

You Get What You Pay for: Measuring Quality in Value-Based Payment for Children's Health Care



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Executive Summary

Value-based payment is central to the New York Medicaid program's reform effort of moving away from fee-for-service payment systems. To date, the main strategies of this payment reform have focused on health care utilization by adults with conditions that are expensive to treat. More recently, attention has shifted to include how value-based payment (VBP) arrangements should be structured to best meet the needs of children as well. This report—and, more generally, UHF's focus on children's health care—aims to supply detail to these ongoing policy discussions.

Rolling children's care into this large reform effort requires close consideration of how value in children's health care is defined, and how it is measured. Some of the quality measures used for adult conditions are not appropriate or illuminating when applied to children, and there is far less literature and consensus on which measures work best in determining value in pediatric care.

This report focuses on the quality measures and outcomes that could be pursued as part of VBP arrangements for children's health care. After a brief overview of the role of quality measurement in VBP systems, it describes the ways in which children's health and health care services differ from adult health care. These key differences include the relative prominence of prevention efforts in children's health; the relatively small number of children with special health care needs; and the confounding effects of different developmental stages throughout childhood. The report then presents three case studies from other child-focused VBP arrangements now underway in Oregon, Ohio, and Colorado, as New York can learn from the practical considerations of how other groups have selected measures.

The timing of this exploration is appropriate, as New York Medicaid recently indicated the possibility of creating new entities charged with working out details of VBP for the specific and unique needs of children: a Clinical Advisory Group for Special Needs Children and a Taskforce on Children and Adolescents. From our review of what literature there is, and from interviews with innovative payers and providers, we arrived at four central lessons for New York:

1. Government and public programs, particularly Medicaid, have historically led in the development and use of children's health quality measures and have good reasons to continue to do so. New York's Medicaid program, in particular, has a unique opportunity to ensure that VBP arrangements are supportive of long-term health and development in children.

2. New York's current child health measures are a solid start for thinking about what incentives VBP arrangements should include, but high-value care for children goes beyond what is currently measured. The State should consider establishing a process for adopting more ambitious measures that match its long-term goals for child health and well-being. New York's Medicaid program can simultaneously encourage the use of quality measures to achieve near-term goals for children's health, such as reducing unnecessary asthma hospitalizations, and plan to pursue more aspirational goals for children's health care services, like improving the overall health

trajectory of children. Such an approach would begin with an initial set of children’s health quality measures that reflect New York’s immediate goals; build up experience among Medicaid providers and risk-bearing entities; establish an entity with a long-term view, such as a children’s health quality steering committee, that would monitor progress toward children’s health goals and recommend changes to the measures as necessary; and, ultimately, work with other State agencies to consider more ambitious measures, such as cross-sector measures of success.

3. Ensuring that children with special needs receive high-quality care amid cost reductions incentivized by value-based payment is critically important—and potentially complex. With regard to VBP for vulnerable subpopulations of children, the Medicaid program will need to think through several challenging issues: (1) distinguishing the appropriateness of different payment methods for different kinds of vulnerable children; (2) determining which quality measures should be used as “balancing measures” to ensure that VBP, if applied to children with special needs, does not have unintended consequences for care; and (3) sorting through the methodological challenges that may arise when holding providers accountable for outcomes among small subpopulations of children.

4. Given frequent primary care use by children, VBP measures could encourage primary care providers to integrate (or actively coordinate) oral health services, behavioral health services, and interventions for addressing social determinants of health. While primary care providers should not be held accountable for problems they cannot fix, such as shortages of specialists, thought should be given to rewarding providers (through incentive measures) for using tested but innovative means to increase access to oral and behavioral health prevention and treatment services.

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Introduction

A key feature of New York State's health care reform is moving to a payment system that promotes value. Driving much of the State's reform effort in this area is New York's Medicaid program, with an ambitious goal of having 80–90 percent of Medicaid managed care payments to providers be value-based payments (VBP) rather than fee-for-service (FFS) by 2020.¹ New York Medicaid does not plan to carve any populations out of its VBP plans, although there does appear to be some flexibility in applying different VBP approaches to different subpopulations. To date, most discussion of value-based payment has focused on managing high-cost conditions that occur most commonly among adults. More recently, attention has shifted to include how VBP arrangements should be structured to meet the needs of children as well.

An essential component of such planning will be the child health quality measures and goals that will need to be met, and aspired to, as part of VBP arrangements. According to the March 2016 annual update to the New York Medicaid VBP Roadmap, New York Medicaid is considering launching two new entities focused on children and value-based payment: a Clinical Advisory Group for Special Needs Children² and a Taskforce on Children and Adolescents.³

The goal of the Taskforce on Children and Adolescents would be to consider the broad, primarily preventive, needs of the general pediatric population.⁴ The Clinical Advisory Group, on the other hand, would presumably consider outcome measures and VBP parameters as they relate to particularly vulnerable subpopulations of children with high health care needs. (Explicit mandates for these groups have not yet been made public.) Given that Medicaid covers 43 percent of all New York children, VBP in Medicaid has the potential to be highly consequential for children's health, and these workgroups offer a good platform for thinking about how payment can broadly improve children's health in the state. There are over 2.3 million children aged 0 to 20 in New York's Medicaid program, representing over 37 percent of all New York Medicaid enrollees.⁵

The prospect of these two Medicaid workgroups raises an opportunity to carefully deliberate on how to extend VBP principles to children's health care services. This paper does not take a stance on whether VBP is inherently good or bad for children; it points out the nuances that must be considered in designing VBP arrangements for children's health services and calls for focused attention on how value for children will be defined and how it will be

¹ New York State Department of Health. June 2015. *A Path Toward Value-Based Payment*. https://www.health.ny.gov/health_care/medicaid/redesign/dsrip/docs/vbp_roadmap_final.pdf

² This Clinical Advisory Group (CAG) would specifically focus on children, but it should be noted that other already-established CAGs, such as those focusing on maternity and behavioral health, also have high relevance to children's health needs.

³ New York State Department of Health. March 2016. *A Path Toward Value-Based Payment: Annual Update*. Pages 34 and 59. www.health.ny.gov/health_care/medicaid/redesign/dsrip/docs/1st_annual_update_nystate_roadmap.pdf

⁴ New York State Department of Health. February 2016. *Value-Based Payment Subcommittee Recommendation Report*. Pages 48–49. https://www.health.ny.gov/health_care/medicaid/redesign/dsrip/2016/docs/2016-feb_sub_comm_recommend_rpt_consol.pdf

⁵ New York State Department of Health. September 2015. *Medicaid Program Enrollment by Month*. <https://health.data.ny.gov/Health/Medicaid-Program-Enrollment-by-Month-Beginning-200/m4hz-kzn3>

measured. On the upside, through its emphasis on achieving good outcomes and avoiding unnecessary costs, value-based payment could avoid the many drawbacks of the current FFS payment system. On the downside, it is unclear whether the methodologies and strategies typically applied to the general adult population are ideal for paying for children's health care services. VBP approaches are often designed to address challenges associated with caring for high-cost adults; broadly applying them to children's health care services without considering the unique health needs of children could be suboptimal or could even cause damage by creating the wrong care incentives.

Making these deliberations even more challenging is the fact that value-based contracts for children's health services have not received significant national attention. Little information on pediatric value-based payment contracts is publicly available. Many national efforts to develop and promote VBP have been prompted by Medicare, which—having only a few child beneficiaries—has not engaged children's health care providers as part of its VBP models or demonstration projects.

Methodology and Structure

This brief attempts to add to the literature on value-based approaches for children's health care. It focuses specifically on the quality measures and outcomes that could be pursued as part of value-based payment arrangements.

After a brief background on the principles of value-based payment, the paper is structured around four questions:

1. Why does the quality component of the VBP agenda matter?
2. Which key features of children's health and health care services might have implications for quality measurement selection in the context of VBP?
3. Which measures have other innovative payers and providers used in their child-focused VBP arrangements, and how were they selected?
4. What are some lessons for New York?

This brief was informed by a review of national peer-reviewed reports and relevant gray literature, as well as 18 interviews with state and national payers, providers, and children's health advocates.

A forthcoming report commissioned by UHF and the Schuyler Center for Analysis and Advocacy will also examine VBP arrangements for children, with more attention to the payment side of specific VBP designs and methodologies for children.

Background on Value-Based Payment

The value agenda in health care begins with the notion that our current health care system is failing to deliver high-quality care for the amount of money being spent in the system. Value in health care is commonly understood as “the health outcomes achieved per dollar spent, or the quality payers and consumers are getting for their spending.”⁶ The two dimensions of value—cost and quality—are often described as having a dynamic relationship to one another: value increases if health care outcomes can be optimized while costs are minimized. In a seminal piece on the value agenda in health care, the interaction between costs and outcomes was described quite specifically: “Improving value requires either improving one or more outcomes without raising costs or lowering costs without compromising outcomes, or both.”⁷ Two common strategies for increasing value are (1) avoiding new costs by reducing unnecessary care, including preventable hospitalizations or the medical complications that can emerge from poor care; and (2) shifting care to lower-cost settings.

Value-based payment (VBP) is an umbrella term encompassing several different payment methodologies believed to incentivize providers to deliver more value by encouraging them to contain costs, to improve the quality or outcomes of their care, or both. New York’s Medicaid Value-Based Payment Roadmap spells out which payment methodologies (Levels 1–3 in Table 1) will be considered value-based.⁸

Table 1. Value-Based Payment Methodologies

Level 0 VBP	Level 1 VBP	Level 2 VBP	Level 3 VBP
FFS with bonus and/or withhold based on quality scores (including PMPM subsidy for integrated primary care)	FFS with upside-only shared savings available when outcome scores are sufficient (FFS may be complemented with PMPM subsidy for integrated primary care)	FFS with risk sharing (upside available when outcome scores are sufficient; downside is reduced or eliminated when quality scores are high)	Capitated payment or bundle (with quality-based component)

Source: New York State Department of Health. March 2016. *A Path Toward Value-Based Payment: Annual Update*. Page 18. https://www.health.ny.gov/health_care/medicaid/redesign/dsrip/docs/1st_annual_update_nystate_roadmap.pdf

⁶ Stanek M. February 2014. *Quality Measurement to Support Value-Based Purchasing: Aligning Federal and State Efforts*. Page 3. National Academy for State Health Policy. <http://www.nashp.org/sites/default/files/Quality.Measurement.Support.ValueBasedPurchasing.pdf>

⁷ Porter M and T Lee. October 2013. *The Strategy That Will Fix Health Care*. *Harvard Business Review*. <https://hbr.org/2013/10/the-strategy-that-will-fix-health-care>

⁸ New York State Department of Health. March 2016. *A Path Toward Value-Based Payment: Annual Update*. Page 18. https://www.health.ny.gov/health_care/medicaid/redesign/dsrip/docs/1st_annual_update_nystate_roadmap.pdf

Why the Quality Component of the Value-Based Payment Agenda Matters

Moving from the traditional FFS system to a value-based system is a daunting task. A key strategic decision in this process is identifying what one is trying to achieve through payment reform. In other words, developing VBP arrangements requires “refining a precise definition of value—particularly quality and cost goals—to enable the selection or development of appropriate quality measures.”⁹ Since only a subset of all potential measures available to payers and providers can possibly become embedded in value-based payment contracts—for example, the Medicare Shared Savings Program uses 33 out of hundreds of validated measures to disseminate payment to accountable care organizations (ACOs)—the particular measures that are chosen become key in signaling to providers where their attention should be spent in care improvement. Each value-based payment reform process therefore “reflects its priorities and the understanding of value it is seeking to promulgate and reward” through the selection of cost and quality goals.¹⁰

While the development of child health quality measures has historically lagged behind that of adult measures, the federal Medicaid program has made substantial progress in the last decade in improving the development of child measures, many of which could be used in VBP programs. Much of this work has grown out of Title IV of the Children’s Health Insurance Program (CHIP) Reauthorization Act of 2010, which instructed the Centers for Medicare and Medicaid Services (CMS) to develop performance measures specifically recommended for use by state Medicaid and CHIP programs.¹¹ Updated annually since 2013, this “Child Core Set” of measures—used by New York’s Medicaid managed care organizations—has quickly focused attention on strengthening quality of care for children (see Appendix A for the 2016 Core Set). It has also spawned the development of new child health measures, following the recognition that “many important priorities for quality measurement and improvement do not yet have metrics available to address them.”¹² As a result, additional measures are recommended to be phased in over time. Appendix B includes six measures that were recommended in August 2015 for phased addition to the Child Core Set.

And yet there are few national standards or models for guiding the selection of child-focused cost and quality goals specifically in the context of value-based payment. The Medicaid Child Core Set, while potentially a good source of VBP quality measures, was not designed

⁹ Stanek M. February 2014. *Quality Measurement to Support Value-Based Purchasing: Aligning Federal and State Efforts*. National Academy for State Health Policy. <http://www.nashp.org/sites/default/files/Quality.Measurement.Support.ValueBasedPurchasing.pdf>

¹⁰ Stanek M. February 2014. *Quality Measurement to Support Value-Based Purchasing: Aligning Federal and State Efforts*. National Academy for State Health Policy. <http://www.nashp.org/sites/default/files/Quality.Measurement.Support.ValueBasedPurchasing.pdf>

¹¹ Brooks T. March 2016. *Measuring and Improving Health Care Quality for Children in Medicaid and CHIP: A Primer for Child Health Stakeholders*. Georgetown University Health Policy Institute, Center for Children and Families. http://ccf.georgetown.edu/wp-content/uploads/2016/03/Measuring_Health_Quality_Medicaid_CHIP_Primer.pdf

¹² Measure Applications Partnership. August 31, 2015. *Strengthening the Core Set of Healthcare Quality Measures for Children Enrolled in Medicaid and CHIP, 2015*. National Quality Forum.

for VBP purposes. Although the 2010 Affordable Care Act authorized funding for a pediatric ACO demonstration led by CMS, the funds were never appropriated. Nor have child health needs been a prominent focus in subsequent CMS efforts to lead the country toward VBP. Little information is available on commercial VBP contracts for children but public-private efforts to align approaches have primarily focused on adult health services. Child measures were not included in the February 2016 aligned measure set from CMS and America's Health Insurance Plans (AHIP, a national trade association for health plans) for use by ACOs and Patient-Centered Medical Homes, although reportedly the American Academy of Pediatrics is developing a similar set for adoption.¹³ Notably, a few children's health measures have been included within New York's own efforts to align measures for "Advanced Primary Care" (a state medical home initiative for commercial payers analogous to the CMS/AHIP process), and within New York's Delivery System Reform Incentive Payment program (DSRIP, a federal Medicaid waiver program). Many of these measures could be looked to by the Medicaid VBP process for adoption.

While the number of pediatric value-based payment arrangements seems to be growing, early evidence from a review of a few emerging VBP arrangements suggests the quality component of children's VBP is underdeveloped. A 2015 survey of children's hospitals identified 12 existing or planned pediatric accountable care arrangements.¹⁴ All of the arrangements were directly with Medicaid or a Medicaid managed care organization. Four of the arrangements were classified as shared-savings, one was considered shared-risk, and the remaining seven were full prospective capitation (of which three had carved-in behavioral health services).¹⁵ The survey found that the quality component of those arrangements were underdeveloped in comparison to the goals, incentive programs, and strategies that were in place for achieving cost reductions. None of the ACOs were required to perform well on quality measures as a prerequisite for receiving shared savings, although some of the hospitals chose to distribute incentive payments to providers based on quality performance. Leaders of the ACOs observed that "payers did not come to contract negotiations equipped with pediatric-focused quality metrics." Most of the quality measures that were employed were drawn from the National Committee for Quality Assurance's HEDIS measure set, and primarily measured care processes or utilization. The authors concluded that many pediatric accountable care structures have failed to identify how VBP can result in health improvements for children.¹⁶

¹³ Conversation with Ellen-Marie Whelan, Chief Population Health Officer, Center for Medicaid and CHIP Services.

¹⁴ The survey defined ACOs as hospitals with existing or planned accountable care or accountable care-like entities, self-identified based on similar criteria to the Medicare accountable care requirements based in federal regulation.

¹⁵ The authors used a modified version of the three tiers of classification for financial arrangements developed by Shortell, Casalino, and Fisher. Shortell SM, LP Casalino LP, and ES Fisher. July 2010. How the Center for Medicare and Medicaid Innovation Should Test Accountable Care Organizations. *Health Affairs* 29(7): 1293-8.

¹⁶ Makni N, A Rothenburger, and K Kelleher. 2015. Survey of Twelve Children's Hospital-Based Accountable Care Organizations. *Journal of Health Care Management* 4(2):64-73.

Key Features of Children’s Health with Implications for Measure Selection in VBP Arrangements

Ensuring that VBP results in improved *value* for children requires taking into consideration the ways in which children’s health and health care services differ from those of the adult population. Key considerations identified through interviews and a review of published literature fall into three major categories: the relative prominence of preventive measures in children’s health; the relatively small number of children with special health care needs; and the confounding effects of different developmental stages with different medical emphases. Detail on each follows.

1. Children’s health care is primarily prevention-oriented.

The majority of children are the healthiest they will ever be in life. For these children, the aim of pediatric care is to maintain and promote optimal physical, mental, and cognitive health. There is a strong body of evidence that investments in preventive care early in life, including the promotion of early childhood development, can keep children on a healthy trajectory. Interviews identified multiple ways in which the prevention orientation of children’s health care might pose challenges to traditional VBP arrangements:

The impact of prevention can be hard to measure. First, measuring the outcome of prevention efforts requires detecting the absence of disease or disability when there otherwise would be such morbidity, which can be methodologically complex.¹⁷ It can be difficult to isolate that precise contribution the health care system should make to overall child health and well-being given the many outside influences on a child’s health. Socioeconomic influences can have a large and cumulative effect on a child’s health. Some notable pediatricians have suggested that well-child care “should be guided by a predetermined set of measurable outcomes for which providers should be held accountable, as well as other outcomes to which they should be expected to contribute.”¹⁸ One list of potential outcomes, proposed by Edward Schor in his article “The Future Pediatrician: Promoting Children’s Health and Development,” is included in Appendix C.

The cost savings from pediatric prevention efforts are often only realized in the long term. The most prevalent health challenges for children are often developmental and behavioral in nature. Preventing these conditions can have significant health and societal payoffs but can take many years to observe. The most common VBP arrangements are built around 12-month budget cycles and their associated quality measures, which tend not to reward providers for making upfront, long-term investments that can alter the health trajectory of an individual. This does not mean to suggest that there are *no* short-term savings and health care improvements to be generated from pediatric primary care. Reducing avoidable asthma hospitalizations and

¹⁷ Beal AC et al. January 2004. Quality measures for children’s health care. *Pediatrics* 113(1 Part 2): 199-209.

¹⁸ Schor EL. November 2007. The Future Pediatrician: Promoting Children’s Health and Development. *Journal of Pediatrics* 151(5): S11–S16.

diverting care from the emergency department to primary care are two frequently cited opportunities. But these short-term opportunities are relatively minor in comparison to adult care and in comparison to the long-term savings and health improvements that come from upstream investments, like the early prevention of behavioral disorders¹⁹ or preventing early childhood dental caries.

Many notable benefits from pediatric prevention efforts accrue to sectors outside the health care system. Many benefits of strong pediatric primary care yield benefits to sectors other than health care, which poses questions for how these benefits could be accounted for as part of VBP arrangements. For example, while good asthma management can reduce unnecessary hospitalizations, it is far more likely that it will prevent missed school days. Reducing that number is a benefit to the health of a child and to society more generally, but is more difficult to observe from a health care lens. Similarly, several studies of primary care wraparound services that promote early childhood development have yielded significant improvements in child well-being and cost savings—but often by avoiding learning disorders, with implications for special education budgets.²⁰ This means health insurers, including public health insurance programs like Medicaid, currently see little benefit from investing in these kinds of programs and few data systems have been built to capture cross-system quality outcomes.

Many effective prevention interventions are currently grant-funded, and therefore are not part of a health insurer's costs. Several evidence-based interventions for preventing physical and mental health problems (e.g., Triple P Positive Parenting and Healthy Steps) are not yet incorporated into routine pediatric primary care through the FFS system. Under VBP, pediatric providers could have the flexibility to invest in these programs, but that would only be feasible if the cost benchmark took into account these new costs on top of historical spending. Adoption of such programs would be aided by the development of new process and outcome measures that can document improved child health and behavioral/cognitive functioning as an expected result of primary care prevention activities.²¹ Such measures would need to be balanced with providers' desire to align quality measures across payers and the tendency toward nationally endorsed, validated measures rather than “homegrown” measures.

2. Proportionally, there are fewer high-cost, high-need patients among children than adults—but those children have specific care needs that should be safeguarded in VBP arrangements.

An estimated 13,000 children in New York Medicaid are considered to be medically fragile, generally meaning they have a chronically debilitating condition or conditions.²²

¹⁹ Kelleher KJ and K Hoagwood. January–February 2015. Will Health Care Reform Rescue Families in Crisis? *Academic Pediatrics* 15(1): 1–2. <http://www.sciencedirect.com/science/article/pii/S1876285914003957>

²⁰ Center for Health Care Strategies. July 2014. *Intensive Care Coordination Using High-Quality Wraparound for Children with Serious Behavioral Health Needs: State and Community Profiles.*

²¹ Perrin EC, LK Leslie, and T Boat. May 2016. Parenting as Primary Prevention. *JAMA Pediatrics* (online). <http://archpedi.jamanetwork.com/article.aspx?articleid=2522754>

²² https://www.health.ny.gov/health_care/medicaid/redesign/docs/2013-01-24_final_mfc_wrkgrp_rpt.pdf

These children are part of a broader classification—children with special health care needs—that includes congenital anomalies, physical disabilities, sickle cell disease, behavioral health conditions, and severe cases of common conditions such as asthma. Because these children represent such high costs within the pediatric population, they are frequently considered a potential focus of value-based payment arrangements.

There are two dominant considerations in this area. First, the conditions and illnesses called “special health care needs” often differ from those that affect adults. Even when there are similar strategies in caring for adults and children—e.g., reducing costs by shifting to home- and community-based intensive care management services—the structure and intensity of services involved may differ dramatically across age groups.

Second, the relatively small numbers of chronically sick children make it difficult to reliably distinguish the effects of a provider’s care from random variation. (Larger sample sizes make it easier to reliably detect the real effects of provider’s care.) Additionally, lumping together small groups of children with such different conditions and needs into a single “children with special health care needs” group can make it hard to identify specific outcome measures.

3. Standards for appropriate and high-quality care can differ across developmental stages.

Finally, health care utilization, preventive needs, and standards for appropriate care differ as a child ages and moves through developmental stages. CMS’s recent focus on improving the quality of child health measures has particularly contributed to the development and use of quality measures specific to each age group. This has been a large step forward, as a 2004 review of child health measures identified 396 measures used to assess children’s health care quality, yet there was a lack of health care quality measures specific to each age group, including none applied to school-age children.²³ It is also likely that the pool of child health measures will continue to improve and expand over time.²⁴

Influencing all of the considerations above is the environmental context in which child health providers are operating. Across the board, interviewees noted that most child-focused VBP arrangements are still in the pay-for-performance stage²⁵, while there seems to be more uptake of shared savings, shared risk, bundled care, and full capitation in Medicare-driven VBP arrangements. Interviewees also wondered whether child health providers are as ready to take on risk from payers, given that pediatric-focused EMRs have been slow to emerge²⁶ and only a few of the projects under New York’s Delivery System Reform Incentive Payment program are oriented toward children’s health care.

²³ Beal AC et al. January 2004. Quality Measures for Children’s Health Care. *Pediatrics* 113(1 Part 2): 199-209.

²⁴ National Quality Forum. August 2015. *Strengthening the Core Set of Healthcare Quality Measures for Children Enrolled in Medicaid and CHIP, 2015: Final Report*. Page 2. http://ccf.georgetown.edu/wp-content/uploads/2016/03/Measuring_Health_Quality_Medicaid_CHIP_Primer.pdf

²⁵ New York Medicaid does not consider pay-for-performance to be VBP.

²⁶ <http://www.ahrq.gov/policymakers/chipra/index.html>

Case Studies: Measures and Processes Used by Innovative Payers and Providers in Child-Focused VBP Arrangements

Three case studies from across the country offer insight into how payers and providers have approached VBP for the populations they serve, with particular attention paid to how they have defined value and selected quality measures.

I. Oregon Coordinated Care Organizations

Description of Provider and Payer In 2012 the Oregon Health Authority, which oversees the state’s Medicaid program, created risk-bearing, locally governed provider networks called Coordinated Care Organizations (CCOs).²⁷ CCOs are given a global budget (a mix of capitated and non-capitated payments) that grows at a fixed rate, and they are accountable for providing all Medicaid enrollees with physical and behavioral health services, as well as dental care. The CCOs are eligible to receive incentive payments based on their performance on a core set of quality measures, which are reevaluated annually by a statewide Metrics and Scoring Committee.²⁸

Origin and Description of Arrangement Oregon’s Medicaid reform process is notable for its thoughtful consideration of how children’s health services could be affected by, and improved through, value-based payment. Four key factors affected how Oregon incorporated child health measures into its VBP process:²⁹

1. The Oregon Health Authority established a Child Health Director role with an explicit goal of thinking about how children’s health care services fit within health system transformation.
2. The Oregon legislature passed a bill requiring CCOs and their community advisory councils to “adopt health improvement plans that include strategies for improving the integration of all services provided to meet the needs of children and their families,” and to report back on their progress.³⁰ The bill acknowledged that many CCO efforts would likely focus on adults with serious chronic or mental health conditions and high utilization of emergency departments, given the CCOs’ cost-control mandate. But it also acknowledged “many prevention programs and children’s health programs [that] have been in place for a long time and have a proven record of success,” suggesting its

²⁷ Oregon Health Authority. *Coordinated Care: the Oregon Difference*. <http://www.oregon.gov/oha/OHPB/pages/health-reform/ccos.aspx>

²⁸ Oregon Health Authority. *Where We Are and Where We’re Going: Rate Setting for Coordinated Care Organizations*. http://www.oregon.gov/oha/analytics/Documents/Rates%20Policy%20Brief%202015_4_27.pdf

²⁹ Author interviews with Dana Hargunani, former Child Health Director, Oregon Health Authority, and Sarah Bartelmann, Metrics and Evaluation Manager, Health Policy and Analytics, Oregon Health Authority.

³⁰ Oregon Senate Bill 436. Oregon Senate Bill 436. http://www.oregon.gov/oha/Transformation-Center/Resources/SB436_FINAL_report-0107152.pdf

emphasis on health metrics that are balanced not only across measure domains but also across age groups.

3. Two of the nine initial members of the committee responsible for setting CCO metrics were pediatricians, and several other members were highly attuned to the importance of driving positive child health outcomes as both an immediate and long-term strategy for achieving the Triple Aim.

4. Oregon simultaneously undertook a reform of its Early Learning System; while addressing children's health and well-being across systems may not have been the intent, Oregon took the opportunity to do so. A joint measures workgroup was established in 2014 and charged with recommending to the State additional accountability measures for joint adoption between CCOs and the early learning system.³¹

Value/Goal Articulation The committee overseeing metric setting for CCOs defined value as achieving the Triple Aim, with an emphasis on improving quality and achieving better health outcomes for Medicaid beneficiaries.

The joint measures workgroup naturally thought of value differently, and it developed a definition of child and family well-being to guide its measure selection process. They defined child and family well-being as being "when families are happy, healthy, and successful in achieving their own life goals." The group elected to focus on measures for families with children between the ages of 0 and 6.

Measure Selection Among several more traditional health measures, kindergarten readiness was singled out as a potential measure of keen interest to the joint measures workgroup. Proponents felt that it would be transformative for Oregon's Medicaid program, while others felt that including it would be too ambitious, as kindergarten readiness is driven by many factors outside the control of the health system, and pointing to the difficulty of connecting a multi-year outcome to a 12-month payment cycle. Eventually, the joint measures workgroup defined a bundle of measures that collectively represent kindergarten readiness (included in Appendix D), but delayed recommending its use until CCO and Early Learning Hub data systems become advanced enough to collect the component outcome measures and generate a single measure for Kindergarten Readiness. The group also recommended a phased approach for developing those information systems.

The committee setting CCO measures has continued to refine measures and take recommendations from external stakeholders, including those developed by the joint measures workgroup. Of the 17 measures included in the 2016 incentive measure set for CCOs, 12 are applicable or specific to children (Table 2).

³¹ The Joint Subcommittee of the Early Learning Council and the Oregon Health Policy Board. September 11, 2015. *Child & Family Well-Being Measures Workgroup: Final Report and Recommendations*. <https://www.oregon.gov/oha/Documents/Child-Family%20Well-Being%20Measures.pdf>

Table 2. Oregon: Oregon Health Authority’s Incentive Measures for Children, 2016

Adolescent well-care visits (NCQA)	Prenatal and postpartum care: timeliness of prenatal care (NQF 1517)
Childhood immunization status	Alcohol or other substance misuse (for ages 12 and up)
Dental sealants on permanent molars for children	Emergency department utilization
Developmental screening in the first 36 months of life	Enrollment in a patient-centered primary care medical home
Effective contraceptive use among women at risk of unintended pregnancy	Depression screening and follow-up plan (for ages 12 and up)
Mental, physical, and dental health assessments within 60 days for children in DHS custody	Tobacco prevalence (for ages 13 and up)

Note: Criteria following those of National Committee for Quality Assurance (NCQA) and National Quality Forum (NQF) are noted in the table.

Reflections to Date

While some child health advocates say the CCO measures have “not gone far enough” in terms of encouraging better outcomes for children, the CCO Metrics and Scoring Committee feels it has been effective at focusing CCO attention on specific quality improvement efforts for specific populations, and that over time the set will evolve to be more outcome oriented. The December 2014 Oregon Health Authority report to the Oregon legislature found widespread inclusion of child health improvement efforts across CCOs, with a focus on strengthening primary care, behavioral health, and oral health services, and addressing health promotion. Between 2014 and mid-2015, the CCOs significantly improved some key child health measures: developmental screenings, provision of dental sealants, and timely health assessments for children in foster care.³²

As for the kindergarten readiness measure, The Joint Committee of the Health Policy Board and Early Learning Council generally endorsed the bundle and asked staff to develop a work plan and report back in mid-2016.

³² For greater detail on these improvements, see the “Quality and Access by Metric” page of the Oregon Health Authority’s website: <http://www.oregon.gov/oha/Metrics/Pages/measures.aspx>

2. Partners for Kids and Nationwide Children’s Hospital

Description of Provider and Payer	Nationwide Children’s Hospital is a large academic medical center located in Columbus, Ohio, with over 1 million patient visits per year. In 1994, Nationwide Children’s Hospital partnered with community physicians to create the physician-hospital organization Partners for Kids. Partners for Kids (PFK) is frequently referred to as the first pediatric ACO in the country. It currently receives sub-capitated payments from all five of Ohio’s Medicaid managed care organizations, making PFK financially responsible for all health care services for all Medicaid beneficiaries aged 0 to 18 years in a 34-county region in central and southeast Ohio. This includes income-eligible children and the Medicaid category of the aged, blind, and disabled.
Origin and Description of Arrangement	<p>The Partners for Kids ACO was not created as part of a state shift to value-based payment, as Oregon’s efforts were. It was driven instead by the partnering organizations themselves, as both parties believed they could have greater influence over cost and quality outcomes for low-income children than Ohio’s managed care organizations. Executive leadership at Nationwide Children’s Hospital and Partners for Kids believed that since the hospital and physicians were already clinically responsible for a large group of children, it would be reasonable to assume financial responsibility for them too, with the benefit of being able to retain savings if the care cost less than the capitated amount.</p> <p>The sub-capitation arrangement is structured so Partners for Kids is paid a monthly age- and gender-adjusted capitation rate for each beneficiary. Partners for Kids is considered by the Ohio Department of Insurance to be the financial risk-bearer (an intermediary organization) but the managed care organizations provide several standard insurance management functions, including claims processing and member relations services.</p>
Value/Goal Articulation	In general, PFK views the value equation for children to be similar to the one for adults: it is “outcomes over cost,” where improving the value of care is achieved by reducing the cost of care while either maintaining or improving quality. PFK has noted, though, that the value-creation strategy for children differs in a few ways. First, PFK views its work with children as setting a member of society on a specific health path or health trajectory with 60+ year implications. This means that even small improvements in health and health care can, over the long term, bring large benefits. Second, given the outsized role families and the education system play on a child’s health, PFK invests in prevention efforts within homes and schools. A key strategy for PFK in improving value has been embedding two behavioral health prevention interventions (the Good Behavior Game and Signs of Suicide) in classrooms—and measuring access to those preventive services. Finally, while controlling comorbidities can be a key strategy for cost-reduction in adults (even with small populations of adults), comorbidities are rare among children. Without being able to rely on that key strategy, PFK has relied on having a large attributed population and the ability to provide interventions over broad swaths of the population in order to alter and detect changes in utilization patterns. The key difference is in a targeted vs. population-based approach to health improvement.
Measure Selection	In 2015 PFK and Nationwide Children’s Hospital used 37 measures to track the progress of their population health efforts. The measures fall into six domains, ranging from access

to preventive care (“health supervision”) to high-quality care for high-cost subpopulations.³³ Five measures (noted in Table 3 with an asterisk) come directly from Ohio’s pay-for-performance incentive system for managed care plans in 2015.³⁴ PFK receives a financial incentive from the managed care plans to perform well on these measures. Each year PFK also selects several measures to include in a pay-for-performance incentive program for its non-salaried physicians, who are primarily still paid on an FFS basis. These measures tend to be the same as those selected by the State.

Table 3. Ohio: PFK and Nationwide Children’s Hospital Outcome Measures for Children, 2015

<p>Asthma</p> <p>Asthma emergency department visits (excluding disabled population)</p> <p>Asthma inpatient admissions (excluding disabled population)</p> <p>% Practices per month with mean asthma control test score >=20</p> <p># Asthma pts enrolled in asthma control programs / month</p> <p>Students receiving medications from school nurse</p> <p>Schools with students receiving medications</p> <p>Asthma patients seen for asthma visit within previous 6 mos</p> <p>% Pts with persistent asthma using controller medications</p> <p>90-day asthma ED return rate for asthma express patients referred during a hospitalization</p> <p>% Hospitalized asthma patients who have a PCP appointment scheduled at time of discharge</p> <p>Behavioral Health (BH)</p> <p>Follow-up with BH provider within 7 days of discharge from BH inpatient stay (HEDIS FUH)*</p> <p># Classrooms receiving BH prevention interventions (Good Behavior Game and Signs of Suicide)</p> <p>% New BH intake assessments that are scheduled within 30 days from time of first contact</p> <p>Complex Care</p> <p># Patients in high-risk care coordination</p> <p>Inpatient admissions /100 patients in feeding tube cohort</p> <p>% Medicaid pts in feeding tube cohort with acceptable weight</p>	<p>Healthy Neighborhoods, Healthy Families</p> <p>Housing: number of vacant/abandoned lots cleaned</p> <p>Workforce: number of community residents employed by NCH</p> <p>Property crimes per 1,000 residents of census tract 5610</p> <p>Number of houses refurbished</p> <p>Health Supervision</p> <p>Well-child visits: at least 6 in the first 15 months</p> <p>Well-child visits: annual, ages 3–6 yrs</p> <p>Well-child visits: annual, ages 12–18 yrs *</p> <p>Appropriate treatment of upper respiratory infection*</p> <p>Child and adolescent access to primary care, 12–24 mos</p> <p>Child and adolescent access to primary care, 25 mos–6 yrs</p> <p>Child and adolescent access to primary care, 7–11 yrs</p> <p>Child and adolescent access to primary care, 12–19 yrs</p> <p>Perinatal/Newborn Care</p> <p>Infant mortality rate</p> <p>Preterm (<37 weeks) birth rate</p> <p>% Babies born with weight <2,500 grams</p> <p>NICU days / 1,000</p> <p># LARC insertions in Franklin Co. patients seen at any NCH clinic</p> <p>% Pregnant teens who receive a prenatal care visit in the first trimester*</p> <p>% Women who receive at least 81% of recommended prenatal care</p> <p>% Women who receive post-partum visit between 21 and 56 days post-delivery*</p> <p>NICU days for Neonatal Abstinence Syndrome babies</p>
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* Drawn from Ohio’s pay-for-performance incentive system for managed care plans in 2015.

³³ The measures dashboard also includes four measures related to the hospital’s *Healthy Neighborhoods, Healthy Families* initiative, which is a public-private partnership that seeks to remove barriers to the health and well-being of residents of the communities surrounding the hospital. PFK views the initiative as both a way to reinvest back into the community some of the savings it has accrued and as a way to pilot new approaches to influencing social determinants of health.

³⁴ The two measures not included on PFK’s dashboard are measures for controlling high blood pressure and comprehensive diabetes control. The Ohio Department of Medicaid. July 2014 (Amended January 2015). *Ohio Medical Assistance Provider Agreement for Managed Care Plan*. See Appendices M and O. <http://medicaid.ohio.gov/Portals/0/Providers/ProviderTypes/Managed%20Care/Provider%20Agreements/SFY2015-ManagedCare-PA.pdf>

Reflections to Date

From 2008 to 2013, PFK controlled cost growth for its Medicaid population compared to Ohio's statewide FFS Medicaid and managed care plans; the quality of its care over the same period remained generally stable, with some small improvements and some minor deterioration on specific measures.³⁵ While PFK believes the cost savings it has seen will contribute to its short-term success, it is disappointed by the more modest impact on quality outcomes and believes ACOs should be able to improve quality as part of their value proposition. The ACO partially faults the lack of change in quality results to the challenge of reliably measuring a change in outcome for many specialty pediatric conditions, even with an attributed population of 300,000 patients. It also plans to make greater investments in building a robust quality improvement infrastructure in the near future.

Reflections on PFK's experience to date reveals a tendency to focus on health outcomes that can be achieved through well-researched, evidence-based interventions and a desire to move from process measures to outcome measures. Both characteristics are partial explanations as to why asthma features so prominently in the measure set. Finally, PFK is seeking to balance improving primary care quality with controlling costs. It sees few opportunities for cost reduction within primary care aside from pharmaceutical spending, especially on psychotropic medications, and it is expanding its strategy to directly engage pediatric subspecialists on cost control.

³⁵ Kelleher KJ et al. March 2015. Cost saving and quality of care in a pediatric accountable care organization. *Pediatrics* 135(3):e582–e589.

3. Colorado Pediatric Collaborative

Description of Provider and Payer	Colorado Pediatric Collaborative is a non-profit organization formed in 2011 to help child-serving primary and specialty physicians adjust their practices to have a greater focus on quality of care. The Collaborative currently has value-based contracts with two commercial payers, Anthem and Aetna, covering over 200,000 children. Both contracts are shared-savings arrangements that include a PMPM care management fee paid by the payers to help cover the costs of quality coaches and other infrastructure necessary to run quality initiatives. The Anthem contract also includes a slight increase in the resource-based relative value assigned to pediatric services, which results in increased payment for pediatricians.
Origin and Description of Arrangement	<p>The origin of the Collaborative dates back to the 1990s HMO era of contracting when local pediatricians formed an IPA to give greater voice to pediatricians at the contracting table. After the Colorado market moved away from HMOs, the Collaborative evolved to have new life as a quality improvement entity.</p> <p>One of the first quality improvement efforts it initiated was an asthma registry for its participating physicians; it used the data to develop targeted quality improvement strategies. That effort demonstrated lower costs in terms of emergency department utilization and yielded significant improvements to health and well-being, including fewer missed school days for children and fewer missed work days for parents. Later efforts focused on improving immunization rates and obesity prevention.</p> <p>When interest rose in value-based payment, the Collaborative was well positioned—with its history of cost containment and quality improvement—to accept performance- and risk-based contracts with payers. In 2012 Anthem, reportedly interested in the Collaborative’s organizational infrastructure and quality improvement skills, approached the Collaborative with a set of pediatric measures and ambitions to start a value-based program with pediatric primary care physicians and the Children’s Hospital of Colorado. The program began as a pay-for-performance program, and then evolved into a shared-savings arrangement with a care management fee.</p>
Value/Goal Articulation	The Collaborative views value as “effectively treating and preventing pediatric health issues.”
Measure Selection	The Collaborative’s contract with Anthem focused on three domains: chronic and acute disease, preventive health care, and utilization. Measures with an asterisk are scored on a quality improvement basis.

Table 4: Colorado: Colorado Pediatric Collaborative’s Outcome Measures for Children

Chronic and Acute Care	Preventive Care
Appropriate testing for pharyngitis*	Childhood immunization status: measles, mumps, and rubella (MMR)
Appropriate treatment of upper respiratory infection	Childhood immunization status: varicella (VZV)
Diabetes care: HbA1c score*	Well-child visits, ages 0–15 months
	Well-child visits, ages 3–6 years*
	Well-child visits, ages 12–21 years
Utilization	
Potentially avoidable emergency department rates	
Pediatric ambulatory sensitive care hospital admissions	
Generic dispensing rate	

* Measures scored on a quality improvement basis.

Reflections to Date

In contrast to the two case studies above and many other child-focused value-based payment arrangements, the Colorado Pediatric Collaborative has had success in attracting commercial insurer interest. Part of this might be due to Anthem’s own innovative culture, but it is also due to the leadership of Colorado’s Medicaid program, which through the development of Regional Care Collaborative Organizations (a primary care-centered accountable care model) initiated some exploration of value-based arrangements by Colorado’s child-serving providers.

For the 2014–15 performance year, the Collaborative successfully met its Anthem quality targets and accrued savings that will be distributed to its participating physicians. The Collaborative partially credits this performance to the robust quality improvement infrastructure it already had in place. As the Collaborative looks to move toward a shared-risk contract, it will need to define the risk corridors of such an arrangement; it has had some experience doing so under capitation. The Collaborative knows firsthand that it can be challenging to accept risk for pediatric sub-populations due to either small population size or the diversity of conditions in a given sub-population, which can make it hard to standardize care approaches.

The Collaborative identified four care domains where accepting risk requires sophisticated data management systems and experienced staff: NICU, oncology, accidental trauma, and special needs. It views behavioral health as a high-risk opportunity for savings and care improvement. The Collaborative also emphasized several considerations for selecting quality measures for pediatric populations. First is for the need to understand how “appropriate care” may differ across developmental stages. For example, while imaging for a 13-year-old may not differ greatly from that for an adult, imaging for a 3-year-old is very different; even if the imaging is appropriate it might require sedation. Second is the major role families and the education system play in influencing the health of a child. While the Collaborative sees potential strategies for significantly engaging families and the education system in improving child health outcomes, it sees barriers to such engagement as well.

The Collaborative suspects it will only be able to accrue savings for a few more years, when its emphasis will shift to the “next version” of VBP—developing strategies to improve the long-term health of the population. Whether there is benefit to commercial insurers in pursuing such a strategy remains an open question for the Collaborative.

Lessons for New York State

A Taskforce on Children and Adolescents and a Clinical Advisory Group on Special Needs Kids, with mandates along the lines suggested in this report, could have a considerable effect on children's health and health care services in New York. The launch of these groups would give New Yorkers the opportunity—and the responsibility—of carefully considering how VBP can be applied to Medicaid's child beneficiaries. The unique features of children's health, and the experiences of other providers and payers that have already engaged in VBP arrangements, can inform these deliberations. A few themes have emerged: the importance of Medicaid leadership in promoting children's health quality, the role of measures in marking progress toward the achievement of long-term goals, the complexity inherent in reliably measuring quality improvement among small subpopulations of vulnerable children, and the opportunity to build upon the primary care platform.

Government and public programs, particularly Medicaid, have historically led in the development and use of child health quality measures and have good reasons to continue to do so. Medicaid and CHIP insure 40 percent of all children nationally and consequently have a significant stake in managing the health risks of childhood. Public programs are far more likely than commercial insurers to have an incentive in making investments that are long-term and have benefits across numerous systems. As such, New York's Medicaid program, in particular, has a unique opportunity to ensure that the VBP arrangements that emerge from this process are supportive of long-term health and development. The risks of not doing so are clear: without a clear mandate or framework for using child health quality measures as part of VBP arrangements, the quality dimension of “value” could be woefully underdeveloped.³⁶ New York Medicaid should continue to play a lead role in ensuring the use of increasingly sophisticated quality measures. Integration of those measures into VBP arrangements will become the primary vehicle for encouraging their widespread use.

New York's current child health measures are a solid start for thinking about what incentives VBP arrangements should include, but high-value care for children goes beyond what is currently measured. The State should consider establishing a process for adopting more ambitious measures that match its long-term goals for child health and well-being. Common to all the case studies included here was the process of refining measure sets in order to achieve more ambitious goals over time. Interviewees provided examples of child health goals (e.g., preventing avoidable emergency department visits) that have standardized, valid, reliable measures and could be immediately incorporated into VBP arrangements. Leaders in each organization were also simultaneously planning to pursue more aspirational goals for children's primary care services, like improving the overall health trajectory of children. New York can take a similar approach with the following steps:

- Begin with an initial set of child health quality measures that reflect New York's immediate goals for improving child health, stemming from recommendations from

³⁶ Makni N, A Rothenburger, and K Kelleher. 2015. Survey of Twelve Children's Hospital-Based Accountable Care Organizations. *Journal of Health Care Management* 4(2):64-73.

the proposed Taskforce on Children and Adolescents and the Clinical Advisory Group for Special Needs Children. Most of these should be accountability measures, as such measures can be used immediately in value-based contracting. This set should include measures for both the general pediatric population and vulnerable subpopulations, and be balanced across developmental stages. Both the Medicaid Child Core Set and New York’s draft APC measure set include some well-child measures that could be drawn on for performance measures. New York’s Medicaid program may also want to add a small number of more ambitious outcome measures that are *not* linked to payment but are used on a reporting-only basis, in order to test any new or emerging measures not yet nationally endorsed.

- Build up experience among Medicaid providers and risk-bearing entities with using this initial set of child health measures, focusing on quality improvement and the development of core capacities—such as data analysis and care management—necessary for moving toward more population health outcome measures.
- Establish an entity, such as a children’s health quality steering committee, that takes a long-term view. Such an entity could (1) monitor over several years whether the initial quality measures used in VBP are achieving the child health goals identified at the outset of the process; and (2) recommend changes to the measure set to be consistent with emerging science, demonstrate continuous improvement, and orient the measures toward outcomes.
- Once experienced with the general approach of establishing and refining quality measures within the health care domain, work with other State agencies to consider more ambitious measures, such as cross-sector measures of success.

Monitoring and refining measures over time can ensure that the Medicaid program is collectively progressing toward long-term goals without moving beyond the maturity of data systems and provider experience with population health management.

Ensuring that children with special needs receive high-quality care amid cost reductions incentivized by value-based payment is critically important—and potentially complex. The development of a Clinical Advisory Group for Special Needs Children is a necessary step for ensuring that vulnerable children receive high-quality care as the Medicaid program transitions to value-based payment. The group will need to work through several challenging issues: (1) distinguishing the appropriateness of different payment methods for different kinds of vulnerable children, ranging from medically fragile populations to foster care children; (2) determining which quality measures should be used as “balancing measures” to ensure that VBP, if applied to special needs children, does not have unintended consequences for care; and (3) sorting through the methodological challenges that will arise if child health providers are held accountable for achieving outcomes among small subpopulations of children.

Given frequent primary care use by children, VBP measures could encourage primary care providers to integrate (or actively coordinate) oral health services, behavioral health services, and interventions for addressing social determinants of health. One of the most distinctive elements of children’s health care utilization is the

relatively high use of primary care—by both the general “well” population and children with special health care needs—compared to adults. Compared to other states, New York performs well on access to primary care, both in terms of the frequency of well-child visits and the length of time it takes to schedule appointments. The broad availability of primary care provides a platform for considering how to integrate, or link to, other child health services. Primary care providers should not be held accountable for problems they cannot fix, such as shortages of specialists; however, they could be rewarded (through incentive measures) for using tested but innovative means to increase access to oral and behavioral health prevention and treatment services. Incentive measures can also be used to encourage primary care providers to address social determinants of health when they are able to do so—for example, by promoting pre-reading skills.

The health care system is clearly moving toward value-based payment, and New York Medicaid is at the forefront of this shift. Ensuring that value-based payment leads to health improvements for all New Yorkers will require a dedicated process to apply VBP principles appropriately to children’s health services. This planning must take into account how value should be defined for children and how to measure that value. With this orientation in mind, New York will be poised to be a national leader in using payment reform to improve health outcomes for its youngest residents.

Appendix A. 2016 Core Set of Children’s Health Care Quality Measures for Medicaid and CHIP (“Child Core Set”)

Measure Category and NQF Code	Measure Steward	Measure Name
Access to Care		
NA	NCQA	Child and Adolescents’ Access to Primary Care Practitioners (CAP)
Preventive Care		
0033	NCQA	Chlamydia Screening in Women (CHL)
0038	NCQA	Childhood Immunization Status (CIS)
1392	NCQA	Well-Child Visits in the First 15 Months of Life (W15)
1407	NCQA	Immunizations for Adolescents (IMA)
1448	OHSU	Developmental Screening in the First Three Years of Life (DEV)
1516	NCQA	Well-Child Visits in the Third, Fourth, Fifth and Sixth Years of Life (W34)
1959	NCQA	Human Papillomavirus Vaccine for Female Adolescents (HPV)
NA	NCQA	Adolescent Well-Care Visit (AWC)
Maternal and Perinatal Health		
0139	CDC	Pediatric Central Line-Associated Bloodstream Infections – Neonatal Intensive Care Unit and Pediatric Intensive Care Unit (CLABSI)
0471	TJC	PC-02: Cesarean Section (PC02)
1382	CDC	Live Births Weighing Less Than 2,500 Grams (LBW)
1391	NCQA	Frequency of Ongoing Prenatal Care (FPC)
1517	NCQA	Prenatal & Postpartum Care: Timeliness of Prenatal Care (PPC)
1360	CDC	Audiological Evaluation No Later Than 3 Months of Age (AUD)*
NA	AMA-PCPI	Behavioral Health Risk Assessment (for Pregnant Women) (BHRA)
Behavioral Health		
0108	NCQA	Follow-Up Care for Children Prescribed Attention-Deficit/Hyperactivity Disorder (ADHD) Medication (ADD)
0576	NCQA	Follow-Up After Hospitalization for Mental Illness (FUH)
1365	AMA-PCPI	Child and Adolescent Major Depressive Disorder: Suicide Risk Assessment (SRA)
NA	AHRQ-CMS CHIPRA NCINQ	Use of Multiple Concurrent Antipsychotics in Children and Adolescents (APC)*
Care of Acute and Chronic Conditions		
0024	NCQA	Weight Assessment and Counseling for Nutrition and Physical Activity for Children/Adolescents – Body Mass Index Assessment for Children/Adolescents (WCC)
1799	NCQA	Medication Management for People with Asthma (MMA)
NA	NCQA	Ambulatory Care – Emergency Department (ED) Visits (AMB)
Oral Health		
2508	DQA (ADA)	Prevention: Dental Sealants for 6–9 Year-Old Children at Elevated Caries Risk (SEAL)
NA	CMS	Percentage of Eligibles Who Received Preventive Dental Services (PDENT)
Experience of Care		
NA	NCQA	Consumer Assessment of Healthcare Providers and Systems (CAHPS®) 5.0H (Child Version Including Medicaid and Children with Chronic Conditions Supplemental Items) (CPC)

Source: www.medicaid.gov/medicaid-chip-program-information/by-topics/quality-of-care/downloads/2016-child-core-set.pdf

Appendix B. Measures Recommended by the National Quality Forum’s Measure Applications Partnership for Phased Addition to the Medicaid and CHIP Child Core Set

Ranking	Measure Number and Title	MAP Recommendations
1 / 2 (tie)	NQF #0477: Under 1500 g Infant Not Delivered At Appropriate Level of Care Use of multiple concurrent antipsychotics in children and adolescents (<i>Not NQF-endorsed</i>)	Support Conditional support, pending successful NQF endorsement
3	Effective postpartum contraception access (<i>Not NQF-endorsed</i>)	Conditional support, pending successful NQF endorsement
4	Use of contraceptive methods by women aged 15 – 20 (<i>Not NQF-endorsed</i>)	Conditional support, pending successful NQF endorsement
5 / 6	NQF #1360: Audiological evaluation no later than 3 months of age (EHDI-3) NQF #2393: Pediatric all-condition readmission measure	Support Support

Source: National Quality Forum. August 2015. *Strengthening the Core Set of Healthcare Quality Measures for Children Enrolled in Medicaid and CHIP, 2015: Final Report*. Page 2.

http://ccf.georgetown.edu/wp-content/uploads/2016/03/Measuring_Health_Quality_Medicaid_CHIP_Primer.pdf

Appendix C. Proposed Outcomes of Well-Child Care During the First Five Years of Life

(Reprinted from Schor EL, 2007)

Domain of Well-Child Care	Outcome at School Entry
Child Physical Health and Development	<ul style="list-style-type: none"> • All vision problems detected and corrected optimally • All hearing problems detected and actively managed • Management plans in place for all chronic health problems • Immunization complete for age • All congenital anomalies/birth defects detected • All lead poisoning detected • <i>All children free from exposure to tobacco smoke*</i> • <i>Good nutritional habits and no obesity; appropriate growth and good health attained*</i> • <i>All dental caries treated*</i> • <i>Live and travel in physically safe environments*</i>
Child Emotional, Social, and Cognitive Development	<ul style="list-style-type: none"> • All developmental delays recognized and treated (emotional, social, cognitive, communication) • <i>Child has good self-esteem*</i> • <i>Child recognizes relationship between letters and sounds*</i> • <i>Child has adaptive skills and positive social behaviors with peers and adults*</i>
Family Capacity and Functioning	<ul style="list-style-type: none"> • Parents knowledgeable about child's physical health status and needs • Warning signs of child abuse and neglect detected • Parents feel valued and supported as their child's primary caregiver and function in partnership with the child health care provider • Maternal depression, family violence, and family substance abuse detected and referral initiated • Parents understand and are able to fully use well-child care services • <i>Parents read regularly to the child*</i> • <i>Parents knowledgeable and skilled to anticipate and meet a child's developmental needs*</i> • <i>Parents have access to consistent sources of emotional support*</i> • <i>Parents linked to all appropriate community services*</i>

* Italicized items are those outcomes to which child health care providers should contribute by educating parents, identifying potential strengths and problems, and making appropriate referrals but for which they are not independently responsible. Other outcomes listed are those for which child health care providers should be held accountable for achieving.

Source: Schor EL. November 2007. The Future Pediatrician: Promoting Children's Health and Development. *Journal of Pediatrics* 151(5): S11-S16.

Appendix D. Oregon Health Authority and Early Learning System Proposed Kindergarten Readiness Bundle

Domain	Metric
Health Care Components	<ul style="list-style-type: none"> Well-child check completed in past year Vision is normal or corrected Hearing is normal or addressed Immunizations are up to date Dental exam shows no active decay Children with a special health care need have a cross-system, family-centered, actionable shared care plan in place Family is screened for food insecurity/hunger Developmental screening has been completed in past year
Family Components	<ul style="list-style-type: none"> Parent/caregiver assessed for depression in past year Parent/caregiver assessed for substance use disorder in past year Parent/caregiver assessed for domestic violence in past year
Kindergarten Assessment Components	<ul style="list-style-type: none"> Children have behavior that facilitates learning Children have literacy skills Children have numeracy skills

Denominator: Children who have their fifth birthday during the measurement year.