



Highlights of AHRQ Children's Healthcare Quality Findings

Definition of high-quality care.

AHRQ defines high-quality care as care that is safe, timely, effective, efficient, equitable, and patient-centered.

Why public payers should be concerned about health care quality for children.

- Children with public-only insurance accounted for \$23.3 billion in health care expenditures in 2002, almost one-third of total expenditures for children.
- Children with public-only insurance are less likely to have health care expenditures than children with private insurance (81.4% v 89.4%), but among children with any expenditure, the average expenditure was higher for children with public-only insurance (\$1,459 v \$1,237).
- In 2003, Medicaid paid an estimated \$11 billion in hospital charges alone for children ages 0-17. Medicaid paid for between 26% and 77% of child hospitalizations across the major diagnostic categories.

Improving health care quality care for children can save lives, improve child well-being, and is cost-effective.

- Quality and patient safety improvement in just four clinical topics could save between 3,700 and 7,400 children's lives in a single year.
- By encouraging, promoting, and supporting quality improvement efforts in perinatal care, Medicaid could help to reduce health care costs. If the savings were spread equally across 50 States plus the District of Columbia, each State program could achieve gross savings of from \$947,000 (smoking cessation) to \$1.4 million (infection reduction in NICU) in a single year.
- From 12% to 50% of asthma hospitalizations are believed to be avoidable with better primary care and parent/patient education. In 2003, Medicaid was charged for 52% of child asthma hospitalizations, for an aggregate of \$653 million.
- Use of antibiotics for the common cold among children declined 28% between 2001-2002, and 2003-2004.

Children and adolescents experience health care quality problems. Health care quality is often worse for poor and low-income children, and typically worse for children with no insurance.

- The rate of potentially avoidable asthma hospitalizations for children is higher than that for adults. Poor children are three times as likely to be hospitalized with asthma as high-income children.
- The quality of asthma care was better among children enrolled in SCHIP than in those on a waiting list.
- Almost twice as many high-income children as poor, low, and middle-income children ages 2-17 had at least one dental visit in 2003.
- Receipt of well-child visits is lower among uninsured children (35.3%) and uninsured children eligible for public coverage (28.4%), than for privately or publicly insured children (60%).

We know how to improve the quality of children's health care.

- As a result of improving physicians' leadership among their peers and offering care by a nurse educator, children with asthma had significantly more symptom-free days, fewer physician visits, and more regular use of asthma controller medicines.
- Team training and provision of tools in primary care practices increased the delivery of preventive services and improved adolescents' health outcomes.
- A multifaceted collaborative improvement initiative in hospitals with neonatal intensive care units resulted in more timely delivery of surfactant (a lung-protecting treatment) to high-risk babies.

- Tympanostomy tube insertion does not appear to improve hearing among children with middle ear effusion (ear infections).
- Many AHRQ-funded projects to implement and evaluate improvement strategies are underway.

Enough measures exist to routinely and systematically assess many aspects of health care quality for children and adolescents, although additional measures and data collection efforts would be helpful.

- Pediatric Quality Indicators (PDIs) are a set of measures that can be used with hospital inpatient discharge data to detect patient safety events and potentially avoidable hospitalization rates.
- The Medical Expenditure Panel Survey (MEPS) quality measures for children address receipt of preventive services, appropriate asthma care, timeliness, and patient-centeredness.
- The Consumer Assessment of Healthcare Providers and Systems (CAHPS) program is a public–private initiative to develop standardized surveys of patients’ experiences with ambulatory and facility-level care. Medicaid programs use CAHPS to measure quality of care for children with special health care needs.
- A compendium of measures was prepared for a National Quality Forum Workshop on Child Measures.

Efforts to improve health care quality for children need to recognize where children and their health care delivery systems differ from those of adults.

- The over 70 million children and adolescents in the US comprise 25% of the population.
 - While children consume few health care dollars relative to adults, they differ from adults in several ways that are important for measuring and improving the quality and safety of their care. Their long life span means that the impact of investments in quality will be longer lasting.

Selected ongoing AHRQ-supported initiatives to improve the quality and safety of health care for children and adolescents

Improving Safety

- Improving pediatric safety and quality with health care IT (Harvard)
- Electronic records to improve health care for children (Yale)
- Health Information Collaborative in Colorado (UC)
- Using an electronic medical record to improve urban child health (BU)
- Teamwork training and detection of safety threats in high-risk settings (Cincinnati)
- Pediatric simulation training (CHOP; Cincinnati)
- Prescribing errors in ambulatory pediatric care; evaluating e-Prescribing (MUSC; UW)
- Disparities in medication errors and adverse drug events (Weill-Cornell)

Improving other aspects of quality

- Decreasing disparities in pediatric asthma care (6 States)
- Electronic health record decision support in asthma care (CHOP)
- Creating online NICU networks (USM)
- HIT infrastructure for children with special health care needs (UT-K)
- Telehealth (U Rochester)
- Perinatal regionalization and quality of care (CHOP)
- Disparities in quality of healthcare—impacts on use (MCW)
- Patient-centered access to resources for urban children (Children’s-Boston)
- Transitions in care for youth with chronic conditions (UM)
- Strategies for Group A streptococcal prevention (Harvard Pilgrim)
- Postpartum depression care improvement (Olmstead)
- Formularies and the costs and quality of care (Harvard)

