



The Unique Value Proposition of Pediatric Health Care

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This document provides a framework for the value proposition of pediatric health care. It is intended to provide a succinct set of principles for establishing this proposition that demonstrates the short- and long-term value to the child and family, the health care system, and society as a whole.

VALUE IN PEDIATRIC CARE

The health and well-being of children and youth strongly influence their health and well-being as adults. Health early in life has vital importance to many interests across society, where the basic aim of society is the well-being of families and individuals. Value (in health care) is defined as outcomes relative to costs.¹ Outcomes for children include resolution of disease and current health status, but these connections between health and long-term well-being clarify the need to address long-term outcomes as well. The value of healthy children becoming healthy adults provides a focus for the value of high-quality pediatric care.

Health is more than the absence of disease.² Our vision as pediatricians is that all children, including those with chronic conditions and disabilities, grow and develop in safe, loving families and supportive communities that help them achieve their greatest potential. Families are critical to these goals, and children's health and well-being partly reflect parental mental and physical health.

Pediatrics, at its core, is about prevention of illness, early recognition of problems, and provision of care based on individual needs delivered in the context of a patient- and family-centered, coordinated, culturally appropriate delivery system. Its aim is to promote children's physical, developmental, social-emotional, and nutritional health and to detect and treat challenges early enough to mitigate lifelong effects. High rates of mental and behavioral health issues call for addressing these conditions directly in pediatric care, including upstream prevention. Adversity in childhood, including the effects of

abstract

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racism, contributes to lifelong poor health.³ Positive childhood experiences in the health system can support resilience and good health in later life.^{4,5} The experiences of children and their early health impact the health and health equity of our society.^{5,6} Children and youth who thrive become productive contributing young adults.

Immunization, a key part of pediatric prevention, has well-documented benefits—including the substantial economic benefit of eliminating several diseases that had exacted a heavy cost.⁷⁻⁹ High-quality preconception care and prenatal care, similarly, are critical family services for healthy birth outcomes.¹⁰

Society benefits from having a physically and emotionally healthy, well-educated, and functioning population of young adults who can strengthen the economy and make communities competitive in an increasingly complex economic environment.¹¹

WHY ARE CHILDREN AND YOUTH DIFFERENT?

Children's health needs and outcomes differ from those of adults, on whom most current value-based care models are built.¹² Value in pediatrics must account for the following realities:

- Children's health care needs change dramatically as they grow, with major changes in opportunities for prevention, how health problems manifest, and responses to treatment.
- America's child population is more diverse in race, ethnicity, and language than any other age group, requiring a greater effort to provide culturally competent care and mitigate the detrimental health effects of racism. As of 2019, 50% of children younger than age 18 years in the United

States were Hispanic, Black, Asian, or Indigenous.¹³

- Children in the United States have the highest rates of poverty among all age groups, including seniors. Poverty has a clear impact on health and growth, independent of other factors. Value-based health care ameliorates the inequities that poverty creates.
- The health of children depends on healthy parents, families, neighborhoods, schools, and communities. Thriving children reflect the health and well-being of their families and communities.

To date, many value propositions and outcome measures that affect pediatric care have not adequately addressed these differences.

A VISION FOR HIGH-QUALITY PEDIATRIC CARE

Children should ideally receive high-quality primary care in family-centered medical homes, emphasizing the use of teams, with integrated mental/behavioral health care.¹⁴⁻¹⁹ Medical homes for children are culturally competent, comprehensive, and accessible and provide coordinated care. Medical homes are community-based, including connections to appropriate specialists and therapists (the medical neighborhood) and community supports, such as infant and toddler home visits, early intervention, and schools.²⁰⁻²²

Public and individual health concerns are best met when populations develop trusting relationships with health care professionals who practice high-quality, evidence-based medicine. Established relationships with health care professionals and systems start in early childhood during frequent visits for health care in the first years of life.

Quality pediatric care recognizes that health care needs and anticipatory guidance change with age and development. *Bright Futures: Guidelines for Health Supervision for Infants, Children, and Adolescents*, Fourth Edition, defines quality for child health at different ages. Children receive preventive services including immunizations and age-appropriate screenings for developmental, social-emotional, oral, and mental health.²³ When appropriate, they are screened for conditions such as lead poisoning, anemia, and sexually transmitted infections. Growth is monitored, with nutritional and physical activity advice tailored to each child's needs. Families are assessed for postpartum depression, substance use, domestic violence, food insecurity, and housing and transportation needs to connect them to community services and public benefits.²⁴⁻²⁶ Given the high impact of childhood adversity in driving adult health outcomes, high-quality pediatric care prevents poor outcomes by addressing social and structural determinants of health and mitigating the impact of racism and trauma.^{5,27-29}

Special health care needs include a highly diverse group of chronic health conditions, making accounting for their needs more complex, yet essential, in a value-based environment. The medical home team supports children and youth with special health care needs and their families through care coordination, with care in least restrictive environments, especially the home. The medical home also assists with timely and appropriate transition to adult health care systems. Families are supported as they provide for their children's medical, nutritional, educational, emotional, and behavioral needs.

Evidence-based guidelines, when they exist, provide

recommendations for care for child/adolescent conditions—for example, asthma, attention-deficit/hyperactivity disorder, bronchiolitis, fever in young infants, and febrile seizures.^{30–34} These guidelines describe best practices for the care of children and adolescents, including costs of care, and should also guide the measurement of quality.³⁵

Health care facilities providing care for children require core pediatric skills and health system resources to access more specialized care.^{36–39} Children needing subspecialty care should receive such care in a timely manner from pediatric-trained providers whenever possible.⁴⁰ Emergency and disaster response planning should include the health care of children and their unique needs.^{41,42}

MEASURING PROCESSES AND OUTCOMES TO ASSESS VALUE

Process measures of high-quality pediatric care include rates of immunizations and routine screening regarding development, depression, substance use, social determinants, and parental needs. Other measures assess monitoring of growth, early intervention for overweight, obesity, or underweight, adherence to guidelines for asthma or attention-deficit/hyperactivity disorder, use of the emergency department for nonemergent conditions, and rates of hospitalization for asthma or depression. Metrics should also include whether children receive care in medical homes with timely access to subspecialty care when needed. For children and youth with special health care needs, measures could include referrals to palliative care, home care, and other supportive services.

Although much value in child health is derived from long-term outcomes,

many potentially measurable outcomes for children can be observed in a few years rather than over decades. Effective medical and community interventions impact measures such as school readiness at age 5 years,^{43,44} literacy at age 8 years,⁴⁵ and high school graduation rates; health can drive all of these. School readiness and literacy, in turn, lower the need for special education services in early school years. Other measurable outcomes include anxiety/depression, substance use, and sexually transmitted infections in adolescents.

For long-term outcomes, several studies document favorable changes in income, maternal educational achievement, maternal age at birth of first child, and incarceration rates of males through early childhood interventions that have health care components.^{46–48} Recent long-term outcome evaluations of these projects have also documented lower rates of adult chronic disease among those who received these interventions as preschool children. As noted, key life course outcomes (education level, socioeconomic positioning) are often not measured within the health care arena. The lack of a longitudinal record documenting long-term health outcomes also presents unique challenges to measuring value in pediatrics, yet growing data capabilities will allow integration of data over time and across agencies to further quantify impact.

PRINCIPLES FOR PAYMENT REFORMS TO INCENTIVIZE VALUE IN PEDIATRIC CARE

Payment strategies provide a key pathway toward delivering high-value health care. This section addresses principles that should guide payment to ensure value in pediatric care. Underlying the principles is the recognition that

much current payment reflects the value proposition for older populations and provides few incentives to achieve value in pediatric care. The adult value proposition (investment for short-term savings while maintaining quality) has driven most discussions and policies regarding value-based care. The value proposition for children and youth differs substantially from that for adults, in part because much return on investment is long-term and comes in sectors other than health care.

The 3 main payers for health care (employers, government, and families) have short-term and medium-term interests in limiting preventable and unnecessary health care expense. Benefits of a pediatric-focused value proposition will differ for these different payer groups. Each has long-term interests: employers benefit from a healthy adult workforce; public agencies benefit from physically and mentally fit adults who can meet a community's needs and rely less on public resources; and families benefit when their children mature into healthy adults who can care for themselves, care for their own children, and eventually assist in the care of their elders. Numerous economic models have demonstrated the significant long-term return on investment of money spent on children.^{46,49,50}

Expenditures for pediatric care are very small compared with expenditures for adults.^{51,52} Short-term savings from fewer emergency department visits for asthma and other conditions, fewer hospital or intensive care days for children and youth with complex medical conditions, or improved NICU care are real but relatively modest. Short-term savings also accrue from fewer workdays lost by parents who need to stay home caring for sick children. Good health care for

children (including prevention) lowers parent concern and anxiety. Parents who know that their child is healthy or at low risk for an acute physical or behavioral problem maintain better focus on their work activities and will be more effective workers.⁵³

Furthermore, investment in child health reaps large long-term benefits beyond savings measured in the health care system, namely in the child welfare, school, and juvenile justice systems and in parents' abilities to participate in the workforce, ultimately producing a stronger economy with healthier adults. Such investments substantially lower long-term costs associated with prisons and adult chronic illness care.¹¹ Despite the emphasis on short-term savings, child and adolescent health care must be viewed as an investment in equitable long-term outcomes for US children to produce a healthy and vibrant young adult population.

Medicaid and the Children's Health Insurance Program (CHIP) are critical pieces of the health insurance coverage landscape for children and youth in the United States. Together, these programs cover as much as half of all US children. Children eligible for Medicaid live predominantly in low-income families more likely to be affected by the socioeconomic factors that influence health.

Because Medicaid is such a dominant payer, child health financing reform must depend on adequately funding a strong Medicaid program for children with uniform standards for prevention, screening, early detection, and treatment services such as the Early and Periodic Screening, Diagnostic and Treatment benefit (a foundational feature of the Medicaid program). Most children covered by Medicaid/CHIP are enrolled in

managed care organizations. Medicaid, unlike Medicare, has joint financing by state and federal funds. Thus, Medicaid programs vary from state to state, providing room for innovation and the opportunity for cross-state learning. Many state Medicaid programs have moved away from fee-for-service toward value-based payment models. States have experimented with multipayer arrangements, using common metrics and incentives for quality. Some states have started Medicaid Accountable Care Organizations (ACOs) that include children, with a few pediatric-specific Medicaid ACOs.⁵⁴ Some states have considered opportunities to link across sectors and state agencies, forming global child budgets. Medicaid remains substantially underfunded, well below Medicare levels; achieving these value-based goals will require raising funding levels at least in parity with Medicare.

Medicaid presents distinct opportunities to incorporate the pediatric health care value proposition into new payment and delivery systems and to drive this change.⁵⁵ As many as half of child Medicaid enrollees remain enrolled in the program over a 5-year period, and children with sociodemographic risk factors are more likely to stay enrolled in Medicaid for longer periods.⁵⁶ Evaluating the population enrolled in Medicaid affords the opportunity to measure some important outcomes over a meaningful period.

Because states administer numerous education, human service, public health, and other programs that address socioeconomic factors influencing child and family health, the potential for savings and the creation of efficiencies across state systems present incentives for a state to operationalize the pediatric health care value proposition in a

way that benefits both children and the state.

Although Medicaid/CHIP is the single largest insurer of children, many US children continue to receive coverage through commercial insurance from their parents' employment. Shifts in the commercial insurance market have led to insurance plan consolidation and to the same movement away from fee-for-service toward value-based payment as seen in Medicaid. Children do not drive the expenditures of commercial insurers, nor do they present a clear opportunity for near-term cost savings. Commercial payers direct most of their attention and value-based innovation toward more costly adult populations.

Although commercial payers may focus more on higher cost adult conditions to achieve near-term cost savings, the long-term value proposition of pediatric health care should be attractive in the commercial sector as well. With increased consolidation in the insurance industry, insurers may increasingly cover individuals for longer periods and/or cover individuals at different points across the lifespan. Moreover, commercial payers will play a significant role in health care system changes that increasingly focus on lifelong health, integration of physical and behavioral health, population health management, and attention to social determinants of health.

To this end, it is critical to ensure that commercial payers recognize the pediatric health care value proposition. Regulation of commercial payers should be used where necessary. Moreover, efforts should be undertaken to bridge commercial payer efforts with concurrent Medicaid and CHIP efforts—doing so will lead to a more streamlined, consistent, efficient,

and value-focused health care payment and delivery system for children and the profession of pediatrics.

The American Academy of Pediatrics provides the following recommendations for payment reforms to achieve value in pediatric care, for both Medicaid/CHIP and commercial payers.

- Value-based payment arrangements that include coverage of children must specifically address **children's health care** in their design, recognizing the long-term value proposition. Focusing solely on the high costs of other populations with opportunities for rapid return on investment risks overlooking children and youth.
- Value-based payment reform must address **early childhood adversity** and social determinants. The health care system should address the broad health and mental health needs of children and their parents and coordinate with community agencies to improve housing, food security, and community services and supports such as transportation, schools, and safety.
- Value-based payment reform must include appropriate **metrics and data collection** over time, with clear attention to racial, ethnic, and other disparities in health outcomes. Pediatric metrics must address health equity, social determinants, and long-term value explicitly, aligned across both commercial and public plans, so that all children receive high-quality health care.
- Payment strategies must preserve a **focus on prevention and early intervention** as a critical framework for child health. This is recognized in the Medicaid Early and Periodic

Screening, Diagnostic and Treatment protection, CHIP's child-focused benefit design, and the Patient Protection and Affordable Care Act preventive care service requirement.

- Value arrangements must facilitate **partnerships among health care providers or health care systems and other state and community agencies** (schools, child welfare, home-visiting programs, early childhood programs).
- Value-based payment strategies must promote **integration of behavioral health and social services in both primary care settings and subspecialty care settings**. This includes both the care and coordination of care for children with developmental and mental health diagnoses as well as children with social-emotional challenges that do not yet meet diagnostic criteria of the *Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition (DSM-5)*.
- Value-based systems must consider **risk stratification** that accounts not only for medical complexity but also for parental and social complexity, taking social determinants of health into consideration. Risk models should address the special issues of care for children and youth with special health care needs and those with medical complexity.
- Payers must support the **creation of validated predictive risk algorithms** for children, **construct "high-risk" lists for pediatric care coordination**, and ensure adequate payment for such services. Most proprietary algorithms currently used by private payers have low relevancy for identifying high-risk or rising-risk populations of children. Furthermore, payers must recognize that "risk" cannot be

identified by focusing solely on high cost in the ensuing 12-month period.

- Value-based arrangements must include **payment for new technologies that facilitate care management in the medical home without a patient/physician in-person encounter**.
- New health care delivery systems such as ACOs, or clinically integrated networks that contract for value-based payment, **must include pediatricians in their governance** structures if the system delivers children's health services. Keeping the voice of children at the table is crucial.

The American Academy of Pediatrics supports a value proposition for children and adolescents that considers health care, transformed as indicated previously, as a long-term investment in the health and well-being of children and youth as they mature to active and participatory young adulthood.

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ABBREVIATIONS

ACO: accountable care organization

CHIP: Children's Health Insurance Program

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