



March 2019

Dear Colleague,

We are excited to share the final report and recommendations from the Health Aspects of Kindergarten Readiness Technical Workgroup. The work detailed in this report reflects an important milestone in Oregon's progress toward driving the health sector's focus on kindergarten readiness.

The Health Aspects of Kindergarten Readiness Technical Workgroup was convened by Children's Institute in collaboration with the Oregon Health Authority and with expert consultation from the Oregon Pediatric Improvement Partnership and Artemis Consulting.

The workgroup, including health care, early learning, and community representatives, spent a year integrating family input, building cross-sector engagement, and developing its recommendations. As part of their process, the workgroup developed a working definition of kindergarten readiness, created a conceptual framework and measure criteria, and identified health care quality metrics for consideration.

This effort culminated in the workgroup's proposal for a comprehensive measurement strategy that includes a set of measures spanning multiple areas of children's health and development that impact school readiness. This proposal has been initially endorsed by Oregon's Metrics and Scoring and Health Plan Quality Metrics Committees. The approved recommendations include four metrics to incentivize health care providers and the health system to ensure children receive the physical, oral, behavioral, and developmental health care necessary to be ready for kindergarten. We believe that together, these incentivized metrics will encourage greater integration of health care services to support the whole child and catalyze the cross-sector collaboration we know is needed to truly advance kindergarten readiness in Oregon.

Oregon is the first state to pursue this type of health care measurement approach as a means to drive health system improvements and investments upstream. Brain science, research on the developmental origins of health, and evidence of the impact of adverse childhood experiences (ACEs) all point to the critical importance of early childhood health in laying the foundation for children's lifelong trajectory and long-term outcomes. That is why an approach that focuses on improving the health system is essential to ensuring that children enter school ready to learn and thrive.

In sharing this report, we applaud the commitment of Oregon's Metrics and Scoring Committee in sponsoring this workgroup and share our appreciation for the endorsement from both the Metrics and Scoring and the Health Plan Quality Metrics Committees. Doing so underscores the importance of a comprehensive focus on children's health and development to meaningfully impact kindergarten readiness outcomes. We also give our deep appreciation to the workgroup members who generously offered their time, expertise, and passion to this endeavor, as well as to the families who provided invaluable input through focus groups.

There is much more work to do as we dive into the next steps to ensure the implementation of our recommendations. We hope to continue in partnership with you all—as advocates, funders, innovators, policy-makers, and service providers—to ensure all young Oregonians have the opportunity to succeed.

Sincerely,



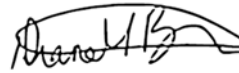
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HEALTH ASPECTS OF KINDERGARTEN READINESS TECHNICAL WORKGROUP

REPORT AND RECOMMENDATIONS

February 2019

PREPARED FOR OREGON'S METRICS AND SCORING COMMITTEE

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*Denotes a member who was unable to remain active for the full duration of the workgroup.

The workgroup was staffed by Elena Rivera of Children's Institute as well as Dr. Dana Hargunani and Sara Kleinschmit of the Oregon Health Authority Health Policy and Analytics Division. Colleen Reuland of the Oregon Pediatric Improvement Partnership and Diana Bianco of Artemis Consulting supported the workgroup as expert consultants.

I. Executive Summary

As Oregon faces persistent and intractable challenges—including one of the poorest high school graduation rates in the nation, a cycle of intergenerational poverty that creates family instability, and a costly health care system—there is no time to waste in identifying solutions. Luckily, there is strong evidence for an approach to disrupt and address these challenges: focus on providing young children with needed supports early in life to prepare them for kindergarten.

A child's earliest development is shaped by their experiences, relationships, and community environments, starting prenatally. That child's physical, cognitive, and social-emotional development and skills when they enter kindergarten, their *kindergarten readiness*, reliably predicts their academic trajectory, long-term health, and success in life.

Over the past several years in Oregon, concurrent health and early learning system transformation has created a vision and platform for collective action towards kindergarten readiness. Further momentum has been propelled by Governor Kate Brown's development of a comprehensive Children's Agenda, as well as planning for CCO 2.0 and a new Early Learning Strategic Plan for Oregon.¹

Driven by growing energy and leadership to advance kindergarten readiness, Oregon's Metrics and Scoring Committee sponsored the **Health Aspects of Kindergarten Readiness Technical Workgroup**. The workgroup was charged with developing recommendations for measures of the health sector's role in kindergarten readiness that could be applied as CCO incentive measures. The workgroup's recommendations also have the potential for broader applicability: recommended measures could be applied to other health plans in Oregon and inform work in other states to measure children's healthy development and kindergarten readiness.

The Health Aspects of Kindergarten Readiness Technical Workgroup believes that the role of the health sector is to provide family-centered services and to work internally to integrate services as well as collaboratively with other sectors to ensure children are healthy in preparation for kindergarten. The workgroup's vision of transformative action and results requires a focus on physical, oral, developmental, and social-emotional health, in combination.

The workgroup achieved considerable progress that can inform and galvanize critical work on kindergarten readiness. The workgroup's milestones are detailed in this report, and include:

1. Identifying a **definition of kindergarten readiness** that can be shared across sectors.
2. Creating a **conceptual framework** that clearly outlines the specific role that the health care system plays in preparing children for kindergarten. The framework can be shared and adapted across sectors.
3. **Identifying metrics** that can assess whether the health care system is fulfilling its role in kindergarten readiness.
4. **Prioritizing 13 metrics** for assessing the health aspects of kindergarten readiness with the greatest potential to drive transformative work in Oregon.
5. Developing a **measurement strategy proposal for the Metrics and Scoring Committee**, for implementation through the CCO Quality Incentive Program. The

workgroup proposes a measurement strategy that is feasible to implement in the next few years and builds over time to advance Oregon's kindergarten readiness goal.

6. Highlighting priorities for **additional work needed** to align cross-sector efforts and maximize impact.

II. Background

Why Kindergarten Readiness

Oregon has a bold vision: all children should enter kindergarten prepared for success. Research demonstrates that a child's kindergarten readiness has a significant impact on their future health, education, and economic outcomes. These long-term outcomes are critical to breaking the cycle of intergenerational poverty that plagues far too many Oregonians and hinders our state's potential for a thriving society and economy.

In addition to serving as an early predictor of long-term well-being, kindergarten readiness is an outcome of children's earliest development. There is an extensive body of scientific evidence that the first few years of a child's life, beginning even before birth, is the most sensitive period of growth and development. During this period, more than one million new neural connections are formed every second. This rapid shaping of the brain architecture is impacted by children's experiences, relationships, environments, and the supports they receive beginning before birth through school entry.

The Center on the Developing Child at Harvard University notes, "Science tells us that meeting the developmental needs of young children is as much about building a strong foundation for lifelong physical and mental health as it is about enhancing readiness to succeed in school." In Oregon, all sectors—health, education, human services, and beyond—impact children's early development and readiness for kindergarten. By focusing efforts on supporting children, families, and communities to achieve kindergarten readiness, sectors can maximize their collective impact and help ensure all children in Oregon realize their full potential.

Why Now

The momentum in our state has been building, and we have a window of opportunity to make progress toward our vision that all children enter kindergarten prepared for success. Oregon's unique opportunity stems from our past seven years of health and early learning system transformation.

In 2011, Oregon began transforming its early learning system with the creation of the Early Learning Council to oversee a seamless system for young children birth to age 6 in Oregon. The early learning system has three overarching goals: 1) Healthy, stable, and attached families; 2) Kindergarten readiness; and 3) A coordinated, aligned, and family-centered system. Regional Early Learning Hubs were created in 2013 to advance those goals.

In 2009, the Oregon Health Policy Board was established as the policy-making and oversight body for the Oregon Health Authority. Health care system reform began with federal approval of Oregon's Section 1115 Medicaid Demonstration Waiver in 2012, which set up a new health care delivery model designed to achieve the Triple Aim of better health,

better care, and lower costs. Regional Coordinated Care Organizations (CCOs) were created to manage the physical, behavioral, and oral health needs of Medicaid beneficiaries.

These concurrent efforts created a platform to catalyze new cross-sector relationships and commitments. Momentum has also been propelled by Governor Kate Brown's creation of a Children's Cabinet in 2017, made up of cross-agency leaders and cross-sector experts committed to improving Oregon's prenatal to age 5 system and services. Governor Brown released her Children's Agenda in September 2018, which outlines priorities for helping children to achieve their full potential.ⁱⁱ

Growing interest and commitment to improving outcomes for children, alongside advances in system development and policy leadership, has created an opportunity to galvanize progress on kindergarten readiness through measurement. The health sector is well poised to initiate new measurement efforts and has demonstrated great interest in measures of kindergarten readiness to apply to CCOs.

CCO performance is measured against a set of quality metrics, and financial rewards are distributed annually for performance that meets specified targets on a subset of these metrics, known as incentive metrics. Incentive metrics are notably effective at focusing CCO and provider attention and driving improvements in health care quality and outcomes.ⁱⁱⁱ CCO incentive metrics also have broader applicability, as they are included in a statewide measure menu from which other health plans can draw when selecting quality measures.

Oregon created two committees with explicit statutory authority to recommend quality measures for the state's health system. The Metrics and Scoring Committee (MSC), established in 2012 by Senate Bill 1580, chooses outcome and quality measures for the CCO Quality Incentive Program.^{iv} The Health Plan Quality Metrics Committee (HPQMC) was established in 2015 by Senate Bill 440 to identify an aligned measure menu of health outcome and quality measures that may be applied to CCOs as well as for services sold through the health insurance exchange or offered by the Oregon Educators Benefit Board (OEBB) and the Public Employees' Benefit Board (PEBB).^v The Metrics and Scoring Committee chooses the CCO incentive measures from the aligned measure menu created by the HPQMC.

Driven by growing energy and leadership within the health sector to advance kindergarten readiness, Oregon's Metrics and Scoring Committee sponsored the **Health Aspects of Kindergarten Readiness Technical Workgroup**. The technical workgroup was intended to build on foundational work led by the Child and Family Well-Being Measures Workgroup from 2014–2015. That workgroup developed recommendations for definitions and measures of child and family well-being that could be applied for statewide monitoring and cross-sector accountability.^{vi}

Workgroup Charge and Composition

The Health Aspects of Kindergarten Readiness Technical Workgroup was charged with the urgent task of developing recommendations for Oregon's Metrics and Scoring Committee for one or more health system accountability measures that:

- Drive health system behavior change, quality improvement, and investments that meaningfully contribute to improved kindergarten readiness
- Catalyze cross-sector collective action necessary for achieving kindergarten readiness

- Can be applied as CCO incentive measures

The Health Aspects of Kindergarten Readiness Technical Workgroup was convened by Children’s Institute in partnership with the Oregon Health Authority. Children’s Institute brought expertise in early childhood policy and research, as well as capacity to serve as a neutral convener. The Oregon Health Authority’s Health Policy and Analytics Division, including Dr. Dana Hargunani, current chief medical officer and former child health director, provided health policy expertise as well as knowledge of the CCO Quality Incentive Program. Two consultants were recruited to provide expertise and support to the workgroup: Colleen Reuland, director of the Oregon Pediatric Improvement Partnership, brought technical skills in quality measurement to advise the workgroup, and Diana Bianco filled an essential role as the workgroup facilitator.

Children’s Institute led an intentional recruitment process to ensure the workgroup included a diverse group of content experts and cross-sector leaders. The workgroup roster included CCO representatives, early learning sector representatives, health care providers, health care insurer representatives, individuals with expertise in quality measurement, and representatives from health care consumer organizations.

III. Workgroup Process and Products

The Health Aspects of Kindergarten Readiness Technical Workgroup met ten times from March through November 2018. The planning team guided the workgroup through a purposeful and collaborative process aimed at developing recommendations that have the greatest transformative potential while addressing the sense of urgency and need for feasibility. The workgroup process, including the products developed along the way, is detailed below.

Centering Family Voice

Families are the experts on what children need to grow, learn, and thrive; and parents and caregivers have important ideas about how the health care system can support children’s healthy development and kindergarten readiness. To ensure the workgroup process and recommendations were informed by the perspective of Oregon families, Children’s Institute contracted with the Portland State University (PSU) Center for Improvement of Child and Family Services to conduct kindergarten readiness family focus groups. The PSU research team conducted eight focus groups with parents and caregivers of young children in rural and urban communities across the state. Focus group findings highlighted how families define kindergarten readiness for themselves and their children, how they think health services currently support their children’s readiness for kindergarten, and how they would like to see health care improve to meet children’s health and developmental needs.

Families shared invaluable perspectives on health and kindergarten readiness, and the rich qualitative data informed the workgroup’s entire process and recommendations. In particular, findings contributed to the development of the Health Aspects of Kindergarten Readiness conceptual framework and measure criteria, detailed below. All [focus group findings](#) can be found on [Children’s Institute’s website](#), and an overview of family focus group findings is included in [Appendix A](#).

Working Definition of Kindergarten Readiness

The Health Aspects of Kindergarten Readiness Technical Workgroup agreed that its first step was to adopt a working definition of kindergarten readiness. There is no one nationally accepted definition of kindergarten readiness, but in 2015 Oregon's Early Learning Council adopted this goal for school readiness: *All children arrive at kindergarten with the skills, experiences, and supports to succeed.*

The workgroup adopted this statement as its working definition of kindergarten readiness, with the addition of two bullet points to add nuance and clarity.

All children arrive at kindergarten with the skills, experiences, and supports to succeed.

- **Supports** include assistance and services to families that promote family stability and functioning.
- **Succeed** refers to children making progress toward educational goals set by families and schools. Goals should be tailored to the individual child to optimize educational experience and outcomes.

Conceptual Framework

The workgroup developed a conceptual framework that articulates how the health sector uniquely contributes to kindergarten readiness. The conceptual framework outlines the child and family domains of health that impact kindergarten readiness and school success, including a child's physical, cognitive, and social-emotional development as well as parent and caregiver health and additional family factors. The framework identifies the specific ways in which health care services and experiences impact those domains of health and kindergarten readiness. These categories of health care services and experiences reflect the attributes of health care services that families indicated as most important. Lastly, the framework includes a section that identifies the impact that CCOs can have in leading cross-sector activities that engage community partners and address policy, payment, and capacity barriers.

The domains of child development included in the conceptual framework are aligned with commonly-accepted domains of child development from the early learning and education fields. The workgroup's intention was to develop a conceptual framework that could be adapted and used by other sectors to align strategies and services toward greater cross-sector collective action to improve kindergarten readiness. The Health Aspects of Kindergarten Readiness conceptual framework is included below, and can also be found in [Appendix B](#).

Domains that Impact a Child’s Kindergarten Readiness by Population of Focus for the Metric ¹	Domains of Specific Health Care Services and Experiences				CCO System-Level: Cross Sector Collaboration
	Promotion, Prevention & Screening/Early Detection	Follow-Up to Address Risks Identified	Care Coordination and Integration	Family-Centered Care Optimizing Interactions, Partnership, & Engagement	
Children 0-6					
Child Physical, Perceptual, Motor Development (Includes nutrition, vision, and dental) ²					
Child Social-Emotional Well-Being ²					
Child Cognitive, Language and Literacy Development ²					
Family Function and Capacity ³					
Children with Special Health Needs:					
Management and treatment of SHN(s)					
Family Capacity and Supports to Manage SHN					
Parent/Caregiver:					
Pre-Natal Health: Mother					
Health Shown to Impact a Child’s Kindergarten Readiness: Parent/Caregiver					

¹HAKR Workgroup Definition of Kindergarten Readiness: All children enter kindergarten with the skills, experiences, and supports to succeed.

² Domains aligned with the constructs of kindergarten readiness outlined by the National Education Goals Panel: Domains of Early Development and Learning, Head Start Early Learning Outcomes Framework: Central Domains, Oregon Early Learning and Kindergarten Guidelines, and the Developmental Foundations of School Readiness for Infants and Toddlers Report.

³ Adapted from Connecting Child Health and School Readiness by Charles Bruner and the Build Initiative.

**Developed by the Oregon Pediatric Improvement Partnership for the HAKR Technical Workgroup convened by Children’s Institute and the Oregon Health Authority.*

Measure Criteria

The workgroup adopted measure criteria to assess individual metrics as well as criteria to evaluate a set of metrics or metric parts (if that approach was recommended). The criteria first included content to assess whether metrics fit the parameters of the Metrics and Scoring Committee and Health Plan Quality Metrics Committee, to ensure the metrics were appropriate for consideration by the workgroup. Also included are criteria to determine how well metrics align with the goals and objectives of the workgroup, such as driving impact and transformation, addressing social determinants of health, and promoting cross-sector collaboration. Three measure criteria address feedback from families about the importance of ensuring health care services are understandable to families, family-centered, and address specific needs and priorities for children’s and family’s health.

The Health Aspects of Kindergarten Readiness Technical Workgroup measure criteria are listed below and included in [Appendix C](#).

Required Criteria for Metrics:

- **Meets CCO Incentive Metric Attributes:** Reportable at CCO-level in a 12-month period.
- **Technical Specification Reliability and Validity:** Produces reliable and valid results. A version of the metric has been piloted within a sector of the health care system (e.g., at the state-, system- or practice-level).

- **Feasible:** The data for calculating the measure are feasible to collect and with large enough denominators to produce reliable results.
- **Attainable:** It is reasonable to expect improved performance on this metric in a 12-month period. If a clinical process, evidence exists that it can be feasibly and meaningfully implemented. CCO has some degree of control over the health practice or outcome being measured.

Criteria to Assess Individual Metrics:

- **Evidence-Based or Aligned with Clinical Recommendations:** Measures align with clinical recommendations and, where possible, are based on an existing body of evidence demonstrating a significant impact on child health.
- **Outcome Related to Domains of Kindergarten Readiness (KR):** Addresses actual outcomes, or there is evidence that what is being measured has a strong association with or predicts a positive outcome associated with KR (e.g., more young children being read to as a predictor of greater kindergarten readiness).
- **Actionable:** The intended users can understand the results of the metric, how the corresponding care relates to a promotion of kindergarten readiness, and what should be improved.
- **Engages Health System:** Promotes the health system's awareness, engagement, and role in ensuring children are ready for kindergarten.
- **Understandable to Families:** Successfully communicates to families of young children the health system's role in ensuring that children are ready for kindergarten.
- **Family Priority:** Measures aspects of health care important to families.
- **Family-Centered:** Promotes family-centered care and support of parents and caregivers in fostering optimal child health and development and encourages collaborative communication between families and health care providers.
- **High Impact on KR:** Drives investments in areas with a significant and positive impact on a young child's kindergarten readiness.
- **Addresses Social Determinant:** The metric drives the health care system to play a role in addressing social determinants of health.
- **Promotes Cross-Sector Collaboration:** Measures aspects of health care that require cross-sector collaboration to meet the needs of young children.
- **Able to Identify Inequities:** The measure highlights disparities by race, ethnicity, culture, gender, language, geography, or other child and family factors.
- **Promotes a Focus on Addressing Inequities:** Drives health care systems to provide services that are equitable and culturally competent.
- **Transformative towards KR:** Drives priority areas for transformative health system behavior change.

Criteria to Assess Composite, or Multiple, Metrics:

- Set of metrics is parsimonious and limited in the number of individual components.
- Includes metrics which, in combination, measure the desired outcome by addressing the array of services that impact a child's kindergarten readiness.
- Includes metrics that utilize various data sources.
- Includes measures with the most transformative potential to drive health system change and stimulate cross-sector collaboration.

Identification of Metrics Aligned with the Health Aspects of Kindergarten Readiness

The Health Aspects of Kindergarten Readiness conceptual framework demonstrates the complex and interrelated nature of the domains of kindergarten readiness as well as the challenge of measuring the myriad ways that the health sector impacts kindergarten readiness. The workgroup recognized that it would not be feasible to recommend an overly expansive set of metrics to address the entire conceptual framework, so it prioritized areas of interest.

To identify priorities for measure exploration, the workgroup considered where the current child-focused CCO incentive metrics fall within its conceptual framework. See [Appendix D](#) for the current CCO incentive metrics displayed in the conceptual framework. The workgroup identified gaps in the conceptual framework, including populations for which there are no current CCO incentive metrics (such as children and youth with special health care needs) and domains of health care services and experiences that aren't currently measured by CCO incentive metrics (such as family-centered care). The workgroup prioritized additional areas within the conceptual framework based on their content expertise and sector perspective, and through reflecting on family focus group findings. See [Appendix E](#) for the priority areas of interest displayed in the conceptual framework.

The planning team conducted a comprehensive search to identify existing metrics that address the workgroup's priority areas of interest. The planning team utilized the following sources when searching for metrics:

- Child and Family Well-Being Measures Workgroup measure library^{vii}
- State performance measures tracked by the Oregon Health Authority^{viii}
- Health Plan Quality Metrics Committee aligned measure menu^{ix}
- National Quality Forum
- National Quality Measures Clearinghouse
- Buying Value Measure Selection Tool
- Professional consultation with other states

This search yielded some metrics that are ready for immediate implementation: they have valid specifications, applied use, and meet the other requirements of the CCO Quality Incentive Program. The search also identified measures that could be ready for implementation within a few years. These measures have specifications and have been applied in some settings but need work to be ready for application within the CCO Quality Incentive Program. See [Appendix F](#) for a list of the ready and near ready metrics identified.

Some challenges emerged during the identification of metrics that address the workgroup priority areas. Challenges included:

- Overall dearth of metrics for many of the priority areas, including metrics for the population of children and youth with special health care needs (CYSHCN) and metrics focused on the upstream causes of health inequities.
- The workgroup sought metrics that would drive transformation and get as proximal to the outcome of improved health and kindergarten readiness as possible; however, the majority of existing metrics are process-oriented rather than outcome-oriented, and measure components of access rather than quality.

- Several of the metrics identified have significant feasibility obstacles, including challenges in data collection and the demonstration of progress on an annual basis, making them ill-suited for the CCO Quality Incentive Measure Program. Consequently, some metrics, despite having strong potential to drive transformative work on kindergarten readiness, were deprioritized by the workgroup for inclusion in its recommendations.

Once an initial set of metrics were identified, the workgroup prioritized a subset for further exploration based on their potential for impact on kindergarten readiness and appropriateness for the parameters of the CCO Quality Incentive Measure Program. For each of the metrics considered for inclusion in workgroup recommendations, workgroup members scored the metric according to the number of criteria it met, and a mean score was calculated to indicate the metric's relative strength. See [Appendix G](#) for the metrics assessed and mean scores displayed in the conceptual framework.

In response to the challenges with identifying existing metrics, the workgroup generated ideas for new metric concepts that could address some of the priority areas of interest for which existing metrics are lacking. Metrics were considered new if they do not have specifications developed and have not been applied in any known settings, and therefore would take substantial work to develop and prepare for implementation. See [Appendix H](#) for the array of current metrics, existing metrics, and new metrics displayed in the conceptual framework.

While recommending new metrics was not initially in the scope of work for the workgroup, several important ideas and priorities emerged that informed the direction of the workgroup's recommended measurement strategy. Recommendations for future development of some of these metric concepts are captured in the Recommendations section.

As the workgroup considered its conceptual framework and recognized that there are currently no metrics to assess the degree to which CCOs engage in system-level and cross-sector activities, it developed a unique new metric concept. The workgroup thought creatively about a CCO-level metric that would require a set of CCO actions to address complex system-level factors that impact the services that kids and families receive and how they receive them. Specifically, the workgroup intends for this metric concept to address several factors or goals:

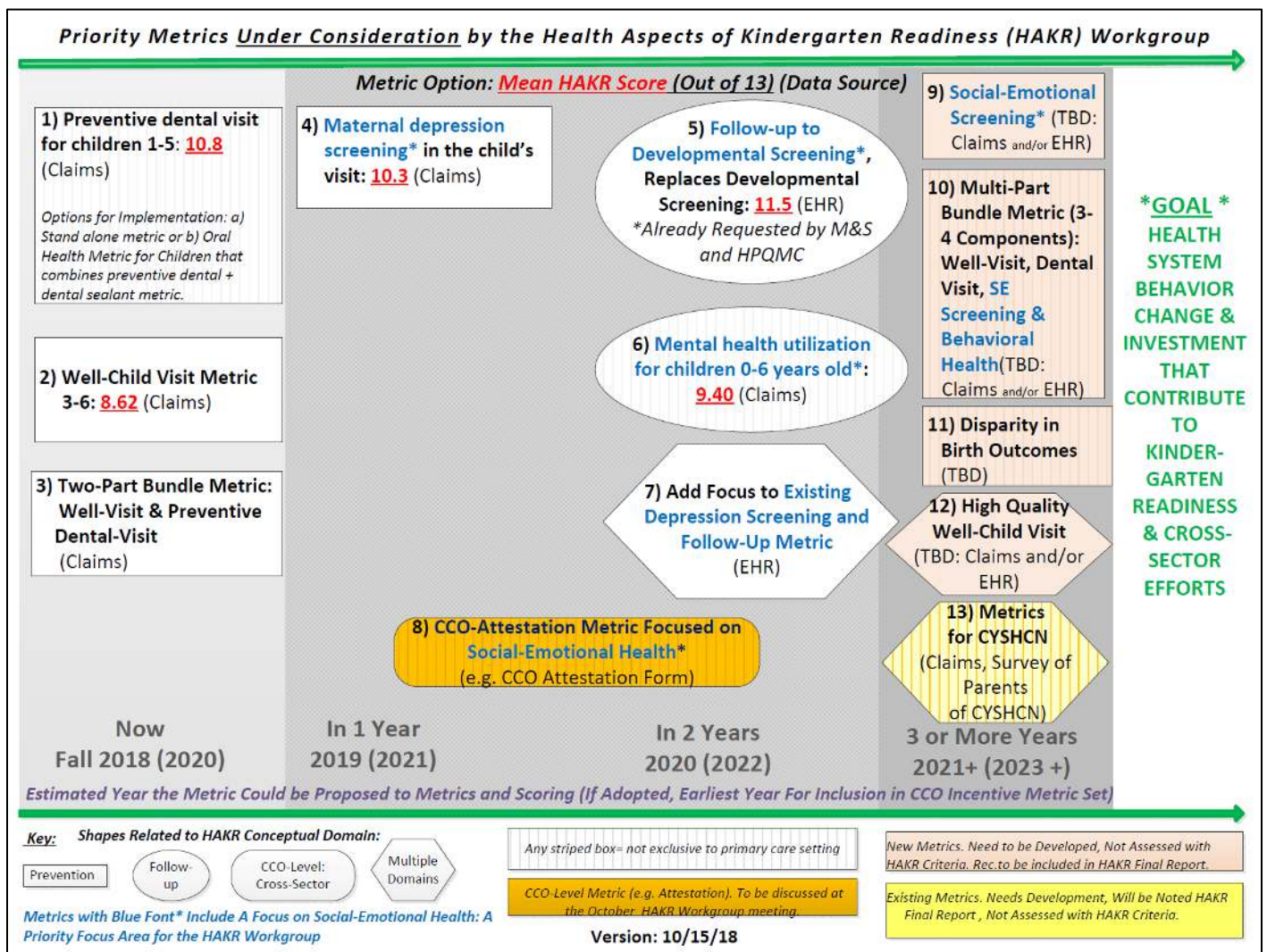
- The workgroup wanted to incentivize CCO-level cross-sector collaboration as well as CCO's leadership role in addressing system-level factors that impact critical services for kids and families. No existing metric was deemed to have sufficient capability to drive these activities at a CCO level.
- The workgroup wanted to prioritize a metric in the area of social-emotional development, yet there are no ready or near ready measures that fit this domain. A CCO-level attestation metric focused on social-emotional health was identified as an interim opportunity to drive foundational actions within CCOs, paving the way for a future child-level metric on social-emotional health.

While further development of this CCO-level metric is needed, key elements of this measure have been outlined in the workgroup's recommendations below.

Identification of Thirteen Priority Metrics to Assess the Health Aspects of Kindergarten Readiness

The workgroup recognized that it could have the greatest impact on kindergarten readiness if it recommended a measurement strategy to the Metrics and Scoring Committee that includes either multiple metrics or a metric with multiple components and that is designed to build over time. Through workgroup discussions, the list of metrics under consideration for a proposal was narrowed to a set of 13 priority metrics.

As the workgroup deliberated about developing a measurement strategy proposal that would include a smaller set of these 13 priority metrics, several factors came into play. The workgroup aimed to balance different qualities of the metrics it was considering, such as when the metric would be ready for implementation, how the metric scored on the Health Aspects of Kindergarten Readiness measure criteria, what conceptual domain of kindergarten readiness the metric addresses, and what data source the metric uses. The planning team developed a visual to capture these key considerations and metric attributes to facilitate progress toward developing a measurement strategy proposal. See the visual below, also included in [Appendix I](#).



*Developed by the Oregon Pediatric Improvement Partnership for the HAKR Technical Workgroup convened by Children's Institute and the Oregon Health Authority.

At this stage in their process, the planning team and workgroup identified targeted stakeholder groups from which to solicit essential perspective on the relative advantages and disadvantages of the 13 priority metrics under consideration. Stakeholders included the Metrics and Scoring Committee, the CCO Metrics Technical Advisory Group, the Health Plan Quality Metrics Committee, primary care providers, Early Learning Hub leaders, and families. Stakeholders shared invaluable input about which metrics have the greatest potential to impact kindergarten readiness, what risks for unintended consequences there may be, and what metrics could build on existing energy and progress. [Appendix J](#) includes a summary of stakeholder input and public comment.

During deliberations about selecting metric components for a measurement strategy proposal, the workgroup looked to its measure criteria for a composite metric or multiple metrics listed on page 9.

The workgroup also considered additional factors, including:

- Assessment scores that reflect the strength of metrics according to measure criteria
- Desire to create a focus on social-emotional health
- Importance of driving cross-sector collaboration as well as integration within CCOs (i.e., physical, oral, and behavioral health integration).
- Input from various stakeholder groups about the metrics under consideration.

The workgroup's ultimate measurement strategy proposal to the Metrics and Scoring Committee is detailed in the Recommendations section below.

IV. Workgroup Recommendations

Health is only one aspect of kindergarten readiness, but it is critical. The role of the health sector is to provide family-centered services and to work internally to integrate services as well as collaboratively with other sectors to ensure children are physically, socially, and emotionally healthy in preparation for kindergarten.

The Health Aspects of Kindergarten Readiness Technical Workgroup believes that a comprehensive approach to improving kindergarten readiness includes an array of measures to track progress in all domains of kindergarten readiness, alongside sufficient resources and greater capacity for services and system-building. The workgroup's vision of transformative action and results requires a focus on physical, oral, developmental, and social-emotional health, in combination. Attention to only one or two of those areas will be insufficient. In the same vein, the workgroup strongly believes that a successful approach to measure kindergarten readiness will support and, ultimately, require cross-sector collaboration.

There are several pathways to measure the multiple components of a child's development and to push cross-sector collaboration. Some workgroup members felt that a single, bundled measure encompassing physical, oral, developmental, and social-emotional health would be the most effective tool to drive towards health system behavior change and increased investments. Others felt there were additional opportunities to achieve the same ends, including creative use of the CCO incentive challenge pool, as detailed below. A strong, shared agreement among the workgroup is that the measurement approach must be multi-dimensional and transformational, break down silos, and require collaboration. In addition,

the workgroup wanted to convey a sense of urgency for this work to begin as soon as possible.

Kindergarten readiness must continue to be a statewide priority, and a measurement strategy applied through the CCO Quality Incentive Program should be just one of many coordinated and mutually reinforcing efforts to propel Oregon toward its kindergarten readiness goal.

Measurement Strategy Proposal for the Metrics and Scoring Committee

The Health Aspects of Kindergarten Readiness Technical Workgroup proposes a multi-year measurement strategy that aims to drive health system behavior change and investments that contribute to improved kindergarten readiness and cross-sector collaboration. See the proposal below and in [Appendix K](#). The proposal builds on the existing CCO incentive metrics focused on children prenatal through age 5, and leverages past and current quality improvement efforts centered on children's health.

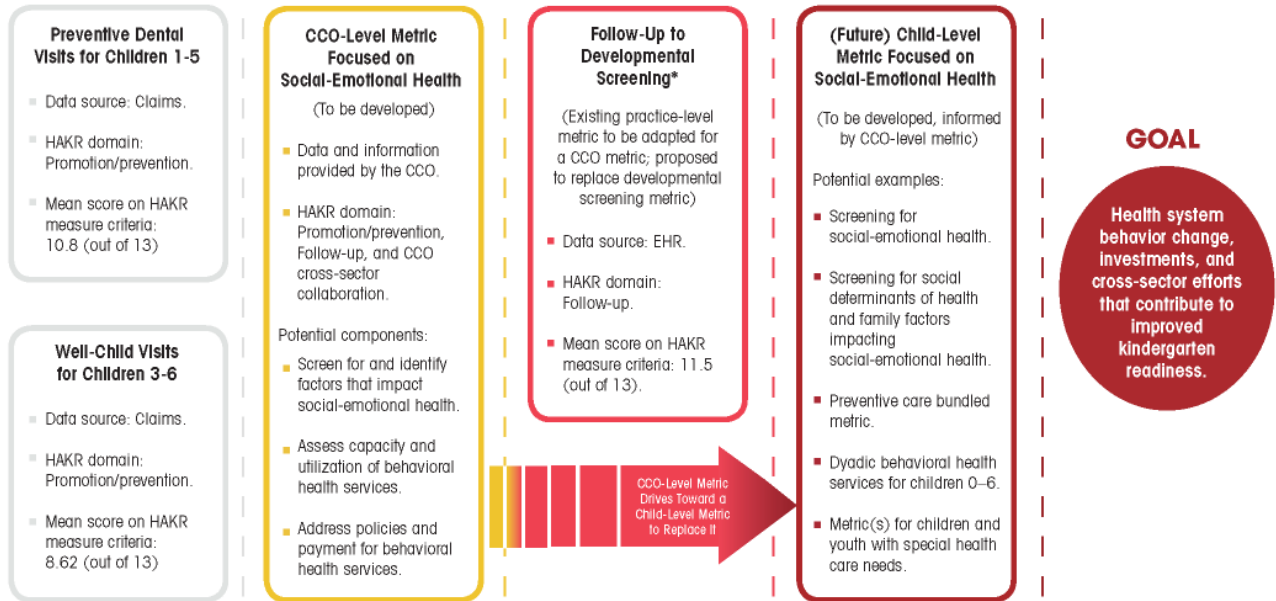
The proposal balances a sense of urgency and the current window of opportunity with a desire for further transformational potential ahead. It includes metrics that are feasible to implement within the next few years, and it also drives toward the development of future metrics that the workgroup believes are necessary for continued progress toward achieving kindergarten readiness. Individual metric components included in the multi-year proposal include:

- Preventive dental visits for children ages 1–5
- Well-child visits for children ages 3–6
- CCO-level attestation metric focused on social emotional health
- Follow-up to developmental screening

As ongoing measure development work progresses, the workgroup proposes that the CCO-level metric is replaced with a child-level metric that addresses social emotional health.

Health Aspects of Kindergarten Readiness Measurement Strategy Proposal

Stratification and reporting of metrics to examine disparities and for CYSHCN



Estimated Year Metrics Ready for Implementation



The Health Aspects of Kindergarten Readiness (HAKR) Technical Workgroup met from March – November 2018 to develop measures of the health sector’s role in kindergarten readiness for use as CCO incentive metrics, or for use by other health plans. The workgroup developed a conceptual framework for the health aspects of kindergarten readiness, developed measure criteria, prioritized areas of the conceptual framework for measure exploration, and identified priority measures. The HAKR Technical Workgroup proposes this multi-year measurement approach to jointly focus on children’s physical, oral, developmental, and social-emotional health. The measures are intended to be adopted as a collective unit to help Oregon achieve its kindergarten readiness goals.

*Metric has been requested by Metrics & Scoring and Health Plan Quality Metrics Committees.

*Content developed by the Oregon Pediatric Improvement Partnership for the HAKR Technical Workgroup convened by Children’s Institute and the Oregon Health Authority.

The workgroup chose individual metric components for several important reasons, including the strength of evidence demonstrating the impact on domains of kindergarten readiness, alignment with family needs and priorities, the opportunity to fill a current gap in the CCO Quality Incentive Program, and, when available, Oregon data demonstrating substantial room for improvement on the metric. See [Appendix L](#) for a detailed summary the metrics included in the proposal.

If implemented as proposed, this measurement strategy is greater than the sum of its parts and has the potential to galvanize significant progress in Oregon towards kindergarten readiness.

The proposed measurement strategy will:

- Catalyze health system integration and care coordination for children across physical, behavioral, and oral health.
- Address multiple interrelated domains of child development, thereby maximizing the potential to improve the overall outcome of kindergarten readiness.

- Advance the provision of essential preventive services for all children as well as targeted services for children and families with additional needs.
- Focus on the capacity of the systems that serve children.
- Create a clear focus on social-emotional health, an area of great need articulated by families, health care providers, and early learning and K–12 education stakeholders.

Furthermore, the measurement strategy proposed is aligned with priorities and work underway through CCO 2.0 and Oregon’s Early Learning Council strategic planning. By adopting this proposal, the Metrics and Scoring Committee will strengthen alignment in these shared, cross-sector goals and will help to amplify the impact of this collaborative work. For example:

- A CCO-level metric focused on social-emotional health could drive work to improve the identification of child and family factors that impact social-emotional development as well as the provision of behavioral health services to children and their families. These elements are aligned with CCO 2.0 policy options related to addressing social determinants of health and children’s behavioral health.
- Follow-up to developmental screening is a priority that has emerged from the strategic planning process of the Early Learning Council. Because Early Learning Hubs and early learning programs will deepen their focus on follow-up, a CCO incentive metric on follow-up to developmental screening could contribute to improved referral pathways and cross-sector data connections to ensure children and families are getting the appropriate services best suited to meet their needs.

Proposal Implementation Considerations

In order to realize its transformative potential, the workgroup strongly believes that this proposal must be considered and implemented as a package. The proposal is driving toward a final destination in which children’s physical, oral, and social-emotional health and development are comprehensively supported and the health sector is fulfilling its role and responsibility for kindergarten readiness. Just as you cannot isolate children’s physical health from their social-emotional development, the health sector cannot choose just one or two components of this measurement strategy to implement and expect it to have a significant impact on the end goal.

There are multiple ways that the Metrics and Scoring Committee can choose to implement the proposed measurement strategy over the next few years. The workgroup discussed options for implementation, each of which has strengths and limitations with regards to the total number of measure slots, or “seats on the plane” that the proposal takes up, and how well it maintains focus on each of the core components of the strategy. Below are the implementation recommendations preferred by the workgroup (see additional options considered by the workgroup in [Appendix M](#)):

- Adopt two metrics now for the 2020 CCO incentive measure set:
 - Well-child visits for children ages 3–6
 - Preventive dental visits for children ages 1–5 (the committee can choose to implement as a standalone metric, or can choose to combine with the current dental sealants metric for a broader children’s oral health metric)
- Adopt a CCO-level attestation metric focused on children’s social-emotional health once specifications are finalized (i.e., for the 2021 or 2022 CCO incentive measure set).

- Replace the existing developmental screening metric with a new follow-up to the developmental screening metric in 2022 or 2023.

Finally, since the proposed strategy builds over time, attention must be paid to ensuring the components remain connected within the CCO Quality Incentive Program, which will in turn drive CCOs to bridge silos and initiate new ways of collaborating to support children and families. To that end, the workgroup discussed two levers that the Metrics and Scoring Committee could utilize to keep the focus on all the components of the measurement strategy together, and recognizes that there may be other strategies the committee identifies as well, including:

- Having a 'bundled' kindergarten readiness challenge pool requiring that a CCO meet each of the components of the measurement strategy to receive challenge pool dollars
- Including some or all of the measurement strategy components as a requirement for a CCO to earn 100 percent of the quality pool dollars for which it is eligible

Future Development Work

The Health Aspects of Kindergarten Readiness Technical Workgroup recognizes that in order to move forward its proposed measurement strategy, additional and urgent measure development work is needed. The workgroup requests that the Metrics and Scoring Committee endorse the following next steps:

1. Develop the CCO-level metric focused on social-emotional health, with attention to the following three areas:
 - a. Examine and expand screening for and identification of factors that impact social-emotional health (including social determinants of health)
 - b. Assess capacity and utilization of behavioral health services for children 0–5 and their families
 - c. Address policies and payment for behavioral health services (within primary care and specialty behavioral health care) for children 0–5 and their families
2. Develop the follow-up to the developmental screening metric
3. Request that the HPQMC add the above metrics to their menu of developmental measures

Additional Workgroup Recommendations to Drive Improvements in Kindergarten Readiness

Throughout the workgroup process, many important ideas and priorities emerged that are outside the scope of a measurement strategy proposal for the Metrics and Scoring Committee. These additional recommendations are detailed below and grouped according to the entity that is best suited to carry them forward.

1. Health Plan Quality Metrics Committee:

- Prioritize and support the development of metrics for the population of children and youth with special health care needs (CYSHCN) for inclusion in the aligned measure menu. Consider how metrics within the existing measure menu could be stratified or reported for subpopulations of CYSHCN.

- Consider adding all the ready metrics identified by the Health Aspects of Kindergarten Readiness Technical Workgroup to the aligned measure menu, and all the near ready metrics identified to the menu of developmental measures.
- Join the Metrics and Scoring Committee in endorsing the developmental work noted above for the CCO-level attestation metric focused on social-emotional health and the follow-up to developmental screening metric.

2. Health Equity Measures Workgroup:

- Prioritize and support the development of metrics that highlight disparities in birth outcomes and other developmental origins of health and disease.

3. Oregon Health Authority:

- Utilize capacity with the Health Policy and Analytics Division to conduct annual reporting of the proportion of children who receive well-child visits and preventive dental visits statewide, by CCO, and stratified by key populations to understand disparities by race/ethnicity and children and youth with special health care needs (CYSHCN). When additional metrics in the measurement strategy proposal are implemented, incorporate them into this annual reporting.
- Consider utilizing the ready metrics identified by the Health Aspects of Kindergarten Readiness Technical Workgroup in the development of value-based payments for maternal and child health.
- Implement CCO 2.0 policy priorities for children's behavioral health in alignment with the vision for a future CCO-level metric focused on children's social-emotional health.
- Maintain a focus on improving and expanding adult behavioral health services, including screening for and treatment of depression and substance use disorders, with attention to multi-generational approaches. The behavioral health of parents and caregivers has profound impacts on children's development.
- As the CCO-level attestation metric and the follow-up to developmental screening metrics are developed, where appropriate, work with partners in the Early Learning Division to ensure alignment of resources and capacity of systems to serve identified children.

4. Early Learning Division and Early Learning Council:

- When appropriate, align measurement efforts for Oregon's early learning system, including the Measuring Success Committee and Hub Indicator Workgroups, with the Health Aspects of Kindergarten Readiness conceptual framework. Utilize the child and family domains in the framework and adapt the columns to align with the services and experiences provided by the early learning sector. Consider adding the ready metric identified by the workgroup to the ELD and ELC dashboard and monitoring.
- As the CCO-level attestation metric and the follow-up to developmental screening metrics are developed, where appropriate, work with partners from the Oregon Health Authority to ensure alignment of resources and capacity of systems to serve identified children.

V. Conclusion

We have a critical window of opportunity to capitalize on demand and buy-in from within the health sector, leverage the transformative power of metrics, and advance progress toward Oregon's broader early learning system goals. The recommendations developed by the Health Aspects of Kindergarten Readiness Technical Workgroup reflect the complexity of kindergarten readiness and the demands that children and families face, as well as a deep commitment to ensuring all children in Oregon reach their full potential. By implementing measures of the health sector's role in kindergarten readiness within its health care system, Oregon will bolster the health care system's view of its role and responsibility for kindergarten readiness and drive critical transformative and cross-sector work. The process and outcomes of this workgroup effort can also advance the national dialogue on shared measurement and accountability to bridge health and early learning.

Appendices

Appendix A: [Health Aspects of Kindergarten Readiness Family Focus Group Findings](#)

Appendix B: [Health Aspects of Kindergarten Readiness Conceptual Framework](#)

Appendix C: [Health Aspects of Kindergarten Readiness Measure Criteria](#)

Appendix D: [Health Aspects of Kindergarten Readiness Conceptual Framework with Current CCO Incentive Metrics](#)

Appendix E: [Health Aspects of Kindergarten Readiness Conceptual Framework with Priority Areas of Interest](#)

Appendix F: [Health Aspects of Kindergarten Readiness Ready and Near Ready Metrics Identified](#)

Appendix G: [Current CCO Metrics and Health Aspects of Kindergarten Readiness Metrics Assessed with Scores](#)

Appendix H: [Current CCO Metrics, Health Aspects of Kindergarten Readiness Metrics Assessed, and New Metrics](#)

Appendix I: [Health Aspects of Kindergarten Readiness Visual of Prioritized Metrics](#)

Appendix J: [Summary of Stakeholder Input and Public Comment Received](#)

Appendix K: [Measurement Strategy Proposal for the Metrics and Scoring Committee](#)

Appendix L: [Summary of Individual Metric Components of Measurement Strategy Proposal](#)

Appendix M: [Metrics and Scoring Committee Options for Proposal Implementation](#)

ⁱ Governor Kate Brown. The Children's Agenda: Pathways Out of Poverty for Children to Achieve Their Full Potential. September 12, 2018.

<https://www.oregon.gov/gov/policy/Documents/Children's%20Agenda-GOVERNOR%20KATE%20BROWN.pdf>

ⁱⁱ Ibid.

ⁱⁱⁱ Oregon Health & Science University, Center for Health Systems Effectiveness. Evaluation of Oregon's 2012-2017 Medicaid Waiver. December 29, 2017.

<https://www.oregon.gov/oha/HPA/ANALYTICS/Evaluation%20docs/Summative%20Medicaid%20Waiver%20Evaluation%20-%20Final%20Report.pdf>

^{iv} Oregon Health Authority. Metrics and Scoring Committee.

<https://www.oregon.gov/oha/HPA/ANALYTICS/Pages/Metrics-Scoring-Committee.aspx>

^v Oregon Health Authority. Health Plan Quality Metrics Committee.

<https://www.oregon.gov/oha/HPA/ANALYTICS/Pages/Quality-Metrics-Committee.aspx>

^{vi} Child and Family Well-Being Measures Workgroup. Final Report and Recommendations. September 11, 2015.

<https://www.oregon.gov/oha/HPA/ANALYTICS/CFWBMeetingsDocuments/CFWB%20Measures%20Workgroup%20Report%20FINAL.pdf>

^{vii} Ibid.

^{viii} Oregon Health Authority CCO Performance Measures. <https://www.oregon.gov/oha/HPA/ANALYTICS-MTX/Pages/HST-Reports.aspx>

^{ix} Oregon Health Authority. Health Plan Quality Metrics Committee 2019 Aligned Measure Menu.

<https://www.oregon.gov/oha/HPA/ANALYTICS/Quality%20Metrics%20Committee%20Docs/2019-Aligned-Measures-Menu.pdf>