

Informing Policy. Advancing Health



# Open Wide for Opportunity

Medicaid's Leadership in a New Vision of Oral Health for Colorado

**FEBRUARY 2019** 



# **Glossary: Caries or Cavities? Terms You Should Know**

Alternative Payment Model (APM): An approach developed by the Colorado Department of Health Care Policy and Financing (HCPF) to tie primary care providers' reimbursement to value. Medicaid providers must demonstrate improvement on selected metrics over a defined time period to be eligible for enhanced reimbursement.

(**Dental**) **Caries:** Another term for tooth decay. It is a disease process occurring when bacteria in the mouth produce acid that destroys the tooth.

**Cavity:** Missing tooth structure caused by decay, erosion, or abrasion. A cavity caused by caries is known as a carious lesion.

**Decay:** The common term for decomposition of the tooth structure.

# Dental Administrative Services Provider (or Dental Administrative Services Organization):

A third party organization that processes claims, manages oral health provider networks, and provides outreach to Medicaid enrollees. In Colorado, DentaQuest currently serves in this role.

**Dental home:** The relationship between a dentist/dental hygienist and a patient that includes access to oral health care.

**Fluoride:** A mineral that helps prevent tooth decay by building the tooth's resistance to acid produced by bacteria in the mouth. Oral health professionals apply topical forms of the mineral — such as silver diamine fluoride and fluoride varnish — to treat and prevent dental caries.

#### **Interim Therapeutic Restorations (ITR):**

A procedure for removing the infected portion of a tooth and replacing it with adhesive restorative material. ITR is intended to slow or stop the process of decay until the patient can access additional dental care.

**Oral health risk assessment:** A series of questions designed to determine a patient's risk for developing oral disease.

**Sealants:** Resinous material designed to be applied to the surfaces of teeth to prevent caries.

Virtual dental home: A community-based oral health delivery system in which people receive preventive and simple therapeutic services delivered by a registered dental hygienist in a community setting such as a school or receive educational, social, or general health services. The delivery system is linked virtually to a dentist via telehealth technology.

**Key Performance Indicators (KPIs):**<sup>14</sup> Metrics established by HCPF to assess performance and access to services in Colorado's Medicaid program. The seven KPIs currently tracked for performance payments in the Accountable Care Collaborative Phase Two are:

**Potentially avoidable costs:** HCPF will use a methodology developed by Prometheus Analytics to compare the expected cost of an episode of care to the actual cost.<sup>15</sup>

#### **Emergency department (ED) visits:**

Number of ED visits per 1,000 members per year.

**Behavioral health:** Percentage of members who access behavioral health services.

**Well visits:** Percentage of members who receive a well visit during a 12-month period.

**Prenatal engagement:** Percentage of deliveries in which a woman received a prenatal care visit during pregnancy.

**Dental visit:** Percentage of members who receive professional dental services.

**Health neighborhood:** A combined measure reflecting connections and referrals between primary care providers and specialty care providers.

## Introduction

A window of opportunity has opened to address Coloradans' oral health needs in new ways.

The opportunity is the state's launch of the Accountable Care Collaborative (ACC) Phase Two, the Regional Accountable Entities (RAEs), and the Alternative Payment Model (APM) in Health First Colorado, the state's Medicaid program. These initiatives signal Health First Colorado's commitment to reforming health care delivery through integrated care, new payment approaches, measurement, and by connecting providers across disciplines in the "health neighborhood."

The RAEs and their partners — including the Colorado Department of Health Care Policy and Financing (HCPF), oral health professionals, members and their advocates, primary care providers, and the state's third-party dental administrative services provider, DentaQuest each play a role in improving access to evidencebased oral health care.

The potential benefits of expanding oral health care are far-reaching. Published evidence makes clear that the mouth is a window to the body. Improving oral health reduces the risk of serious physical conditions. And a healthy mouth absent of pain contributes to good mental health and is critical for social outcomes such as employment and the ability to learn in school.1

In other words, oral health represents a prudent and beneficial investment.

Yet the need for oral health services in Colorado is significant, especially among people with lower incomes. One in four Coloradans (24.8%) with

incomes at the poverty line or below report fair or poor oral health compared with just one in 10 (10.1%) Coloradans with incomes at or above 400 percent of the poverty line. About one third (29.7%) of Coloradans report having no dental coverage. And Coloradans with public insurance report lower rates of dental visits than those with private insurance -60percent compared with 74 percent.<sup>2</sup>

The need may seem overwhelming. However, focusing evidence-based approaches for prevention and maintenance on key sub-populations of Health First Colorado members — such as children, people with diabetes, pregnant women, and older adults represents a promising starting place. In doing so, Health First Colorado can lead a shift from the current volume-based payment and delivery paradigm that experts say contributes to these challenges.

The end goal is a more integrated system that addresses what the health care community commonly refers to as the Quadruple Aim: improved health, decreased cost, and improved experience for both patients and providers.3



# **This Paper**

The Colorado Health Institute, with support from the Caring for Colorado Foundation and Delta Dental of Colorado Foundation, developed this paper to examine the evidence behind oral health strategies, what other states have pursued, and what it would take for Colorado to implement its own approach.

This analysis aims to address one key question:

What opportunities exist for Health First Colorado and its providers to improve oral health by promoting evidence-based approaches?

In its research, CHI identified a core set of principles that guided this work — such as thinking of oral disease as a chronic disease and assessing a person's risk (see box at right).

Applying these principles resulted in CHI recommending four promising strategies aligned with the Quadruple Aim. They are summarized here but outlined in greater depth later in this brief:

# Strategy 1: Leverage Partnerships and Improve Provider Experience

Deploy oral health and primary care professionals to work in teams and ensure their skills are used efficiently and in ways that optimize what is permitted within their scopes of practice. This means developing meaningful partnerships among HCPF, medical and oral health providers, RAEs, member advocates and representatives, and Colorado's Medicaid dental administrative services provider, DentaQuest.

#### **Strategy 2: Reduce Health Care Costs**

Incentivize prevention, risk-based care assessment, and innovative care delivery models by refining pay-for-performance metrics.

#### **Strategy 3: Improve Health Outcomes**

Ensure that Medicaid members have access to the right oral health care at the right place at the right time. This means expanding access to preventive services by integrating oral and physical health care, assessing a patient's risk for oral disease, ensuring that care is coordinated among providers, and completing evidence-based treatment.

# **Guiding Principles**

Through its research, CHI identified a set of principles that informed its work and recommendations:

- Evaluate the evidence behind oral health strategies and commonly accepted practices.
- Focus on prevention and early intervention across the lifespan.
- Reconceptualize oral disease as a chronic disease.
- Reconceptualize oral health care as a component of primary health care.
- Assess a person's risk for ongoing oral disease and deliver care based on individual risk.
- Deploy team-based care approaches, ensuring that oral health professionals — including dentists and dental hygienists — are working at the top of their licensure delivering evidence-based care.

#### **Strategy 4: Improve the Patient Experience**

Maintain patient-centeredness throughout all the strategies. This includes promoting healthy behaviors and developing an oral health workforce that is informed about — and actively delivers — evidence-based, minimally invasive, and patient-centered care.

CHI's research shows that Health First Colorado can establish its leadership not only among public and private payers but also among other state Medicaid agencies in leveraging opportunities, evaluating them, and scaling them.

# **Setting the Stage**

The demand for oral health care in Colorado is significant.

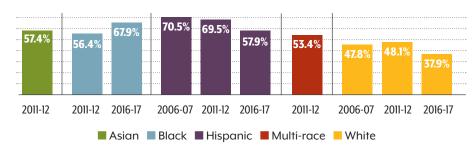
About one third (29.7%) of Coloradans report having no dental coverage. Coloradans' use of dental services has remained flat at around 66 percent since measurement began in 2009. And about 23 percent of Colorado children did not have a dental visit in the past year.<sup>4</sup> One in three Colorado adults (33%) report their mouth and teeth are in fair or poor condition compared with 30 percent nationally and 22 percent in Illinois, the best performing state.<sup>5</sup>

Figure 1. Selected Oral Health Measures by Race/Ethnicity, Colorado 10

#### Percentage of Third Grade Students with Caries Experience



- · The percentage of white students with caries experience has decreased since 2011, while the data suggest an increase among black students.
- · A significant gap of 30 percentage points separates white students from black students.

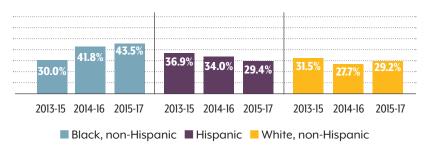


Source: CDPHE, Basic Screening Survey

#### Percentage of Women Who Just Gave Birth Who Needed to But Did Not Visit a Dentist for a Problem



- 43 percent of black, non-Hispanic women who just gave birth and needed a dental visit did not get one.
- The data suggest that the proportion of women who needed dental care and are not receiving it decreased across each racial and ethnic group except black, non-Hispanic women.

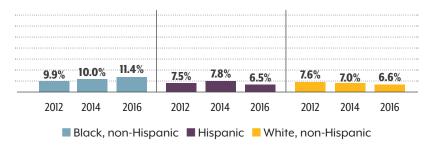


Source: CDPHE, Pregnancy Risk Assessment Monitoring System.

#### Percentage of Adults who Lost Six or More — But Not All — Teeth Due to Decay or Periodontal Disease



- Over one in 10 (11.4%) black adults surveyed in 2016 had lost six or more teeth due to oral disease compared with only 6.6 percent of white adults.
- Each racial and ethnic group experienced a decrease between 2014 and 2016 with the exception of black, non-Hispanic adults.



Source: CDPHE, Behavioral Risk Factor Surveillance System

The barriers to obtaining needed oral health care are numerous. By far the most frequently cited barrier is the cost of dental care, followed by fear of the dentist.<sup>6</sup> Although a decreasing proportion of Coloradans currently cite cost as a barrier -15.8percent in 2017 compared with 21.9 percent in 2009 — Coloradans still report skipping dental care due to cost more often than skipping care from a medical doctor (10.1%) or specialist (11.3%) or passing up prescription medications (10.7%). In addition, one in five Medicaid enrollees is not aware of their dental benefit, suggesting the need for greater oral health

literacy. Lack of transportation, inability to take time off work, and shortages of oral health professionals in rural Colorado are also factors.7 Cost is more frequently a barrier for Latinos (18.7%) compared with non-Latino whites (15.5%); working age adults (20.4%) compared with children (5.4%); and people with less than a high school education (28.9%) compared with those who have a high school degree or more (18.4%).

The needs are pronounced among people with lower incomes. One in four Coloradans (24.8%) with incomes at the poverty line or below report fair or



poor oral health compared with just one in 10 (10.1%) Coloradans with incomes at or above 400 percent of the poverty line. Coloradans with public insurance report lower rates of dental visits than those with private insurance — 60 percent compared with 74 percent.<sup>8</sup> And adults with low incomes are more likely to experience problems due to a condition of the mouth and teeth — such as pain, difficulty chewing, anxiety, problems sleeping, or reduced social participation — than adults with higher incomes. This is true at both the state and national levels.<sup>9</sup>

Figure 1 explores oral health equity in Colorado. Many gains in oral health care over the past decade or two have not been equally distributed across people of different races and ethnicities. The graph illustrates the gap between non-Hispanic white Coloradans — often the most advantaged group — and Hispanic and black Coloradans, who disproportionately have lower household incomes.

These disparities have many causes. For example, Colorado's oral health care system — a patchwork of providers and payers to address these needs — is fragmented. It is rooted in fee-for-service payment, which tends to incentivize volume of procedures over value and prevention. Private dental coverage is typically separated from private medical insurance. And dental care is generally not integrated with medical care; it is delivered in a separate system by dentists, the majority of whom own and operate their own practices. I

Arguably the most significant piece of national health legislation in a generation — the Affordable Care Act (ACA) — made some small gains in addressing these needs. It does, for example, require commercial insurance plans on the small group and individual markets to cover pediatric oral health care.

The ACA also provided the opportunity for states to expand their Medicaid programs. Historically, Medicaid provided oral health benefits for children up to age 20 enrolled in the program. Prior to 2014, there was no dental benefit for adults in Colorado. The state added a limited dental benefit in 2014, shortly after it expanded eligibility for Medicaid under the ACA.

Despite the Medicaid expansion, oral health was not a major focus of the ACA. Nor was it a major focus in the first phase of Colorado's own Accountable Care Collaborative (ACC), which emphasized care coordination and connecting Medicaid members to primary medical care.

Yet Health First Colorado deserves particular attention given that almost one in four Coloradans have Medicaid coverage. And it is unique because it covers many of the Coloradans experiencing the greatest needs. Attention to oral health in Medicaid has somewhat improved with the launch of ACC Phase Two and the Regional Accountable Entities (RAEs). The seven RAEs — which help manage and coordinate the care of Medicaid members in their regions — can earn financial bonuses by showing improvement on a new oral health Key Performance Indicator (KPI). Phase Two also acknowledges oral health professionals as part of the "health neighborhood" of providers, with whom RAEs are encouraged to build relationships.

In their proposals to become RAEs, the organizations that ultimately won the contracts identified a number of oral health strategies that they would undertake or continue. A cross-section of these ideas is included in Figure 2.

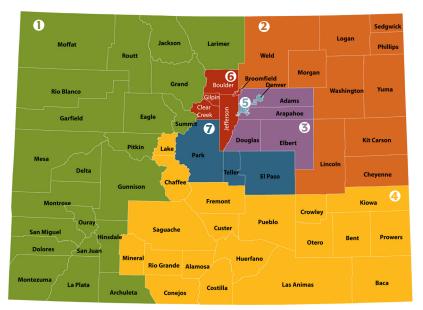
#### What about CHP+?

In addition to Medicaid, the Department of Health Care Policy and Financing (HCPF) also administers Colorado's Child Health Plan Plus (CHP+) program. CHP+ provides medical coverage for children ages 0-18 and pregnant women with household incomes up to 260 percent of the federal poverty level (FPL) — or \$65,260 for a family of four — who are ineligible for Medicaid based on income. The children's CHP+ benefit also covers up to \$1,000 in annual dental services provided by Delta Dental of Colorado. CHP+ currently does not offer dental benefits to pregnant women, though legislation was recently introduced to add this benefit.<sup>15</sup>

Because Medicaid and CHP+ remain separate programs in Colorado, this paper is focused on Medicaid as a starting point. However, many of the same principles and strategies apply to the CHP+ program. For example, some children may move between the Medicaid and CHP+ programs due to fluctuations in income and eligibility. This "churn" emphasizes the need for continuity, coordination, and completion of oral health care for these children.

#### Figure 2: What Oral Health Ideas Did the RAEs Propose? 12

In their bids, the five RAE organizations identified oral health strategies that they would pursue. This map displays a sample of the ideas they proposed.



#### Rocky Mountain Health Plans (Region 1)

- · Integrated school-based mental health care project that includes preventive and restorative dental services.
- Partnership with the Dental Lifeline Network, a national nonprofit providing access to dental care and education for the elderly, those who cannot afford it, have a permanent disability, or are medically fragile.

#### Northeast Health Partners (Region 2)

Partnership with the National Network of Oral Health Access (NNOHA) Dental Dashboard Collaborative, a training program used for quality improvement, implementing evidence-based clinical practices, and monitoring change through a dental dashboard.

#### Colorado Access (Regions 3 and 5)

- Pilot project with Delta Dental of Colorado and CHI to better understand the utilization of oral surgeries for children ages 2 to 8 years old.
- · Focus on diabetes prevention and management (Colorado Access recently completed an analysis of the association between dental care and reduction in visits related to uncontrolled diabetes).

#### Health Colorado, Inc. (Region 4)

Dental services through Valley-Wide Health System's mobile clinic.

#### ■ Colorado Community Health Alliance (Regions 6 and 7)

Partner with Children's Hospital of Colorado Pediatric Oral Health Care program to integrate dental hygienists into primary care clinics.

# **A Starting Place**

Many of the RAE strategies in Figure 2 focus on a specific group of Medicaid members, such as children. This is an acknowledgement that some populations require additional or alternative interventions to optimize their oral health. In other words, when it comes to oral health, one size does not fit all. A young child has different needs and considerations than a person in their 80s or an adult living with a chronic medical condition such as diabetes.

As a starting point, CHI identified four key populations with whom to prioritize efforts (see Figure 3). These are key segments of Medicaid enrollees for which there is evidence that suggests addressing — or preventing — oral health issues can avoid significant

treatment costs and other diseases. In the case of pregnant women, their oral health also has implications for their babies.

# Strategies and Recommendations

Given the needs and promising models for children, pregnant women, people with diabetes, and older adults, CHI identified a set of strategies and recommendations through the lens of the Quadruple Aim.

Many of these recommendations are focused on the RAEs. It is worth noting that the RAEs have competing obligations as Phase Two continues to roll out including coordination of members' care, population



health management, and building and maintaining networks of providers. These proposed oral health strategies acknowledge that not everything can be done at once. They are listed in relative order from shorter-term to longer-term, each accompanied by CHI's recommendations. The strategies should be considered complementary to the RAEs' ongoing responsibilities.

# **Strategy 1: Leverage Partnerships and Improve Provider Experience**

The goal of this strategy is to deploy the skills of oral health and primary care professionals to ensure the most efficient use of resources while optimizing the scope of what a professional is licensed to do. This requires developing meaningful partnerships among HCPF, providers, member representatives or advocates, RAEs, and DentaQuest. For example, improved partnerships can assist RAEs and PCPs in implementing successful strategies to improve existing oral health KPIs, target key populations, or help DentaQuest attain performance goals.

A starting place for these partnerships is a strategic conversation about evidence-based practices, team-based care models, maximizing efficiency, and barriers to providers practicing at the top of their scopes. The recommendations under this strategy identify a few "meetings of the minds" as a starting place.

**Recommendation 1.1:** Convene a summit of Medicaid partners, including RAEs, DentaQuest, HCPF, oral health providers, member representatives, primary care providers, and other oral health stakeholders, to establish shared goals and develop roles and partnerships to further oral health goals. HCPF, a philanthropy, health coalition, or other state agency could serve as convener, working with facilitators whose expertise focuses on evidence-based dentistry and improving outcomes in high-need populations.

Examples of potential partnerships include:

 RAEs and DentaQuest: This partnership would focus on developing complementary efforts in two areas. First, RAEs and DentaQuest can work with member representatives and advocates to identify needs, messaging, and an outreach strategy to ensure Health First Colorado members understand and use their oral health benefits. Second, RAEs and

Figure 3. Key Populations of Health First Colorado

Focus Population and Their Oral Health Challenges

#### **CHILDREN AND YOUTH**

Untreated caries in early childhood is an aggressive and fast-acting disease. It can result in painful infections and expensive care in the operating room (OR). Young children can experience adverse outcomes after undergoing general anesthesia in the OR.<sup>16</sup>



#### **PREGNANT WOMEN**

Less than half (46.5%) of pregnant women in Colorado in 2017 reported having their teeth cleaned during their pregnancy.<sup>28</sup> Women with untreated dental caries who have already given birth put their infants at risk for tooth decay by passing on the bacteria that cause the disease.<sup>29</sup>

#### **PEOPLE WITH DIABETES**

People with diabetes have a high risk of oral health complications, while oral disease gone unchecked can complicate their treatment.<sup>33</sup>



#### **OLDER ADULTS**

Untreated oral health care among nursing home patients increased the likelihood of pneumonia.<sup>36,37</sup> One in 10 (9.8%) adults ages 65 and older in Colorado have lost all their teeth due to decay or periodontal disease.<sup>38</sup>

#### Members: Oral Health Challenges, Strategies, and Promising Models

#### **Key Strategies**

Focusing on preventing tooth decay in early childhood through risk assessment, parent/caregiver education on family health habits, fluoride varnish application, and dental sealants has shown to improve oral health and reduce costs and utilization.<sup>17</sup> Screening throughout childhood is optimal, and the earlier the better. 18,19 Cavity Free at Three promotes oral health screening within pediatric and primary care settings and has demonstrated a significant reduction in caries in high risk populations.<sup>20</sup>

#### **Promising Models**

Colorado's SMILES Dental Project brings a virtual dental home to community settings. The program provides exams, screening, preventive care, and basic dental treatment to many hard-to-reach populations, including children in schools and Head Start programs. The Colorado Medical-Dental Integration (CO MDI) Project integrates dental hygiene services into medical practices, reaching both children and adults.<sup>21</sup> School-based sealant programs — like Colorado's program operated by the state health department — are backed by strong evidence of preventing childhood cavities.<sup>22</sup> Oregon's Coordinated Care Organization (CCO) model demonstrated an increase in sealants among children enrolled in Medicaid ages 6-14, which officials attribute to financial incentives and publicity tied to measurement.<sup>23,24</sup> School-based sealant programs have also been implemented by Oregon's CCOs and their contracted oral health providers. North Carolina's Into the Mouths of Babes program is similar to Colorado's Cavity Free at Three initiative, training physicians and other medical professionals to deliver preventive oral health care like fluoride varnish and oral health risk assessments.<sup>25</sup> It has demonstrated promising reductions in hospitalizations and risk for caries.<sup>26,27</sup>

Educating pregnant women about the value of oral health care during pregnancy and dispelling myths among dentists and physicians that dental care can put pregnant patients at risk.<sup>30</sup>

Prenatal care represents an important opportunity to provide oral health services.<sup>31</sup> Receiving needed periodontal treatment and maintenance during pregnancy demonstrated an annual medical cost savings of \$2,433.<sup>32</sup>



Conducting an oral health risk assessment can identify specific considerations and treatment options. Ensuring the health of both teeth and gums — through appropriate periodontal treatment — is particularly important.

Conducting patient education and oral health assessments of people with diabetes in a primary care setting has shown promise of improving outcomes without increasing costs.<sup>34</sup> Delivering appropriate periodontal treatment to people with diabetes reduces hospital admissions, physician visits, and health care costs.<sup>35</sup> Models like the SMILES Dental Project and CO MDI could deploy dental hygienists to community settings, providing periodontal treatment to populations with barriers to access.

Provide minimally invasive oral health care by a dental hygienist — such as interim therapeutic restorations (ITR), silver diamine fluoride, and fluoride varnish — where people reside and gather. Venues may include nursing homes, long-term care facilities, or other senior-focused programs and housing.<sup>39</sup>



Additional research is needed, but promising approaches include expanding services offered within skilled nursing facilities, providing onsite preventive and evaluative services through a virtual dental home, and implementing risk assessment to measure the likelihood of developing oral disease. For the oral health workforce, additional training in how to care for older adults — considering the patient's goals and stage of life — will also likely improve access and outcomes.



DentaQuest can coordinate their network-building efforts. The RAEs are responsible for building networks of primary care and behavioral health providers. DentaQuest manages the network of oral health providers serving Medicaid members. RAEs and DentaQuest could develop a crosswalk to align their networks to ensure access and optimize provider experience. The goal is to ensure that dentists and dental hygienists in the network are aligned with the principles of prevention, providing treatment based on risk, and monitoring outcomes. Coordinating provider outreach and minimizing duplication of efforts will improve provider experience. Ongoing communication between RAEs and DentaQuest will be essential.

- RAEs and Primary Care Providers: RAEs can use their networks of private practice primary care providers and pediatricians to promote or pilot test preventive approaches. These may include oral health screenings, risk assessments, training on Cavity Free at Three, and tracking these preventive procedures, similar to immunizations (see box on Page 11). This is also a strategy for increasing access to needed evaluative and restorative services.
- RAEs, Oral Health and Primary Care Providers, Quality Improvement (QI) Experts: Engaging QI experts will aid in identifying opportunities for dental and dental hygiene practices (or integrated primary care practices) to most efficiently deploy oral health professionals and resources.
- HCPF, RAEs, Member Advocates, Providers: HCPF's
  Program Improvement Advisory Committee and its
  subcommittees represent ideal existing forums to
  discern additional KPIs focused on oral health. (See
  Strategy 2.) This group could also explore whether
  Medicaid members have equitable access to care,
  including members' experience feeling respected
  or disrespected by clinic staff, ability to schedule
  appointments during office hours, and developing
  a relationship with a dentist or dental hygienist.
- RAEs and Providers: As a component of the RAEs' health neighborhood requirement, RAEs and providers can partner to assess the potential return on investment (ROI) of negotiating a share of the RAE's per member per month (PMPM) payment to be paid to oral health providers or physical health providers who offer oral health services. Existing medical and behavioral health providers in the RAEs' networks could also be identified as

- candidates for colocation or integration of oral health services.
- Providers and Representative Organizations (such as the Colorado Dental Association, the Colorado Dental Hygiene Association, the Colorado Chapter of the American Academy of Pediatrics, and the Colorado Academy of Family Physicians): Primary care and oral health providers could develop a care compact and accompanying guidelines similar to the care compact facilitated by the Colorado Medical Society between primary care physicians and specialty care providers. (See Strategy 2).40

Recommendation 1.2: Develop a platform or forum for RAEs and both oral health and medical providers to share promising practices. In the beginning, the platform could be used to examine strategies for team-based care, improving patient care and provider experience, integrating oral and physical health care, and understanding the respective roles of dentists, dental hygienists and primary care providers. For example, some experts see the role of dentists as surgeons whose training and skills could focus on people with the most complex oral health needs. The platform could eventually be expanded to include other types of care like behavioral health or other programs like CHP+.

#### **Strategy 2: Reduce Health Care Costs**

The goal of this strategy is to incentivize appropriate care based on an assessment of risk, prevention, and innovative care delivery models by refining payfor-performance metrics. The ability of the RAEs and PCPs to earn financial incentives is determined by improvement on a set of metrics called KPIs.<sup>43</sup> Phase Two of the ACC uses seven KPIs, which are tied to payment (See Glossary). These KPIs may be subject to change in the future, as HCPF switched and added KPIs throughout Phase One.

Anecdotal evidence from key informants suggests that RAEs are giving greater attention to oral health services than the Regional Care Collaborative Organizations (RCCOs) did in Phase One. This momentum is likely due to the inclusion of the dental KPI. While the dental visit KPI is a step in the right direction, it is very broad, including preventive and restorative oral health services, and not specific to a population, like children or older adults.

With the guiding principles in mind, CHI developed

# **Learning from Immunizations?**

Public health professionals and pediatricians have largely been successful at establishing a standard immunization schedule for children and adolescents. 41 Could the dental profession learn from this experience and establish a similar schedule? For example, the Cavity Free at Three program provides guidelines for dental and medical professionals to apply fluoride varnish and other approaches to prevent dental disease for infants and toddlers. Recent research found that early childhood caries was reduced when medical providers applied fluoride varnish four times before the age of 3.42 Moreover, one key to the success of immunizations is tracking when particular immunizations were provided over the course of childhood and adolescence, even if the child received care from different providers. Another successful strategy incorporated immunizations into the QI goals of care teams at clinics. Could the dental, medical, and public health professions develop similar tracking and QI approaches for preventive oral health procedures?

four recommendations to encourage HCPF, RAEs and their provider networks to increase their focus on oral health. The underlying rationale is that increased attention to oral health will produce ripple effects, improving other physical health conditions and decreasing avoidable or unnecessary utilization.

**Recommendation 2.1:** In addition to improving performance on the dental visit KPI, identify linkages between oral health investment and the other KPIs. The RAEs may be best suited for this exercise. For example, maintaining dental and periodontal health may reduce services associated with uncontrolled diabetes or pneumonia for older adults,44 improving the "potentially avoidable cost" KPI. Increasing access to oral health services also may negate the need for members to visit a hospital ED for pain and infection related to oral disease. This may require developing a strategy that focuses on adult Medicaid members who tend to visit the ED for oral health complaints more than other age groups.<sup>45</sup>

**Recommendation 2.2:** Consider strengthening the definitions and/or methodology of existing KPIs to include oral health services. For example, the criteria for well visits or prenatal visits could be refined to include service codes for oral exams. Longerterm strategies may include developing a dentist/ dental hygiene "care compact" like the one used between primary care providers and specialty care providers for the health neighborhood metric or encouraging Prometheus Analytics to develop oral health episodes of care, which are currently absent from the list of potentially avoidable costs. Revisions to metric definitions like those proposed in this recommendation will likely result in an interruption in trending over time, so revised metrics will need to be considered new KPIs. This activity would likely be best undertaken by HCPF with stakeholder engagement.

**Recommendation 2.3:** Consider other oral health metrics to add to the KPI list or replace the existing dental KPI. These metrics would encourage the use of evidence-based strategies with specific populations. Figure 4 contains a list of possible metrics adapted from CHI's review of available literature. The Dental Quality Alliance (DQA) has developed guidance for state Medicaid agencies and others to implement many of these claims and eligibility-based metrics.<sup>46</sup> This activity would likely be best undertaken by HCPF with stakeholder engagement, possibly its Program Improvement Advisory Committee or workgroups.

Figure 4 is not intended to an exhaustive list, and there are many considerations in operationalizing these metrics, such as ensuring there is the infrastructure to collect and report the data.

**Recommendation 2.4:** Consider adding oral health measures from Figure 4 or other sources to the performance and/or structural measures for the Alternative Payment Model (APM), without duplicating the KPIs.

The APM was launched to tie enhanced primary care reimbursement to value. Currently, there are no dental or oral health metrics in the APM. As integration of oral health and physical health continues to grow, HCPF may decide to measure the degree to which primary care providers are delivering oral services such as screenings, risk assessments, or preventive measures.

This is a strategy spanning the next few years, as primary care providers cannot change their selected measures in 2019. However, providers could



Figure 4. Oral Health Measures for KPI Consideration 47

Measure Name	Description	Target Population
Preventive Services for Children	Percentage of all enrolled children who received a topical fluoride application and/or sealants within the reporting year.	Children
Oral Evaluation	Percent of enrolled children and youth under age 21 who received a comprehensive or periodic oral evaluation within the reporting year.	Children
Topical Fluoride for Children and Youth	Percentage of enrolled children and youth ages 1-21 years who received at least three to four topical fluoride applications within the reporting year. <sup>48</sup>	Children
Sealants for 6-9 Year-Old Children	Percentage of enrolled children ages 6-9 years who received a sealant on a permanent first molar tooth within the reporting year.	Children
Sealants for 10-14 Year-Old Children	Percent of enrolled children ages 10-14 years who received a sealant on a permanent second molar tooth within the reporting year.	Children
Care Continuity	Percentage of all children enrolled in two consecutive years who received a comprehensive or periodic oral evaluation in both years.	Children
Ambulatory Care Sensitive ED Visits for Dental Caries in Children	Number of ED visits for caries-related reasons per 100,000-member months for all enrolled children.	Children
Periodontal Evaluation in Adults with Periodontitis	Percentage of enrolled adults ages 30 years and older with history of periodontitis who received a comprehensive or periodic oral evaluation or a comprehensive periodontal evaluation within the reporting year.	Adults
Topical Fluoride for Adults at Elevated Caries Risk	Percentage of enrolled adults ages 18 years and older at elevated risk* who received at least two topical fluoride applications within the reporting year.	Adults
Clinical Process**	Percentage of patients given a risk assessment or screening questions.	Any age group
Intervention Measure**	Percentage of patients in need given oral hygiene training.	Any age group
Care Coordination and Referral Process**	Number of referral agreements in place with local dental partners.	N/A

<sup>\*</sup> DQA defines "at risk" as having an elevated risk of caries-related lesion treatment as identified through specific procedure codes in administrative claims data. Refer to DQA documentation for full details.

similarly explore linkages between oral health and existing metrics. In other words, investing in oral health activities may impact their performance on their chosen metrics and result in enhanced reimbursement. Promising candidates include poor diabetes Alc control, eye exams for people with diabetes, blood pressure screenings, well-child visits, depression remission, screenings, risk stratification, care compacts, and referral tracking.

## **Strategy 3: Improve Health Outcomes** by Integrated Care

The third strategy's goal is to ensure that Medicaid members have access to the right oral health care at the right place and at the right time, resulting in improved oral and physical health outcomes over time. This means expanding access to preventive services by integrating oral and physical health

<sup>\*\*</sup> These measures are adapted from a list intended for primary care providers integrating oral health services. However, some may be used by oral health providers as well.

care, using tools to assess a patient's risk for oral disease, coordinating care, and ensuring that the appropriate treatment is completed and documented.

Within the past five years, a number of state and national oral health organizations have acknowledged the importance of this opportunity. Each has developed frameworks and resources for integrating oral health into primary medical care. Colorado's own Cavity Free at Three has established step-by-step resources for pediatricians and medical practices to implement an oral health program for infants and young children.49 Other national examples include the National Network for Oral Health Access (NNOHA), Smiles for Life, and Qualis Health.<sup>50</sup> While the frameworks differ depending on their intended audience or focus area (such as pediatrics), they all address aspects such as administrative readiness, care coordination, team-based approaches, changes to clinical workflow, billing, and quality improvement.

Recommendation 3.1: Review available frameworks and select one to use as a launching point for developing long-term strategies for integrating care. The approaches outlined in this report could be incorporated into the partnerships proposed in Strategy 1.

Recommendation 3.2: Identify additional resources and successful models in Colorado for integrating care in a variety of clinic types, such as the Colorado Medical-Dental Integration project. These include private PCP practices, federally qualified health centers (FQHCs) and community safety net clinics.

**Recommendation 3.3:** Examine Colorado's experience with integrating physical and behavioral health through the State Innovation Model to identify any applicable lessons. Three factors for successful integration of physical and behavioral health, which apply to oral health care as well, include:

- · Incorporation of easy-to-use, validated screening and assessment tools into clinical workflow.
- · Delegation of these tools' administration to medical assistants so that providers can focus on making decisions on patient care.
- · Structured referral processes between the primary care and behavioral health professionals.51

### **Strategy 4: Improving the Patient Experience and Looking Ahead**

The fourth strategy — improving the patient experience — is the most important of all the strategies. It may be best considered a guiding principle, a process, and an outcome. Patient centeredness is a goal and common thread woven throughout all the strategies and recommendations identified in this report.

This thread includes promoting healthy behaviors, focusing on prevention of oral disease, and developing an oral health workforce that is activated and incentivized to provide evidence-based, minimally invasive, and patient-centered care.

The approaches outlined in this paper focus on realigning the delivery and payment systems for oral health. Yet there is also substantial unmet need for oral health care. Making care more convenient for patients — in primary care offices, child care settings, nursing homes — is a strategy to increase access and reduce this unmet demand.

There are many more questions. However, the research and recommendations here demonstrate that the opportunities are wide open for Health First Colorado to lead in a new vision of oral health.

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A Health Grantmaker

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