



# In the Literature

## QUALITY MEASURES FOR CHILDREN'S HEALTH CARE

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In recent years, there have been efforts to develop valid, reliable measures of child health care quality that are on par with those available for adults. Assessing children's health presents unique challenges: children go through rapid developmental changes, are necessarily dependent on others for access to health care, and are more likely than any other segment of the population to live in poverty. Since most children do not have chronic conditions, their care focuses on prevention and developmental needs—aspects of care that have proven difficult to quantify. A new study finds that there are few measures for assessing the safety of pediatric care, and few measures targeted at different age groups.

**“Quality Measures for Children's Health Care”** (*Pediatrics*, Jan. 2004), by Anne C. Beal of The Commonwealth Fund and colleagues, is the first study to assess the current measures of child health care in terms of the Institute of Medicine framework of safety, effectiveness, patient-centeredness, and timeliness. The researchers also consider how well available measures address care from the patients' perspective and whether the sets achieve balance and equity across different child populations.

There are several reasons why such a review is timely. New federal regulations mandate that the Agency for Healthcare Research and Quality (AHRQ) must issue an annual report on health care quality, including pediatric quality. Chronic conditions such as asthma are increasing in prevalence among children, while more and more children are being enrolled in Medicaid managed care plans, and there are concerns about the quality of care provided in these plans.

The researchers identified sets of quality measures through a literature review and input from

national experts, including staff from AHRQ and FACCT (the Foundation for Accountability). Nineteen sets of health care quality measures were identified, of which 10 were developed specifically for children. Ten used administrative or medical record data, and nine used survey data to measure quality.

### Domains of Quality

Most (59.1%) of the measures fell within the domain of effectiveness of care. Few (14.4%) had to do with safety, and most of these were concerned with inpatient care. Moderate proportions of the measures were classified as relating to patient-centeredness (32.1%) and timeliness (33.3%).

### Patient-Perspective Domains

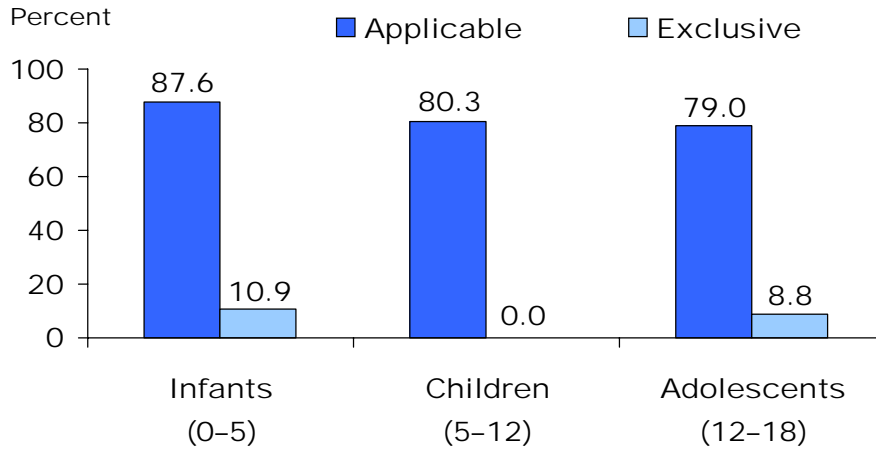
According to the FACCT framework, patients turn to the health care system to stay healthy, get better when ill, manage chronic conditions, and receive end-of-life care. Most (40.2%) of the measures assessed here fell within the getting-better domain, followed by staying healthy (24%); 23.5 percent did not fall within any of the patient-perspective dimensions. The proportion of measures having to do with managing chronic conditions (17.4%) mirrored the proportion of children living with illness.

### Balance and Equity

In terms of balance, the majority (79% or more) of measures could be applied to children across all age groups. Very few focused on specific age groups such as infants and adolescents, and none focused on school-age children (see figure).

The researchers also considered the equity of each measure set by determining whether it had ever been used to compare quality by gender, race, income, health status, or insurance type.

## Proportion of Child Health Care Measures Applicable to Each Age Group with Proportion Exclusive to Each Age Group



Source: A. C. Beal et al., "Quality Measures for Children's Health Care," *Pediatrics* 113 (Jan. 2004): 199-209.

For surveys, they considered whether they were available in languages other than English and whether they had been validated across different populations. They also considered whether the administrative sets included measures of infant mortality, a priority area for reduction in racial disparities in care.

They found that six of the 19 sets had been used to compare populations at risk. All nine of the survey sets had items to identify patients at risk for poor outcomes, and four were available in other languages. Only one survey had undergone cross-cultural validation. Among the 10 sets using administrative or medical data, three had measures of infant mortality.

### Conclusions

The researchers identified a need for safety measures for children's health care, particularly for surgical procedures such as circumcision, tonsillectomy, and appendectomy. They also emphasized that, as better measures of child health are developed, general measures applicable to all children should be balanced against measures specific to various stages in a child's development.

Although current surveys that measure child health can be used for comparative analyses, they have rarely been used to assess disparities in care by race/ethnicity, gender, education, income, health status, or insurance type. Further research in this area is needed to create a more complete picture of the quality of health care for all children.

### Facts and Figures

- The distribution of the 396 individual measures of quality were effectiveness (59.1%), timeliness (33.3%), patient-centeredness (32.1%), and safety (14.4%).
- Nearly 11 percent of all quality measures were exclusive to infants, and nearly 9 percent exclusive to adolescents, none focused on children ages 5 to 12.
- In 1999, children represented half of all Medicaid managed care enrollees.