

American Academy of Pediatrics Recommendations for Pediatric Primary Care Quality Measures 2018

Background

The commitment to quality health care is implicit in the American Academy of Pediatrics (AAP) mission to promote the health and well-being of all children. The AAP supports pediatricians, pediatric medical subspecialists and pediatric surgical specialists and their care teams in continuous quality improvement through a range of programs, activities, and resources to ensure that “every child gets the right care every time.” Recognizing that payers, health plans, ACOs, consumers, and physicians are utilizing quality measures in various forms to improve the overall quality of care, the AAP is advancing a set of existing quality measures that promote child health and can be used for value-based payment.

The development and implementation of national pediatric measures have moved considerably slower than those of adults due to lack of evidence, risk adjustment, unreliable data sources, and small patient populations for chronic pediatric conditions. Despite these challenges, there have been successful efforts to create robust sets of pediatric endorsed measures through many organizations including the National Committee for Quality Assurance (NCQA), the Agency for Health Care Research and Quality (AHRQ), National Quality Forum (NQF), Children's Hospital Association (CHA), America's Health Insurance Plans (AHIP), the National Academy of Medicine (NAM), and the AAP Measurement Alignment and Strategic Selection (MASS) Work Group.

To that end, the AAP has identified a preliminary pediatric primary care measure set that promotes what pediatricians can do to advance child health and development within a system of value-based payment. This measure set has been informed by the work done MASS workgroup and has been approved by the AAP Board of Directors. It can be used to identify gaps in care which can be decreased through quality improvement strategies and is intended to evolve and expand over time as clinicians' reach established payor goals. Furthermore, this measure set creates a standard against which pediatric clinicians can be assessed and appropriately reimbursed. It is

Value of Measuring Children's Health

Expenditures on health care for children and young adults can be viewed as a societal investment. The ability to deliver physically and mentally healthy adolescents to adulthood broadly reflects the true value of high quality pediatric care. Healthy young adults will be better able to engage in the labor force and contribute to their communities as productive citizens. Numerous economic models have demonstrated the significant return on investment of monies spent on children.^{1,2,3}

America's child population is more diverse in race, ethnicity, and languages than any other age group. The child population in the United States also has higher rates of poverty than adults. As more is learned about the impact of childhood adversity on adult health outcomes, more emphasis will be needed on prevention, early intervention, and attending to the social determinants of health. Measuring and addressing the social determinants of child health are core to the practice of pediatrics and should be supported by payors.

While many recent health care delivery reforms are designed to affect rapid change for short term pay back, life course outcomes more accurately reflect quality in pediatric care. The fact that life course information (education level, socioeconomic position) is infrequently collected in healthcare practices, and the lack of a longitudinal health record present unique challenges to measurement of quality care and child outcomes in pediatrics. Nonetheless, evidence based care guidelines describe best practices for the care of children and adolescents which can be used to guide quality measurement, focused on prevention, screening, the early identification of health problems and on what pediatricians can do to guide the development of children within the context of their families.⁴

Challenges of Pediatric Quality Measurement

Much attention has also been focused on connecting quality measurement to payment. The AAP understands that measuring the value of children’s healthcare is fundamentally different from adult care and asserts challenges to the traditional field of quality measurement. Investments in child health have long term consequences (e.g., healthy children mean healthier adults and thus less expensive consumers of healthcare). Recognizing the longer-term impact on child health and balancing the challenges of pediatric quality measurement (Figure 1), the AAP identified a group of existing measures that impact the broad spectrum of child health and development and can be used for payment while also identifying new gaps in children’s health.

Figure 1. Challenges of Pediatric Quality Measurement

Challenges	AAP Perspective
Evidence Base	The AAP recognizes that measures should be evidence-based, reliable, and valid. However, the AAP also understands linking quality improvement and pay for value do not require equally stringent specifications. While the gold standard for measures are those that have a strong evidence base, the AAP acknowledges that measures that are evidence informed can promote child health.
Cost Savings	The AAP is interested in identifying measures that demonstrate improved quality as children transition to adulthood. While the AAP acknowledges the importance of seeking short- and long-term cost savings it is essential to note that measuring the value of children’s healthcare is fundamentally different. Cost savings associated with adult care are often not seen in children due to the preventive nature of pediatric care.
Children are Unique	Children differ from adults and models for pediatric quality measurement should take this into account. Unique differences between children and adults are often described in the literature include development, dependency, differential epidemiology, demographics, and dollars. ⁵ Children have an upward developmental trajectory, with needs and abilities changing over time; they require “habilitative” rather than “rehabilitative” support. Young children are dependent on families/caregivers to care for them and as such, these individuals are integral partners of the healthcare team and health outcomes for children. From a differential epidemiologic perspective, children, in general, are healthier than adults, and the goal of pediatrics is to optimize their health. While certain chronic conditions, eg, asthma, obesity, affect larger numbers of children, a significant number of relatively rare chronic diseases exist in the pediatric population, and there is an increasing number of children are medically complex. Considering demographics, children have disproportionately higher rates of poverty and ethnic/racial diversity than in adult populations.

Criteria for Measure Selection

The AAP engaged in a rigorous process to select existing measures for inclusion in a pediatric primary care measure set. The traditional challenges of pediatric quality measurement were considered as each measure was assessed by the following criteria:

- Impact on child health - Measures that are representative of what pediatricians can do to promote the health of every child.
- Evidence based or evidence informed - Measures that promote child health and development that are evidence based or informed.
- Feasible – Measures that are feasible for pediatricians and those who care for children to collect.
- Reflects the diversity of pediatric care – Measures that cover the broad range and complexity of pediatrics within a social determinants context. This includes the type of care (prevention/wellness, acute care, mental/behavioral health), sites of care, (inpatient, outpatient, school-based), healthy behaviors, overuse and appropriate treatment, person and family centered care, and family and community engagement.

Using these criteria, the AAP examined measures that have already been developed and included in measure sets from AHIP, NAM, HEDIS, the CHIPRA Core Set, and the AAP MASS Work Group then worked to identify the following measure categories to promote amongst the pediatric primary care community.

- Developmental screening
- Adolescent Well Care Visits
- Antibiotic stewardship
- Immunizations
- Mental health screening
- Weight assessment and counseling
- Social Determinants of Health

While this measure set is not inclusive of all clinical quality measures important to child health, this document establishes an initial set of pediatric measures that promote the health and development of children. With the increased focus on population health, the AAP recognizes that pediatric clinicians have a role to play in addressing the social determinants of health and plans to pursue innovative measurement concepts to incorporate into quality care. In particular, the development of measures that address poverty, family engagement, and follow-up to developmental screening should be encouraged. A table of innovative measure concepts can be found on page 8. In addition, the AAP intends to promote a list of measures solely focused on subspecialty pediatrics.

Pediatric Primary Care Quality Measures Measure Specifications

Measure Name <i>Developmental Screening in the 1st Three Years of Life</i>	Category <i>Developmental screening & Follow-Up</i>
Source Oregon Health & Science University	
This measure is also included in these following portfolios AHIP 2018 CHIPRA Core Set	
Level of Measurement Individual, Practice and Plan	
Evidence Base 1. AAP policy statement, “Identifying Infants and Young Children with Developmental Disorders in the Medical Home: An Algorithm for Developmental Surveillance and Screening”, describes the importance of early identification and treatment of children with neurodevelopmental and behavioral problems to pediatric well-being and development.	
Numerator Children who had documentation of a developmental screening (screening for risk of developmental, behavioral and social delays) using a standardized tool by their first, second and third birthdays.	Denominator Children with a visit who turned one, two and three years of age.

Measure Name <i>Childhood Immunization Status</i>	Category <i>Immunizations</i>
Source NCQA	
This measure is also included in these following portfolios CHIPRA Core Set HEDIS	
Level of Measurement Plan and practice	
Evidence Base 1. <i>CDC AHIP Guidelines</i> 2. <i>Bright Futures: Guidelines for Health Supervision of Infants, Children, and Adolescents, 4th Edition</i>	
Numerator Percentage of children age 2 who had four diphtheria, tetanus and acellular pertussis (DTaP); three polio (IPV); one measles, mumps and rubella (MMR); three haemophilus influenza type B (HiB); three hepatitis B (Hep B), one chicken pox (VZV); four pneumococcal conjugate (PCV); one hepatitis A (HepA); two or three rotavirus (RV); and two influenza (flu) vaccines by their second birthday. The measure calculates a rate for each vaccine and nine separate combination rates.	Denominator Children who turn 2 years of age during the measurement year.

Measure Name <i>Adolescent Well Care Visits</i>	Category <i>Bright Futures</i>
Source NCQA	
This measure is also included in these following portfolios CHIPRA Core Set HEDIS	
Level of Measurement Individual, Practice and Plan	
Evidence Base <ol style="list-style-type: none"> Centers for Disease Control and Prevention (CDC). 2014. "Youth Risk Behavior Surveillance—United States, 2013." http://www.cdc.gov/mmwr/pdf/ss/ss6304.pdf Bright Futures: Guidelines for Health Supervision of Infants, Children, and Adolescents, 4th Edition 	
Numerator Assesses adolescents and young adults 12–21 years of age who had at least one comprehensive well-care visit with a primary care practitioner or an OB/GYN practitioner during the measurement year.	Denominator Adolescents with a visit between 12-21 years of age.

Measure Name <i>Appropriate Treatment for Children with URI</i>	Category <i>Antibiotic Stewardship</i>
Source HEDIS	
This measure is also included in these following portfolios AHIP NAM	
Level of Measurement Individual, Practice and Plan	
Evidence Base <ol style="list-style-type: none"> Centers for Disease Prevention and Control. 2013. “Antibiotics Aren’t Always the Answer.” http://www.cdc.gov/features/getsmart/ National Committee for Quality Assurance (NCQA). HEDIS 2016: Healthcare Effectiveness Data and Information Set. Vol. 1, narrative. Washington (DC): National Committee for Quality Assurance (NCQA); 2015. Rosenstein N, Phillips WR, Gerber MA, Marcy SM, Schwartz B, Dowell SF, et al. The common cold--principles of judicious use of antimicrobial agents. <i>Pediatrics</i>. 1998;101(Suppl):181-4. 	
Numerator Patients who were dispensed antibiotic medication on or within 3 days after an outpatient or ED encounter for upper respiratory infection (URI) during the intake period. The measure is reported as an inverted rate (i.e. 1- numerator/denominator, a higher rate is better) to reflect the number of children that were not dispensed an antibiotic.	Denominator All children age 3 months as of July 1 of the year prior to the measurement year to 18 years as of June 30 of the measurement year who had an ED or outpatient visit with only a diagnosis of nonspecific upper respiratory infection (URI) during the intake period (July 1st of the year prior to the measurement year to June 30th of the measurement year).

Measure Name <i>Child and Adolescent Major Depressive Disorder</i>	Category <i>Mental Health</i>
Source AMA PCPI	
This measure is also included in these following portfolios NAM	
Level of Measurement Individual and Practice	
Evidence Base <ol style="list-style-type: none"> 1. American Psychiatric Association. Practice guideline for the treatment of patients with major depressive disorder. Arlington (VA): American Psychiatric Association; 2010 Oct. 152 p. 2. Bir Maher B, Brent D, AACAP Work Group on Quality Issues, Bernet W, Bukstein O, Walter H, Benson RS, Chrisman A, Farchione T, Greenhill L, Hamilton J, Keable H, Kinlan J, Schoettle U, Stock S, Ptakowski KK, Medicus J. Practice parameter for the assessment and treatment of children and adolescents with depressive disorders. J Am Acad Child Adolesc Psychiatry. 2007 Nov;46(11):1503-26. PubMed External Web Site Policy. 	
Numerator Patient visits with an assessment for suicide risk.	Denominator All patient visits for those patients aged 6 through 17 years with a diagnosis of major depressive disorder.

Measure Name <i>Adolescent Immunization Status</i>	Category <i>Immunizations</i>
Source NCQA	
This measure is also included in these following portfolios HEDIS CHIPRA Core Set	
Level of Measurement Practice	
Evidence Base <ol style="list-style-type: none"> 1. Bright Futures: Guidelines for Health Supervision of Infants, Children, and Adolescents, 4th Edition 	
Numerator Adolescents 13 years of age who had one dose of meningococcal vaccine and one tetanus, diphtheria toxoids and acellular pertussis vaccine (Tdap) or one tetanus, diphtheria toxoids vaccine (Td) by their 13th birthday.	Denominator Adolescents who turn 13 years of age during the measurement year

Measure Name <i>Weight Assessment and Counseling for Nutrition and Physical Activity for Children/Adolescents (WCC)</i>	Category <i>Weight Assessment and Counseling</i>
Source NCQA	
This measure is also included in these following portfolios CHIPRA Core Set HEDIS NAM AHIP	
Level of Measurement Practice and Plan	
Evidence Base 1. Koplan J, Liverman C, Kraak V, editor(s). Preventing childhood obesity: health in the balance. Washington (DC): Institute of Medicine, National Academies Press; 2005.	
Numerator The percentage of patients who had evidence of a Body mass index (BMI) percentile documentation, counseling for nutrition and counseling for physical activity during the measurement year.	Denominator Patients 3-17 years of age with at least one outpatient visit with a primary care physician (PCP) or OB-GYN during the measurement year.

Measures Table

Measure Focus	Measure Name	Organizational Measure Set			
		AHIP	CHIPRA Core Set	NAM	HEDIS
Bright Futures	Well-child visits in adolescence		x		x
Developmental Screening	Developmental Screening in the 1st Three Years of Life	x	x		
Immunizations	Childhood Immunization Status	x	x	x	x
Immunizations	Adolescent Immunization Status	x	x	x	x
Antibiotic Stewardship	Appropriate treatment for children with URI	x			
Mental Health	Child and adolescent major depressive disorder: suicide risk assessment			x	
Weight Assessment and Counseling for Nutrition and Physical Activity for Children/Adolescents (WCC)	Weight Assessment and Counseling for Nutrition and Physical Activity for Children/Adolescents (WCC)	x	x	x	x

Innovative Measurement Concepts in Development

Social Determinants of Health	Food Insecurity
Family Engagement	Use of a shared plan of care
Developmental Screening Follow-up	Follow-up with Patient Family after Developmental Screening
Developmental Screening Follow-up	Follow-up Referral after Positive Developmental Screen
Developmental Screening Follow-up	Follow-up Referral Tracking

References:

1. Campbell F., Conti, G., Heckman, J.J., Moon, S.H., Pinto, R., Pungello, E., Pan, Y. (2014, Mar 28) Early childhood investments substantially boost adult health. *Science*, 343(6178):1478-85. DOI: 10.1126/1248429. PMID: 24675955.
2. Heckman J. The Case for Investing in Disadvantaged Young Children. Chapter: Big Ideas for Children: Investing in Our Nation's Future. First Focus, 2008.
3. Heckman J. There's more to gain by taking a comprehensive approach to early childhood development. Online at: https://heckmanequation.org/assets/2017/01/F_Heckman_CBAOnePager_120516.pdf
4. National Quality Forum: Strengthening Health and Healthcare for Children. Online at: http://www.qualityforum.org/Strengthening_Health_and_Healthcare_for_Children.aspx
5. Stille C et al. The Family-Centered Medical Home: Specific Considerations for Child Health Research and Policy. *Academic Pediatrics* , Volume 10 , Issue 4 , 211-217.