcare Reporting Initiative (CCHRI), which analyzes and reports health plan performance data. CCHRI collects data on 22 participating health plans that represent 95 percent of commercially enrolled HMO members in the state.

All data related to clinical quality is based on selected HEDIS indicators, which are collected and audited by a single contractor to ensure comparability. In 1994, CCHRI began issuing report cards that contain these data, as well as results from the NCQA Annual Member Health Care Survey.

The California Public Employees Retirement System (CalPERS) purchases health coverage for over one million California public employees, retirees, and their dependents. It is also an active member of PBGH, and is committed to providing employees with plan-specific quality and performance data to help them become more informed consumers of health care.

Report Cards

CalPERS uses CCHRI data as a major source for the plan performance information it reports to employees. In 1995, CalPERS began publishing its own report cards that include HEDIS and patient satisfaction results for each plan it offers in various regions across the state. The most recent report card included results from the following HEDIS measures:

- Childhood immunizations
- Cholesterol screening
- Prenatal care
- Cervical cancer screening
- Breast cancer screening
- Diabetic eye exam

Individual health plans are designated as being above average, average, or below average as compared against all other plans that contract with CalPERS throughout the state.

The goals of the CalPERS initiative are twofold: 1) that employees will use the information to make better choices in plan selection, and 2) that publication of performance comparisons will prompt health plans to improve quality in areas where they did not compare favorably with their competitors.

Performance Reporting

Although CalPERS is a PBGH member, it negotiates its own performance targets with participating health plans. CalPERS contractually requires plans to report on the following performance measures:

- ID card issuance
- EOC booklets
- Telephone response
- Time to respond to written comments
- Percentage of primary care physicians accepting new patients
- Specialist referrals
- Consultations
- Waiting time for appointments

No financial penalty is imposed if plans fails to meet the goal for each measure, but the fact that performance results are published provides a major incentive to ensure they reach established targets. CalPERS has negotiated with one health plan, however, to link compensation of executives to their plan's success in achieving the performance targets.

Missouri Consolidated Health Care Plan (MCHCP)

The Missouri legislature created MCHCP to act as a health care purchasing cooperative for state and local government employees. In 1997, it began collaborating with the Gateway Purchasers for Health -- a coalition of St. Louis' 30 largest corporations -- that was already publishing report cards using HEDIS measures and NCQA satisfaction data to support comparisons among plans.

The two purchasing groups use the same overall program design and outside vendors to collect, audit, and interpret the data; however, each group independently reviews the material, determines which measures will be most useful to their members, and develops their own report cards.

Report Card

The report card organizes information into three categories:

- selected HEDIS measures
- NCQA patient satisfaction data
- and health plan NCQA accreditation status

MCHCP adopted a Consumer Report card format to score plan performance for each measure.

HEDIS Measures Used in Report Card

In 1997, the following HEDIS measures were collected and audited:

- Rates for C-sections and vaginal births after C-section
- Prenatal first trimester care
- Eye exams for diabetics
- Beta blocker treatment after heart attack
- Follow-up after hospitalization for mental illness

MCHCP decided to publish only two HEDIS measures in its report card (i.e., prenatal care and diabetic retinal exam) because it believed these were the most easily understandable indicators of quality health care. In 1998, however, it will report on all five measures, as well as three additional ones:

- Breast cancer screening
- Readmission for selected mental health disorders
- Board certification of physicians
- Patient Satisfaction Survey Measures

An independent vendor administered NCQA's patient satisfaction survey and analyzed the results. MCHCP then determined which questions should be included in its consumer report, and narrowed the 30-plus questionnaire down to seven measures they believed would be the most understandable and broadly useful for its members:

- Overall satisfaction
- Recommend health plan to a friend
- Intend to switch to different health plan
- Thoroughness of treatment
- Delays while awaiting plan approval
- Difficulty in receiving necessary care
- Not receiving referrals to desired specialists

The Massachusetts Medicaid Program

The Massachusetts Medicaid program has been conducting a state-developed member satisfaction survey for several years (which has both child and adult versions). In 1998, however, it is also pilot testing a total of four CAHPS survey instruments:

- Survey of Child Health Care (core set of measures);
- Survey of Child Health Care (core set supplemented with questions targeted to children with chronic conditions or special needs);
- Survey of Adult Health Care (core set of measures); and
- Survey of Adult Health Care (targeted to adults with chronic conditions or special needs).

Samples of 800 enrollees were drawn from the Primary Care Clinician (PCC) plan for each of the four categories. Among other things, study results will provide information about how the CAHPS instruments compare with the state-developed surveys in capturing relevant data for these cohorts.

Beneficiaries can enroll in one of two types of plans: Medicaid managed care organizations (MCOs), which are capitated; or the Primary Care Clinician (PCC) option, which is a state-managed, fee-for-service plan. The Medicaid program collects and reports much of the same data for both plan options, including:

- HEDIS data: Measures are rotated annually (this is fourth year program has collected HEDIS data); results are compared across health plans and against established benchmarks. Some of the measures included in the most recent HEDIS Report (May 1998) are:
 - Well child visits in first 15 months of life;
 - Well child visits in 3rd-6th years of life;
 - Well child visits in the 7th-11th years of life (state-created measure);
 - Children's (12 months through 11 years) access to PCPs;
 - Adolescent well care visits; and
 - Seven maternity measures.
- Encounter data: System currently under development (e.g., checking reliability and validity of data); are focusing on designing minimum data set, and quality indicators report.
- Annual member satisfaction surveys.

There are some differences in program requirements, depending on the type of health plan. The state Medicaid program also has the following requirements for the two types of health plans: collects some quality and performance information that varies according to type of health plan, such as:

- Additional Quality Initiatives Unique to MCOs:

- All HMOs must perform annual quality improvement activities;
- Require four standard goals and four plan-specific goals per year;
- Set performance standards in contracts;
- Score each HMO and rank plan's overall performance; and
- Link incentives to HMO performance.
- Quality Initiatives Unique to PCCs:
 - Piloting CAHPS' Pediatric and Adult surveys;
 - Plan-level Asthma Quarterly Reports, and Emergency Services Utilization Reports; and
 - Provider-profiling conducted every six months to support QI -- use HEDIS measures that track: well child care; asthma admissions; ER utilization; pap smear and mammography screening. Report contains two types of information: PCC performance rates, and member-specific data (to determine if enrollees are receiving appropriate services).

Appleton, Wisconsin Business Health Care Alliance, Inc.

The Appleton, Wisconsin's Business Health Care Alliance, Inc. (BHCA) is an example of a "single winner" approach to contracting. BHCA developed a detailed RFP containing price targets *and quality goals* incorporated into the contracts. The coalition's RFP required plans to have:

- a written quality improvement plan
- NCQA accreditation (achieved or progress toward)
- clinical outcomes studies
- utilization and quality improvement programs in areas such as:
 - asthma
 - diabetes
 - stroke
 - arthritis
 - low back pain
 - depression
 - chemical dependency
 - nutrition
 - c-sections and VBACs
- wellness programs
- prevention
- quality assurance committee
- medical practice guidelines
- centers of excellence

“CHIPs” (cooperatives for health insurance purchasing) are a “multiple-winner” version of the RFP purchasing model that has been adopted for the fully insured, small employer markets in areas such as the front-range of Colorado and Madison, Wisconsin. Having helped to pass 1994 state legislation enabling cooperatives, Denver's Alliance developed an RFP asking health plans to bid on three levels of covered services. The Alliance selected four plans, with re-bidding occurring on an annual basis. Madison's Alliance is now operating a CHIP for insured firms with fewer than 100 employees. Through an RFP process, it is selecting plans based on price, plan options, financial strength, experience, plan-specific performance standards, and other criteria.

Buyers Health Care Action Group

The Buyers Health Care Action Group (BHCAG) in Minneapolis-St. Paul is contracting *directly* with a variety of *provider-based* care systems. Health plans are not excluded but must demonstrate the value they add in a competitive environment.

A unique feature of this model is that primary care physicians must align themselves with just one care system. This facilitates assessments of *provider performance* and forces consumers to select and remain with a system of care, at least for a year, if they want to use a particular primary care physician.

Care systems must submit bids in the form of “claims targets,” representing their expectations of likely costs.

- Claims targets are risk-adjusted to reflect the varying case mixes of different care systems.
- Claims targets place the systems into one of three “price tiers.”
- Each of these tiers requires different employee contributions, so that “high bids” place care systems in a position where consumers must make substantial monthly contributions if they select them. In the lowest tier, consumer contributions are nominal.
- BHCAG will adjust fee schedules up or down to “balance accounts” as utilization comes in under or over target projections.

The BHCAG model is supported by information on quality of care produced by the Institute for Clinical Systems Integration (ICSI). This institute has produced some 50 medical practice guidelines, and it also provides technical assistance to help medical groups implement them. Outcomes studies and annual population health surveys also contribute to quality improvement. Consumers are given profiles on providers through a software system accessible in kiosks located in workplaces and other locations throughout the community.

BHCAG is using report cards to evaluate the performance of care systems. Based on consumer satisfaction surveys, BHCAG is designating the systems as above-average, average, or below-average.

Preliminary information gathered from the first year of experience with this model shows that consumers are “voting with their feet.” Enrollment swings took consumers away from higher-cost systems and those with relatively poor patient satisfaction scores, and toward those with lower costs and better performance records. One care system with high costs and low quality scores lost 19 percent of its enrollment in one open season period.

	Bright Futures	U.S. Preventive Services Task Force	Health Employer Data Information Set	Guidelines for Adolescent Preventive Services	Healthy People 2000	Rand Quality Care Measurement System for Children & Adolescents	Agency for Health Care Policy & Research	American Diabetes Association	American society of Healthcare Pharmacists	National Academy of State Health Policy	Early and Periodic Screening, Diagnosis & Treatment
SPECIAL ISSUES IN CHILD HEALTH CARE											
Children's pain							✓				
Diabetes								✓			
Pharmaceutical care									✓		
Patient satisfaction measures for child health care							✓				
Otitis Media							✓				
State standards for health plans caring for children										✓	
INFANCY											
General											
Access to primary care providers	✓		✓								
Well-child visits	✓		✓			✓					
Screening											
Height and weight		✓				✓					
Blood Pressure		✓				✓					
Vision Screen (ages 3-4)		✓				✓					
Hemoglobinopathy (birth)	✓	✓				✓					
Phenylalanine level (birth)	✓	✓				✓					
T 4 and/or TSH (birth) ?		✓				✓					

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Lead					✓						
Hearing	✓										
Physical Examination	✓										✓
Immunization											
All immunizations up to date	✓	✓	✓			✓					✓
Anticipatory Guidance, Child Care and Counseling											
Injury prevention											
Child care safety seats (<5 years)	✓	✓			✓						
Smoke detector, flame retardant sleepwear	✓	✓			✓						
Hot water heater temp < 120-130 F		✓			✓						
Window/stair guards, pool fence	✓	✓			✓						
Safe storage of drugs, toxic substances, firearms and matches	✓	✓			✓						
Syrup of Ipecac, poison control number	✓	✓			✓						
CPR training for parents and caregivers		✓			✓						
Diet and Exercise											
Breast feeding, iron enriched formula and food	✓	✓			✓						
Substance Abuse											
Effects of passive smoking, smoke-free environment	✓	✓									
Anti-tobacco messages		✓			✓						
Dental health											

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Regular visits to dental care provider	✓	✓									
Floss and brush with fluoride toothpaste daily	✓	✓									
Advice about baby bottle tooth decay	✓	✓									
Other											
Community reduction of lead exposure		✓									
Ocular prophylaxis (birth)		✓									
Water fluoridation		✓									
Advice to reduce sun exposure		✓									
Evaluate and treat abuse to interrupt intergenerational cycles of abuse					✓						
EARLY CHILDHOOD											
General											
Access to primary care			✓								
Well-child visits			✓			✓					
Screening											
Lead	✓				✓						
Physical Examination											✓
Immunization Status											
All immunizations up to date	✓	✓	✓			✓					✓

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Anticipatory Guidance, Child Care and Counseling											
Breast feeding, iron enriched formula and food	✓	✓									
Injury Prevention											
Lap-shoulder seat belts(>5 years)	✓	✓			✓						
Smoke detector, flame retardant sleepwear	✓	✓			✓						
Hot water heater temp < 120-130 F	✓	✓			✓						
Window/stair guards, pool fence	✓	✓			✓						
Safe storage of drugs, toxic substances, firearms and matches	✓	✓			✓						
Syrup of Ipecac, poison control number	✓	✓	✓		✓						
CPR training for parents and caregivers		✓	✓		✓						
Diet and Exercise											
Limit fats and cholesterol, maintain caloric balance, emphasizes grains, fruits and vegetables	✓	✓			✓						
Regular physical activity	✓	✓									
Substance Abuse											
Effects of passive smoking, smoke-free environment	✓	✓									
Anti-tobacco messages		✓			✓						
Dental health											
Regular visits to dental care provider	✓	✓									
Floss and brush with fluoride toothpaste daily	✓	✓									
Advice about baby bottle tooth decay	✓	✓	✓								
Well-child visits	✓		✓				✓				
Other											

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Community reduction of lead exposure		✓			✓						
Water fluoridation		✓									
Advice to reduce sun exposure		✓									
Evaluate and treat abuse to interrupt intergenerational cycles of abuse					✓						
MIDDLE CHILDHOOD											
General											
Access to primary care providers			✓								
Well-child visits			✓				✓				
Screening											
Vision	✓										✓
Hearing	✓										✓
Hyperlipidemia (high cholesterol)	✓										
Physical Examination											
	✓										✓
Immunization Status											
All immunizations up to date	✓	✓	✓			✓					✓
Anticipatory Guidance, Child Care and Counseling											
Injury Prevention											

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Lap-shoulder seat belts(>5 years)	✓	✓			✓						
Bicycle helmet	✓	✓			✓						
Smoke detector, flame retardant sleepwear	✓	✓			✓						
Hot water heater temp < 120-130 F	✓	✓			✓						
Window/stair guards, pool fence	✓	✓			✓						
Safe storage of drugs, toxic substances, firearms and matches	✓	✓			✓						
Syrup of Ipecac, poison control number	✓	✓			✓						
CPR training for parents and caregivers		✓			✓						
Diet and Exercise											
Limit fats and cholesterol, maintain caloric balance, emphasizes grains, fruits and vegetables	✓	✓			✓						
Regular physical activity	✓	✓			✓						
Substance Abuse											
Effects of passive smoking	✓	✓									
Anti-tobacco messages		✓			✓						
Dental health											
Regular visits to dental care provider		✓			✓						
Floss and brush with fluoride toothpaste daily		✓									
Advice about baby bottle tooth decay		✓									
Sex Education	✓										
Other											
Community reduction of lead exposure		✓			✓						
Water fluoridation		✓									

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Advice to reduce sun exposure		✓									
Evaluate and treat abuse to interrupt intergenerational cycles of abuse					✓						
ADOLESCENCE											
General											
Annual preventive service visit	✓			✓		✓					
Screening											
Height and weight	✓			✓							
Vision and hearing	✓										
PPD	✓										
Hematocrit of hemoglobin (females)	✓										
Cholesterol and coronary heart disease risk	✓			✓							
Eating disorders				✓							
Blood pressure	✓										
Pap test (females)	✓										
Chlamydia screen (females < 20 years)	✓										
Reubella serology or vaccination (females > 12 years)											
Assess for problem drinking	✓										
Assess for severe depression/suicide risk	✓			✓	✓	✓					
Assess for emotional, physical or sexual abuse				✓							
Assess for school/learning problems	✓			✓	✓						

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Annual TB test if live in homeless shelter or have lived in high-prevalence area				✓							
Physical Examination	✓			✓							✓
Immunizations											
All immunizations up to date	✓	✓	✓	✓		✓					✓
Anticipatory Guidance, Child Care and Counseling											
Injury Prevention											
Lap-shoulder seat belts (>5 years)		✓		✓	✓						
Bicycle, motorcycle, ATV helmet		✓		✓	✓						
Safe storage/removal of firearms	✓	✓		✓	✓						
CPR training for parents and caregivers		✓			✓						
Diet and Exercise											
Limit fats and cholesterol, maintain caloric balance, emphasizes grains, fruits and vegetables	✓	✓		✓	✓						
Adequate calcium intake (females)		✓		✓	✓						
Regular physical activity	✓	✓		✓	✓						
Substance Abuse											
Avoid tobacco	✓	✓		✓	✓						
Avoid underage drinking and illicit drug use	✓	✓		✓	✓						
Avoid alcohol/drug use while diving, swimming, boating		✓		✓	✓						
Avoid anabolic steroids				✓							

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Sexual Behavior											
STD prevention: abstinence, avoid high-risk behaviors, condoms/female barrier with spermicide	✓	✓		✓	✓	✓	✓				
RPR/VDRL, screen for HIV	✓	✓									
Hepatitis A vaccine		✓									
Unintended pregnancy, contraception	✓	✓		✓							
Dental health											
Regular visits to dental care provider		✓									
Floss and brush with fluoride toothpaste daily		✓									
Other											
General Guidance to parents				✓							
General guidance to adolescents about their growth and health care				✓							
Community reduction of lead exposure		✓									
Water fluoridation		✓									
Multivitamin with folic acid for females planning/capable of pregnancy		✓									
Advice to reduce street drug use		✓			✓						
Advice to reduce sun exposure		✓									
Advice to reduce HIV infection					✓						
Establish policies on confidentiality of care for adolescents					✓						
Reduce weapons carrying by adolescents					✓						
Evaluate and treat abuse to interrupt intergenerational cycles of abuse					✓						