

Dental Care in Accountable Care Organizations: Insights from 5 Case Studies

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Executive Summary

There is a wave of innovation occurring with health care organizations taking a coordinated approach to patient care and assuming accountability for the cost, quality, and outcomes of their patient population. A limited number of these Accountable Care Organizations (ACOs) include dental care as part of their care coordination strategy (around three percent at present). The American Dental Association (ADA) and American Academy of Pediatric Dentistry (AAPD) commissioned five case studies to investigate successes and challenges to incorporating dental care into a coordinated approach to care. The ADA and AAPD believe that the models currently in operation offer valuable insights into the experience of integrating dental care into ACOs. The five case studies provide several overarching key findings.

First, there were two main motivations for ACOs to offer dental care. Some ACOs embrace a “whole health” philosophy of care delivery that assumes the ACO cannot be accountable for a patient’s overall health if it does not address oral health needs. Both Kaiser Permanente Dental Associates (PDA) and Trillium Coordinated Care Organization typified this perspective. Others included dental care because the primary payer (typically the state’s Medicaid program) includes it as a covered health benefit. For example, Hennepin Health was required by the county to include oral health benefits partially as a result of high cost dental procedures and pain medication dependency associated with untreated oral health problems.

Second, payment arrangements vary across organizations. Most of the ACOs that we studied accept a variation of a capitated payment at the organization level where dental services are carved out of the total capitation. Additionally, individual dentists are able to receive upside incentives without direct downside risk. Permanente Dental Associates, for instance, negotiates an annual capitated payment from Kaiser’s health plan that covers all dental and administrative costs for its patients. It then pays individual dentists incentives for achieving certain quality metrics. Hennepin Health, on the other hand, utilizes a slightly modified capitated payment model in which the organization receives a global payment from the state’s Medicaid program

specifically for the provision of dental services. Individual dentists are paid on a fee-for-service (FFS) basis, however, they are provided bonus payments based on the amount of care provided and meeting certain quality measures. In the more established ACOs, the dentists can be shareholders in the ACO and share in the total generated cost savings.

Third, the ACOs studied reported some promising results in coordinating dental care with overall medical care and improving patient outcomes. Typically, more experienced ACOs reported more advanced care coordination techniques with data showing improved patient outcomes. Kaiser, for example, recognized that its dentists were a critical patient touch-point, interacting more frequently with patients than other health care providers, and achieved remarkable success in utilizing dentists to close patient-care gaps. Hennepin Health has also shown promising results with a large reduction in emergency department utilization by targeting high hospital utilizers and steering them toward preventative dental care. Prior to this initiative, providers were frustrated that their provision of care was essentially limited to prescribing painkillers and not treating the cause of dental pain.

Fourth, integrating dental care into ACOs presents numerous organizational and technical challenges. Kaiser, for instance, has integrated dental care in its Pacific Northwest region since the early 1970s but has not expanded this as a national offering. Several organizations identified technical challenges related to Electronic Health Records systems that are unable to interface with each other without costly fixes or a system-wide replacement. Practicing in an ACO may also present cultural challenges to dentists who are not accustomed to practicing in a large group setting or do not have advanced training that allows them to treat varied and complex cases.

As the health care system continues to evolve toward increased coordination of care and value based payment, there could be further opportunities for better coordination of dental and overall medical care. Our analysis shows that early adopters have seen some important benefits, but that there are also important challenges as well.

Delta Dental of Iowa (Dental Wellness Plan)

The following case study profiles the efforts of Delta Dental of Iowa (Delta Dental), a dental benefits company that acts as the administrator for Iowa's Dental Wellness Plan (DWP). The Dental Wellness Plan provides dental coverage for individuals newly eligible under Medicaid expansion.

While not technically an ACO, Delta Dental of Iowa's relationship with the state through DWP represents an accountable care approach to contracting by addressing provider network adequacy, access measures, increased preventive services, member outreach and education, patient experience of care, and performance incentives for providers.¹

Among the case study participants, Delta Dental's work with the DWP represents the earliest efforts on the spectrum of market development for dental services in accountable care, which requires the coordination of medical and dental providers. This coordination continues to evolve, with the Iowa Department of Human Services (Iowa DHS) looking to fully coordinate dental services into accountable care organizations, through voluntary coordination of these services.² This case presents the perspective of an administrator (Delta Dental) that has been contracted to run the state's dental plan for Medicaid expansion. To understand this arrangement the following individuals were interviewed:

- Cheryl Harding, Chief Operating Officer/Vice President at Delta Dental of Iowa
- Suzanne Heckenlaible, Vice President of Public Affairs at Delta Dental of Iowa and Executive Director of the Delta Dental of Iowa Foundation
- Gretchen Hageman, Director of Dental Wellness Plan at Delta Dental of Iowa

I. ACO Background and Market Overview

Delta Dental of Iowa (Dental Wellness Plan)	
Year Established	2014
Lives Covered	116,000
Patient Population	Medicaid expansion (adults)
Primary Payer Mix	Iowa DHS
Payment Arrangement	Capitated PMPM
Dental Providers	735 dentists
Dental Staffing Structure	Contracted

Delta Dental is the largest and most experienced dental benefits company in the state, insuring more Iowans with more dentists than any of its competitors. Delta Dental covers more than 900,000 lives through contracts with large state-based employers, individuals, and the state government.

Delta Dental is a member of the not-for-profit Delta Dental Plans Association, based in Oak Brook, Illinois, the leading national network of independent dental service corporations. Delta Dental Plans Association member companies provide dental benefits programs to 62 million Americans in more than 114,000 employee groups throughout the country.

Delta Dental invests in oral health projects through the Delta Dental of Iowa Foundation and the Public Benefit Program. Delta Dental supports communities by improving access for predominantly underserved populations and funds programs to advance the careers of dentists (e.g., Dental Education Loan Repayment Program). To date, the Delta Dental of Iowa Foundation has granted over \$20 million to improve the oral health of Iowans.

When Iowa opted to expand Medicaid beginning in 2014, the state created the Iowa Health and Wellness Plan (IHWP) to provide medical and dental coverage for the newly enrolled Medicaid expansion population. Covering all newly eligible Iowans, ages 19–64, with income at or below 133 percent federal poverty level (FPL), the benefits package and provider network currently serves more than 116,000 Iowans.

Eligibility requirements to enroll in medical and dental coverage differ for IHWP beneficiaries. On the medical side, enrollment is based on income. Newly eligible adults above 100 to 133 percent FPL are required to enroll on the Health Insurance Marketplace, receiving medical coverage through select insurers. Newly eligible adults at or below 100 percent FPL receive medical coverage through Medicaid managed care by selecting a provider from a statewide Medicaid provider network, many of whom are participating in accountable care arrangements. The Iowa Department of Human Services (DHS) is highly invested in the success of the state's Medicaid accountable care organizations (ACOs) and encourages these organizations to take a comprehensive approach to promoting healthy behavior by reimbursing providers at higher rates for care coordination. Additionally, as per the Iowa Medicaid ACO Agreement, these ACOs are encouraged to develop relationships with dental providers as well as other non-medical providers to support care efforts.ⁱ Iowa currently has four Medicaid ACOs participating in the Iowa Health and Wellness Plan.

To satisfy the dental component of the IHWP, Iowa DHS contracted with Delta Dental to administer the Dental Wellness Plan (DWP). Delta Dental's large network of providers, experience in efficient administrative management and strong focus on community and public benefit made it the state's choice partner to administer the new plan to manage the newly enrolled Medicaid expansion population. The plan offers comprehensive dental benefits equivalent to the traditional Medicaid dental benefit, but is designed to address shortcomings in the current Medicaid dental program. Specifically, the new plan addresses the problems of an overwhelming administrative burden and low provider reimbursement. Through a new network of dental providers established by Delta Dental, the DWP offers higher reimbursement rates (similar to commercial rates) and incentives for both dental providers and members to be aligned with preventive services and good oral health. Unlike enrollment in medical coverage, the entire Medicaid expansion population is enrolled in the DWP regardless of percent FPL. Also differing from medical enrollment, dental providers are not specifically paid to coordinate members' care.

Since the start of enrollment on May 1, 2014, the DWP has taken a population health approach to dental care, emphasizing member engagement and care coordination. The specific program goals include: (1) enhancing member

access to high quality dental services; (2) population health management, including provider and patient education, care coordination, and community support; (3) assuming accountability for population outcome measures; and (4) engaging members in preventive services and treatment compliance through incentives.

The overarching goal of the DWP is to contribute to the total health of each member by not treating dental as a separate or unrelated component. As part of the DWP's design, there is a focus on care coordination and member engagement by linking oral health care to physical health care through medical homes and ACOs. Although nothing legislatively or contractually obligates coordination between Delta Dental and the state Medicaid ACOs, Iowa DHS intentionally included dental care in the program with the understanding that it is an integral part of the value-based world, and that the ability to facilitate that coordination is essential.

Like other organizations that are integrating dental care with overall health care, Delta Dental appreciates that coordinating relationships between medical and dental providers is novel and will surely evolve. Although Delta Dental believes that dental should be integrated with health care, it is too early to know exactly how these relationships will grow—the Dental Wellness Plan is an experiment to try to find an answer to this question.

Cheryl Harding, Chief Operating Officer of Delta Dental of Iowa, stated, "They're very focused on overall health, with a concentration on the medical side first from an ACO standpoint, and then they will evolve to include the dental piece in some manner. We certainly stay connected to what's going on. We want to be in the conversation to help influence what's going to happen to dental as appropriate." Though dental is not contractually included in the ACO's agreements, the DWP takes an accountable care approach in contracting with dental providers to focus on performance measures and hold providers accountable for the care delivered. Delta Dental believes that the concept of accountability for cost and quality to deliver high-value dental care will eventually be followed by the required coordination with medical providers, as oral health will be included in the ACO's continuum of care.

Delta Dental is currently the only dental carrier for the Dental Wellness Plan and has played an important role in helping Iowa DHS and key stakeholders develop the plan. While Delta Dental is the only carrier for the Dental Wellness Plan

to date, other dental plans are able to participate by meeting certain criteria set by the state—for example, one of these conditions requires participating dental carriers to be on the state’s insurance exchange.

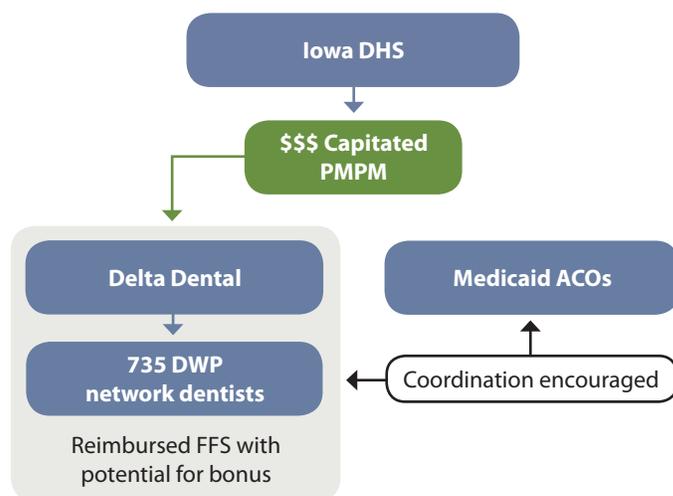
Currently, there are 735 dental providers (646 general dentists, seven endodontists, 50 oral surgeons, 11 periodontists, and 21 prosthodontists) at more than 879 locations within the DWP network. Within the first six months of operation, 821 dentists/locations provided dental services to a DWP beneficiary. Due to the higher reimbursement rates and reduced administrative burden, Delta Dental has experienced a favorable turnout of dentists applying to join the DWP network and is in the process of recruiting more dentists to join. Participation in the DWP is separate and independent from all other existing commercial agreements dental providers may have with Delta Dental.

A 2013 evaluation of Iowa’s now expired IowaCare program, which provided limited health benefits to low-income adults who did not otherwise qualify for Medicaid, determined that oral health issues were the most common chronic condition experienced by enrollees. Additionally, nearly half of enrollees had unmet dental care needs.³ Although the pre-expansion Medicaid population was still in the traditional Medicaid program and not the DWP, these populations share similar characteristics.

Under the DWP, the entire Medicaid expansion population is enrolled regardless of how they receive medical coverage.⁴ Currently, more than 116,000 Iowans are enrolled in the DWP, and within the first six months of the program, more than 24,900 DWP members have received a service.

Like many other providers caring for this subset of patients, Delta Dental has noted significant differences between its typical commercial population and DWP’s Medicaid expansion population, mainly with socioeconomic issues that cause basic differences in needs. For example, Delta Dental has a network of 50 DWP oral surgeons, twice the number of any other dental specialty group. Since the DWP patient population was largely uninsured prior to Medicaid expansion, many members had not received any dental care for several years, if at all. Due to this pent-up demand, Delta Dental has observed high utilization by this population; noting that there has been an increase in oral surgery for the last-resort treatment of tooth extractions.

II. Payment Arrangements and Risk-Sharing



Under the Dental Wellness Plan, dental benefits are provided by the state through a capitated commercial dental plan carve-out.⁵ Delta Dental receives a capitated per-member per-month rate from Iowa Medicaid, then reimburses DWP network providers on a fee-for-service basis, with rates higher than traditional Medicaid reimbursement. Delta Dental contracts with the network of providers, and Iowa DHS is not a party to that contract.

As required by the DWP, Delta Dental has created incentive compensation for the DWP provider network. In addition to the set fees, which are comparable to commercial PPO rates and are substantially higher than current Medicaid reimbursement rates, general and specialist providers are able to earn bonuses for meeting certain requirements.

General dentists participating in Delta Dental’s Dental Wellness Plan network are enrolled in a bonus pool funded by Delta Dental to reward them for improving the oral health of the members. The bonus pool is distributed annually and is divided among dentists that meet certain requirements. These requirements will include the completion of the online risk assessment with each new member exam, proactive outreach to patients to encourage recall visits, and care maintenance.

Similar to the general dentist bonus pool, Delta Dental funds a specialist dentist bonus pool where bonus allocation is based on the number of unique patient visits to a dentist’s office for members to whom a specialist dentist provided

services. The bonus requirements for the specialist dentist bonus pool include a willingness to accept DWP referrals and scheduling accommodations that align with normal business practices.

On the medical side of the IHWP, there is some payment variation based on certain performance measures (e.g., continued preventive care and medical home establishment), and dental is following suit. Though not yet tied to risk and in its early stages, the dental side has instituted similar performance measure tracking. Currently, Delta Dental's only performance measure is 100 percent completion of the oral health risk assessment for each new patient as a requirement for bonus eligibility. For dentists, the concept of completing an online risk assessment for each patient is new and has required special attention from the dental plan. Delta Dental plans to collaborate with other industry experts to determine other performance measures for dental providers once the assessment is more widely accepted and utilized. Delta Dental leadership expects these will include measures such as the number of patients who adhere to treatment plans, as well as other measures around dental interventions, like the durability of crowns.

Care Coordination

Outreach and Referral

Another result of this patient population being previously uninsured, is that many members are unaware of their new dental coverage, let alone how to properly use it. To educate members of their coverage, and as part of its evolving plan to increase coordination between medical and dental, Delta Dental is beginning a new effort by engaging outreach and referral staff to help bridge the interdisciplinary gap. With contracts beginning on February 1, 2015, this outreach and referral team will first target the emergency department (ED), working to increase both member and provider education. For the members, Delta Dental's staff will direct outreach efforts towards those who sought ED services for dental pain. For the providers, Delta Dental's team will equip ED staff with materials to educate them about appropriate referrals and strategies for helping to establish a dental home. Delta Dental leadership is confident that this outreach and referral initiative will lead to further medical-dental integration.

Oral Health Risk Assessments

As part of the Dental Wellness Plan's design for population health management and to encourage care coordination, DWP members' oral health risk is evaluated using self- and provider-completed assessments. All DWP members are encouraged to complete this assessment to identify risky oral health behaviors and to assist in provider communication, education, and outreach. The health assessment not only addresses dental care, periodontal disease, and oral cancer, but also collects broader health information including conditions and habits that can impact overall health, such as diabetes and heart disease.

Additionally, DWP dental providers are required to complete an oral health risk primary assessment for each DWP patient. For this primary assessment, Delta Dental partnered with PreViser, a dental risk analysis company, to develop and implement a user-friendly, online, oral risk-assessment tool that the provider uses during the patient's first visit. The tool records patient information through a secure web portal and the data is then sent to Delta Dental. Delta Dental aligns patient information by integrating the tool's results with member records. The risk assessment gives the dental provider a baseline from which to stratify patients and to establish a care plan from the outset that prioritizes interventions or preventive strategies. The DWP dentists, both general and specialists, are incentivized to complete the required primary assessment for each of their member patients.

On the medical side of the IHWP, medical providers are also asked to complete a health risk assessment for each of their member patients. Although Delta Dental contributed to the development of the dental questions, it is currently geared toward medical-related risk only. Delta Dental's leadership anticipates that the dental and medical assessments could eventually be combined, though there is no definitive timeline for this integration.

While the DWP assessment is primarily oral health-focused, it provides a potential opportunity for collaboration with medical providers and ACOs regarding the needs of the patient. Delta Dental has found that, for its dentists in federally qualified health centers (FQHC) where medical, dental, and social services are offered all in one location, integration between the providers is more likely to occur.

Delta Dental has seen some of their closest integration in their FQHC dental clinics. Though still on a limited basis, providers can collaborate to discuss a high-risk patient and determine a treatment plan.

In implementing care coordination strategies, Delta Dental has faced the reality that, unlike the medical community, it is uncommon for dental practices to share patient data. Furthermore, dental providers tend to take varied approaches to recordkeeping, with a mix of EHR and paper records usage. These realities have presented a challenge for Delta Dental as it pushes practices to integrate the health risk assessments into their care strategies.

Given that Delta Dental understands the complexities of a dental office and knows that to many dentists, the bottom line is time and volume, Delta Dental is in a position to help the practices integrate the assessments into each office's business plan. In order to encourage utilization, Delta Dental requires consistent completion of the primary assessment tool as a requirement for dentists to be eligible for

an annual bonus. Additionally, Delta Dental has had DWP dental providers speak to new network participants about the importance of the primary assessment in enhancing care strategy. These tactics are proving to be successful, with roughly 50 percent completion of the primary assessment in the first six months of the program.

III. Provision of Dental Care

The Dental Wellness Plan is structured in a way that incentivizes members to practice good oral health habits and seek regular preventive care. Members are able to earn increased dental benefits as they meet requirements set by the plan, including establishing a dental home and continuing to follow-up on preventive visits. When adults enroll or first utilize services, they have a fairly narrow benefit of basic preventive services called Core Benefits. The core set of benefits offers immediate access, including exams, cleanings and X-rays as preventive and diagnostic services. Under the Core Benefits, members can also receive emergency services to relieve pain as well as certain temporary stabilization services for basic function and quality of life, including full dentures. If beneficiaries complete a periodic exam within 6–12 months of their first visit, they are eligible to receive Enhanced Benefits, which includes all core benefits plus restorations, root canals, non-surgical gum treatment and some types of oral surgery. Members can earn Enhanced Plus Benefits if they receive a second periodic exam within 6–12 months of their previous appointment. The Enhanced Plus Benefits includes all Core and Enhanced Benefits as well as crowns, tooth replacements (bridges and partials), and gum surgery.

To retain their level of benefits, patients must continue to utilize preventive care. Under this progressing benefits structure, members must return for a recall exam every 6–12 months to maintain earned benefits. If a member fails to do this, they will only have access to Core Benefits and must “start over” at the bottom of the benefit ladder. With this building benefit structure, the plan hopes to create the incentive for behavior change, stopping the cycle of seeking dental care only for rescue.

Preliminary findings suggest that this building benefit structure has helped to shift services toward prevention and diagnosis. As of October 2014, of the total number of services provided to DWP members, 64 percent were for diagnostic and preventive, 20 percent stabilization and 16 percent emergent.

	Core Benefits Immediate Access	Enhanced Benefits Complete 1st follow-up within 6-12 months of initial exam	Enhanced Plus Benefits Complete 2nd follow-up within 6-12 months of 1st follow-up
Diagnostic Services	■	■	■
Preventive services	■	■	■
Emergency services for pain	■	■	■
Stabilization services for basic function	■	■	■
Restorations		■	■
Root canals		■	■
Non-surgical gum treatment		■	■
Some oral surgery		■	■
Crowns			■
Tooth replacements			■
Gum surgery			■

IV. Challenges to Dental Care Provision

Currently, the dentists are largely unaware of the world of accountable care and the impact it may have on them. Though there is high ED utilization for dental-related problems, patients are not following up with their dental clinics for a permanent solution. This has resulted with Delta Dental continuing to engage in basic education about integration, including appropriate referrals and a comprehensive care approach for each member.

The various approaches to recordkeeping in the dental industry will continue to be a barrier for coordination between the medical and dental worlds. To alleviate this, Delta Dental may eventually keep an electronic record of a patient's information as a condition of DWP participation.

V. Results

Delta Dental collaborated with Iowa DHS and other stakeholders to develop a strategy to accomplish the program's overall goals of enhancing member access to dental services; population health management; accountability for population outcome measures; and preventative services and treatment compliance through incentives. Delta Dental also

met with hospital associations and public health agencies to exchange ideas, explore collaborative opportunities, and develop a model with a high likelihood of success in improving care quality and health outcomes. Delta Dental landed on a strategy that from the outset incentivized both dental providers and patients to integrate care and rather than compensating based on strict adherence to guidelines and performance measures.

In starting with the payment piece, Delta Dental and Iowa DHS trusted the structural components would evolve. In these conversations, Delta Dental heard similar themes of focusing on outcomes and quality measures, but the immediate programmatic emphasis was on coordination; particularly, how to get all parties the right information so they could offer the best care.

The greatest success with the DWP is the plan encourages further coordination between medical and dental, a relationship that did not previously exist. It seems the model is on the right path given that within the first six months of the program, roughly 21 percent of enrollees received a service.

Hennepin Health

The following case study profiles the efforts of Hennepin Health, an ACO serving Medicaid expansion beneficiaries in Hennepin County, Minnesota.

This case presents the perspective of an ACO with advanced integration of dental care. To understand this arrangement we interviewed Julie Bluhm, the Clinical Program Manager for Hennepin Health.

I. ACO Background and Market Overview

Hennepin Health	
Year Established	2012
Lives Covered	10,500
Patient Population	Medicaid expansion (adults)
Primary Payer Mix	Minnesota DHS
Payment Arrangement	Global capitation
Dental Providers	1,705 dentists
Dental Staffing Structure	24 employed; 1,681 affiliated

Hennepin Health is a county-based accountable care organization (ACO), which includes a health plan and an innovative care delivery program that serves the Medicaid expansion population⁶ residing in Hennepin County, Minnesota. Launched in 2012, Hennepin Health represents a partnership between four organizations that share financial risk for more than 10,500 low-income adults without dependents. Hennepin Health is county-based, bringing together the county-affiliated safety net hospital and clinics, a county-operated insurer, the county's human services, and public health department under a shared-risk financing arrangement. Its main focus is to identify and address the social determinants that drive poor health. Early outcomes from Hennepin Health are demonstrating that health care reforms can accomplish the triple aim of improving clinical outcomes and patient satisfaction while decreasing costs.

Prior to the ACO's conception, its clinical providers, Hennepin County Medical Center (HCMC), NorthPoint Health & Wellness Center, and public health clinics, had experiences with individual initiatives aimed at coordinating care for safety-net populations—experiences that later helped better prepare the organizations to be accountable for the

Medicaid expansion patient population. These experiences, as well as other market forces, made Hennepin Health uniquely positioned with what their leadership describes as a “fertile environment” of ideal partners that were united with common goals, capable of providing comprehensive services and even located in a state with a long history of health care collaboration and reform.

The concept and care model for Hennepin Health arose from an organizational crisis that occurred as a result of Minnesota's General Assistance Medical Care Program terminating in 2010. A hospital-based block grant program, which greatly reduced available funding, replaced the program and provided state-funded coverage for low-income adults without dependents. As a result, Hennepin County Medical Center was forced to make adjustments in order to meet the needs of this population and avoid what they predicted would be staggering financial losses. The hospital chose to aggressively focus on managing outpatient care rather than waiting for patients to seek care in an inpatient setting. With this shift in focus, HCMC was better positioned and more willing to accept full risk for the newly enrolled population formed by Minnesota's Medicaid expansion in 2011.

Similar safety net concerns compelled the Hennepin Health Foundation to survey 71 dental clinics in Hennepin County in June of 2012 and found significant income- and geographic-related disparities. Their research found that only 10 percent of surveyed clinics accepted patients on medical assistance, with only a small handful of those providing access to new patients with Medicaid or no insurance.⁷ Areas with the lowest levels of dental care access and utilization include Minneapolis neighborhoods in HCMC's primary service area. Hennepin Health represents half of the dental clinics that accept patients with Medicaid or no insurance, with the HCMC Dentistry Clinic and NorthPoint Health & Wellness Center as partners in the ACO.

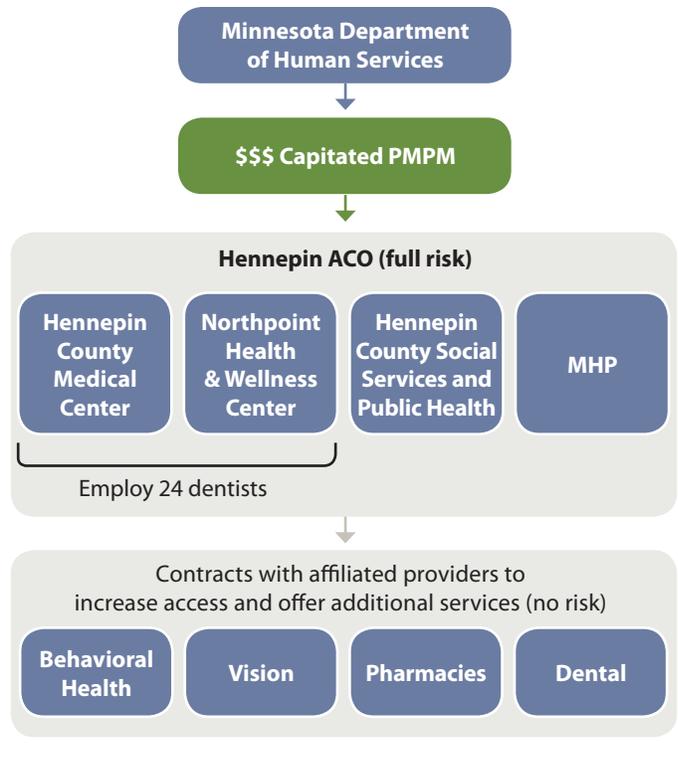
Hennepin Health represents a partnership between four organizations first aligned in 2011 as a response to Minnesota legislation that granted two counties the authority to create innovative health care delivery systems.⁸ These four entities have worked together to build a delivery network that provides high-quality care for the Medicaid expansion population in Hennepin County and share financial risk:

- (1) A medical center: Hennepin County Medical Center (HCMC) is an urban safety-net and comprehensive academic medical center that includes a Level I trauma center and 462-bed teaching hospital in downtown Minneapolis, as well as nine primary and specialty-care clinics. Through charity care and a sliding-fee charge schedule, HCMC provides access to a full range of health services regardless of the patient’s ability to pay. Although it is a resource for individuals across the state, its largest catchment area is Hennepin County.
- (2) A social services organization: Hennepin County Human Services and Public Health Department is the county’s social services agency and public health department, but also houses a number of clinical providers including the county’s mental health center and health care for the homeless.
- (3) A federally qualified health center (FQHC): NorthPoint Health & Wellness Center is a county-operated federally qualified health center (FQHC) and community clinic that offers numerous clinical and social services, regardless of a person’s ability to pay.
- (4) A health plan: Metropolitan Health Plan (MHP) serves Medicaid enrollees as a county-operated, not-for-profit health maintenance organization (HMO). The health plan manages funds as Hennepin Health’s program administrator.

In addition to these four partner organizations, Hennepin Health contracts with other affiliated clinics and community organizations to provide greater access and additional resources for its members such as dental, behavioral health, vision, and pharmacy.

Hennepin County residents who are eligible under Medicaid expansion are able to choose from four health plans for coverage – Hennepin Health’s Metropolitan Health Plan is one of these plans. In addition to those who opt in, Hennepin Health is also the Medicaid expansion program’s default enrollment option for those who fail to select a specific plan. As of March 2015, Hennepin Health had more than 10,500 people enrolled—approximately 25 percent of the county’s Medicaid expansion beneficiaries.

Hennepin Health serves a unique and complex subset of Medicaid enrollees—Minnesota’s Medicaid expansion population made up entirely of adults, ages 21–64, without disabilities and not living with dependent children. Hennepin County is home to Minnesota’s largest foreign-



born population with roughly 13 percent of its residents born in a different country. With 90 different languages spoken, Hennepin County is the eighteenth-most linguistically diverse county in the US.⁹Due to low-income levels and a low prevalence of previous access to health insurance, this patient population tends to be high utilizers of welfare services and crisis care. Hennepin Health’s membership is predominately male, a racial/ethnic minority, and around 45 percent have a mental health condition or a chemical dependency issue. At any given time, approximately one-third is believed to be homeless or unstably housed.

II. Payment Arrangement and Risk Sharing

The four partner organizations created the Hennepin Health ACO by contracting to share full financial risk for Hennepin County’s newly enrolled Medicaid beneficiaries. Hennepin Health believes it has been able to provide a more coordinated, comprehensive care model because all of its partners are assuming financial risk by working together under global capitation. Hennepin Health is given a capitated (fixed total cost of care) per-member per-month (PMPM) payment from Minnesota’s Medicaid agency to cover the cost of all Medicaid services for its members. The clinical providers—HCMC, NorthPoint and the county public health clinics—are reimbursed by the ACO

with traditional fee-for-service payments. Though not part of the risk sharing, or eligible for bonuses, Hennepin Health contracts with affiliated providers to offer increased geographic access and additional resources for its members.

The ACO's social services agency, Hennepin County Human Services and Public Health Department, provides the membership with social services, which are paid for using preexisting state and county human services funds. When necessary, the funding for these social services is supplemented by the ACO's PMPM payments. To help ensure meaningful savings, Hennepin Health tracks social services expenses monthly to determine whether the savings on the medical side are offset by an increase in costs on the social side. Hennepin Health makes investments to further social services with the intention to eventually help lower health care costs.

At the end of each year, if Hennepin Health has saved money relative to the PMPM capitation payments received in that year, a dividend is given to the provider partners with an allotment based on the amount of care provided to the members using formulas that reflect each partner's size and pre-established performance measures. Once divided, the partners can freely distribute their funds within their individual organization. A defined proportion is also set aside for reinvestment funds dedicated to start-up projects and new innovations for the upcoming year. ACO participants can identify and formally propose reinvestment project ideas that are designed to further improve the model and create the potential for short-term future savings. To date, the ACO has kept expenses below the PMPM payments, earning savings each year.

Care Coordination

From its beginning, Hennepin has taken a comprehensive approach to health, believing that the greatest influences affecting health care utilization and outcomes often occur outside of the traditional delivery system. Hennepin Health's model is heavily focused on care coordination and addressing social factors that affect health, including members' medical, dental, behavioral, and social needs.

With the goal to shift care from the hospital to outpatient settings, Hennepin Health decided to first focus on its clinics since they are the setting that can offer a baseline level of care coordination across the system.

As a first step, Hennepin took each clinic through a state-designed medical home certification process and stationed a care coordination team in each practice. These care coordina-

tion teams, consisting of a community health worker, an RN clinical coordinator, and a social worker, help to enroll new members, often forming personal relationships with them, then identify their needs in order to coordinate future care. Once members have established a relationship with a primary care clinic team, they are asked to complete a comprehensive assessment of their lifestyle, including health risk factors and social needs. Additional medical and social services such as housing navigators and intensive case managers are provided by extended teams that target the highest utilizing members. Hennepin Health members with the most complex cases are referred to the Coordinated Care Center, an outpatient intensive care clinic dedicated to these patients.

Assigned care coordinators work to ensure that each Hennepin Health member receives the appropriate care, which may include medical, dental, mental or social services. With all four ACO partners on the same Epic EHR, all can share patient data and work together to plan the best care strategy. Each member's care team has a designated primary coordinator, the person who has established the best relationship or most frequent contact with that member. Providers can utilize the EHR to identify a patient's primary coordinator and notify them with treatment updates, outcomes, and follow-up needs. With all members of the care staff able to access and share information, patients receive better, more appropriate care.

Clinical program manager Julie Bluhm gives an example of this coordination relating to dental, "If someone comes to the ED experiencing an acute dental situation, our staff can get them into the dentist for care. That dentist or the dental staff can look in Epic and see who their primary coordinator is and give that person a call to let them know the patient was seen, the outcome of the visit, and follow up as needed. So it's just really coordinating the services back."

As part of their arrangement with Minnesota Department of Human Services, Hennepin Health is responsible for meeting certain quality measures. Like other Medicaid managed care organizations in Minnesota, Hennepin Health has a percentage of its revenue withheld with its return dependent on improvements to quality measures set by the state, one being the annual dental visit rate. The ACO reports performance on Minnesota Community Measures and on Healthcare Effectiveness Data and Information Set (HEDIS) measures unique to its population. Hennepin Health also reports its performance on the Press Ganey patient satisfaction survey, most recently earning a high patient satisfaction rating of 87 percent.

Understanding the need to quantify the quality of care delivered, Hennepin Health tracks usage, cost and health outcomes monthly using an internal 12-page scorecard. The scorecard measures many health outcomes related to medical conditions such as asthma, cardiovascular disease and diabetes. Regarding dental care, Hennepin Health monitors whether members have had at least one dental visit each year and also tracks each member's number of ED visits. Though this ED tracking is not for dental-related visits specifically, Hennepin could potentially use the data to determine the occurrence of dental visits in the ED.

III. Provision of Dental Care

In Minnesota, dental care is a required component of the Medicaid benefit. The inclusion of dental services is not unique to Hennepin Health, but they are unique in that they have chosen to make dental a focal point of their care model.

Early on, Hennepin Health identified dental pain as one of the highest unnecessary cost drivers in the ED. In addition to the problem of high costs, these emergency dental visits caused other concerns for the ACO. First, most ED visits for dental pain are answered by a prescription for painkillers, a treatment method that can be problematic for a population with high mental illness and chemical dependency. The lack of transportation is also a barrier for this subset of patients, so referrals to see a dentist are often left unanswered, causing the same patients to revisit the ED a few days later. For all of these reasons, Hennepin Health knew it had to find a way to improve and streamline access to same-day dental care.

ED In-Reach

In 2013, Hennepin Health added an ED “In-Reach” initiative to target high hospital utilizers and steer them toward primary care. For this in-reach, Hennepin contracted with a community organization called RESOURCE Chemical and Mental Health who provided a case manager to help with intensive targeted case management. Additionally, Hennepin Health deployed a community health worker to be stationed in HCMC's emergency department (as part of the community health initiative that involves six workers stationed at various sites in the community—a correctional facility, a local homeless shelter, and the health plan headquarters). With the primary task of redirecting patients with dental pain to the appropriate avenues for dental care, the community health worker in the ED assesses cases of dental pain and provides the patient

with options for treatment depending on the severity. As one option, the community health worker can escort the patient from the ED to an onsite clinic located inside the hospital. The HCMC Dentistry Clinic, though mainly used for oral surgery and other specialty services, also offers some preventive care with space for walk-in availability. When Hennepin Health identified an increased need for dental care in the hospital, it extended the hours in the Dentistry Clinic, employing the help of dental therapists and assistants to help the ACO expand capacity.

While these services at the HCMC Dentistry Clinic have proven to be an extremely valuable resource for this initiative, the majority of the ACO's dental services are provided by NorthPoint Health & Wellness Center, Hennepin Health's FQHC partner. When the ED community health worker identifies a member who needs fairly expedited dental care, they can arrange a next-day appointment at NorthPoint, faxing over the basic statement of need as well as any other special instructions. To overcome the barrier of transportation and ensure the patient is able to keep the appointment, the community health worker can help to arrange a ride to the clinic. In addition to solving the patient's immediate dental needs, this coordination with NorthPoint also helps in creating a lasting relationship between patient and dentist, establishing a dental home for future dental needs.

As an effort to decrease ED visits, Hennepin promotes the dental benefit to its members through mailings, care coordination staff, marketing campaigns and member events.

Dental Network

Hennepin Health has roughly 24 employed dentists working at HCMC and NorthPoint. The employed dentists work closely with the ACO's care coordination staff to schedule timely follow-up visits and provide direction for quick access to services.

In addition to the dental services offered at HCMC and NorthPoint, Hennepin Health has a comprehensive network of affiliated dental practices. Hennepin Health contracts with a number of independent providers to increase member access, using the statewide CivicSmiles network. Currently, Hennepin's affiliated network includes 1,681 unique dentists in 3,328 access points. Unlike the employed dental providers, the affiliated dentists at the community practices are not part of the risk-sharing and are not incentivized directly by Hennepin Health to meet the same performance or quality measures.

Dental Outreach Pilot Project

Pulling from 2013's reinvestment funds, Hennepin Health financed a pilot project at NorthPoint with the goal to increase access to dental services for its members and to use dental as a pathway to bring in more members that were not previously engaged in the medical home. In working to give their members opportunities to access dental care, Hennepin Health has found that many members are unaware that dental care is available to them. As part of the pilot project, community outreach staff travel around the community to ask and answer dental health questions, informing people of their coverage at Hennepin Health and locating those with dental needs. These community outreach workers educate and encourage members to understand the importance of oral health, bringing them in to receive dental services. In an effort to coordinate across the care continuum, while members are addressing their dental needs, they are also taught about other primary care services that would be beneficial to their health. When a member is brought in to receive dental services, they are connected with a community health worker staffed in the dental department to discuss the importance of primary care, making recommendations and coordinating further services within the ACO.

This outreach, in an underserved area of Minneapolis, has been successful in bringing in new members to the medical home and has enabled Hennepin Health to improve their same- or next-day dental access, which has greatly supported their work with the ED.

IV. Challenges to Dental Care Provision

One of the major hurdles to coordinating dental and medical care within the Hennepin ACO's has been information sharing.

Currently, the sharing of EHRs between physicians and dentists is only one sided: with dental providers able to view their patients' medical records but medical providers unable to view dental records. Hennepin Health is working to create an interface between its members' medical and dental records for increased shared planning among those providers. Hennepin Health has already begun this shared

planning among medical and behavioral health providers, and hopes that by bringing in dental providers, they too will become recognized as a vital part of the care team.

Even with the organized alignment of Hennepin Health's providers, the legal conditions around data sharing have caused issues for the ACO, particularly challenging for social services, which is not regulated as health information.

V. Results

Hennepin Health acknowledges its FQHC partner, NorthPoint, as being a key contributor to the ACO's ability to successfully address its members' dental needs. NorthPoint, the ACO's primary dental site, has been integrating medical and dental for 30 years, making communication and collaboration an integral part of its culture. For the emergency physicians in the ED, the integration of medical and dental is not a common relationship historically, but Hennepin Health has found that its HCMC emergency doctors are both excited and relieved by the collaboration with dental.

Prior to the ED In-Reach program, physicians felt frustrated by their lack of ability to truly treat dental pain. By simply prescribing a painkiller, physicians knew that the patient would eventually be back. However, with the ED in-reach initiative, those patients are directed to receive a real and lasting solution to dental pain. The primary care providers have experienced a bit of a learning curve adding dental needs to the primary care discussion, but the clinics' care coordinators have largely lifted the burden of that adjustment.

Preliminary results suggest that Hennepin Health has been successful in moving care from the hospital and the ED to outpatient settings. Between 2012 and 2013, Hennepin Health experienced a 9.1 percent decrease in ED visits, and a corresponding 3.3 percent increase in outpatient visits. In 2013, 262 Hennepin Health members used the Access Referral process to obtain dental care, reaching 346 Hennepin Health members in 2014.

Partners for Kids Pediatric ACO

The following case study examines the interaction that Partners for Kids, an ACO created by Nationwide Children's Hospital (Nationwide) that serves pediatric Medicaid beneficiaries in Ohio, has with their dental provider partners. This case presents the perspective of an ACO with limited integration of dental care at this point in their development. To understand the relationships between the ACO and dental providers, we interviewed Paul Casamassimo, former Chief of Dentistry at Nationwide, and Sean Gleeson, Medical Director at Partners for Kids.

I. ACO Background and Market Overview

Partners for Kids Pediatric ACO	
Year Established	2005
Lives Covered	300,000
Patient Population	Medicaid Children
Primary Payer Mix	Ohio Medicaid
Payment Arrangement	Global capitation
Dental Providers	3 Dental Care Organizations
Dental Staffing Structure	Varies: employed or contracted by multiple DCOs

Partners for Kids, created by Nationwide Children's Hospital in Ohio, self-designates as the nation's largest pediatric ACO, covering more than 300,000 lives under the state's Medicaid program. Partners for Kids (PFK) uses a physician-hospital organization model to establish governance that is shared equally between the hospital and representatives of the primary physician and specialty practice groups. The majority of PFK physicians work under a salaried model as hospital or practice partners, while the remaining physicians are community practitioners.

The PFK network has operated as an ACO since 1997, when, as Nationwide's CEO Dr. Steve Allen explained in a 2010 interview,¹⁰ it started for very practical reasons: a number of Medicaid managed care plans went out of business, resulting in the hospitals losing a substantial amount of money. Dr. Allen further explained that

“[Nationwide] recognized that if we adopted a fully capitated model, we would eliminate the solvency risk as an issue because we would get paid up

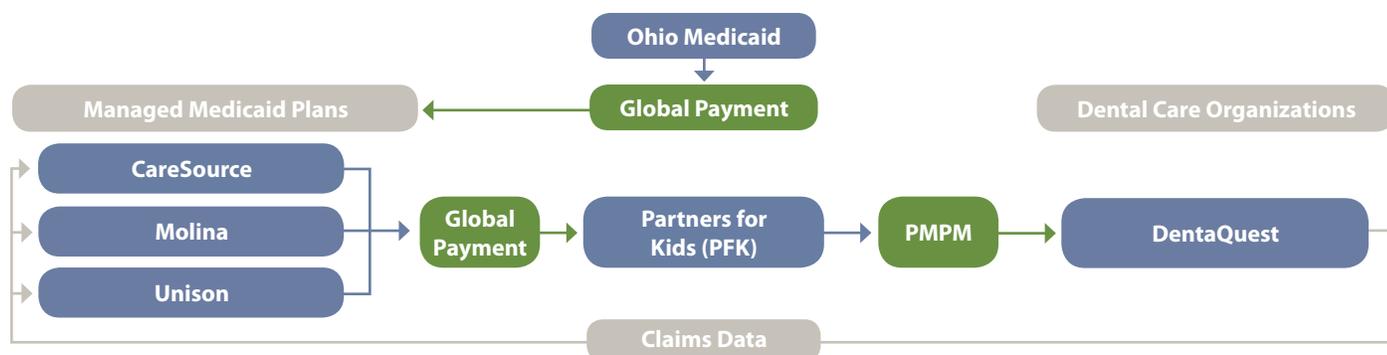
front—and assume the risk for care. Once we made that financial decision, other plans got involved, and Partners for Kids took shape around its ability to impact care.”

This financial approach also resulted in PFK taking full risk on the dental aspect despite not being structured in a way to directly affect the provision of dental care. Another motivation for Nationwide to start PFK was to improve access to primary-care doctors for children on Medicaid throughout central and southeastern Ohio. Because state Medicaid payments are below what it costs to provide care, many physicians stopped seeing children, so “We gave them an incentive to open up their panel to see more Medicaid patients,” said Allen. PFK has a board of directors to assist the Physician Hospital Organization (PHO) in determining the scope and direction of their ACO efforts. The board consists of 16 individuals who represent Nationwide Children's Hospital, including employees and community physicians who are participating with the ACO.

II. Payment Arrangements and Risk Sharing

Under the arrangement with Ohio Medicaid Managed Care Plans, Partners for Kids receives a capitated fee to care for more than 300,000 pediatric beneficiaries. The organization assumes the business risk for clinical and financial outcomes but the Medicaid managed care plans provide claims processing, member relations, and other medical management functions in exchange for a percentage of the Medicaid premium.

As a joint contracting entity, PFK offers its community doctors several benefits to practice under their collaborative model. As previously noted, PFK offers an enhanced reimbursement under Medicaid. PFK also promises to remove what Medical Director Dr. Sean Gleeson refers to as the “burden of overhead created by the normal tension between providers and payers” since, due to PFK's agreement with the Medicaid managed care plans, PFK is both the payer (in the sense that it pays the individual providers) and the provider in one. Beyond the contracting aspects, PFK offers what they call “practice facilitation and quality improvement support” through the implementation of the patient-centered medical home model and related quality improvement efforts around asthma and ADHD.



In 2010, PFK and Nationwide leadership eagerly anticipated the rollout of a pediatric ACO pilot authorized under the Affordable Care Act (ACA). The ACA provision gave the Secretary of Health and Human Services the authority to establish a program that would, similar to the Medicare Shared Savings ACO program, allow providers to organize in a way that enabled them to take a level of financial risk and clinical responsibility for a specified population. Allen described the inclusion of the pediatric ACO provision in the ACA as “recognition that pediatric care is a critical intervention point for shifting a culture of acute care to a culture of prevention” and an “appreciation for the different market forces in pediatric health care.” To the dismay of many in the pediatric community however, the pediatric ACO program never made it to the rules process and therefore will not see any official program coming from CMS.

Nonetheless, PFK leadership, in collaboration with several other entities with an interest in improving pediatric care for Ohio Medicaid patients, applied for and was awarded a Health Care Innovation grant from the Centers for Medicare and Medicaid Innovation (CMMI). The group, which includes Nationwide, PFK, Akron Children’s Hospital, Voices for Children, the Ohio Children’s Hospital Association, and the state’s Medicaid program, was awarded \$13.1 million dollars to help achieve the triple aim goal of lowering the cost of providing care, improving care outcomes, and improving the population health—through a model of collaboration that employs the principles of accountable care.

The CMMI grant provided assistance to expand coverage more than 500,000 pediatric Medicaid patients in 46 counties, including 15,000 previously excluded disabled children who constitute a large portion of pediatric medical costs. The project started on July 1, 2012 but was implemented in September 2012. It will run through the end of June 2015, with a review of the results expected soon thereafter.

III. Provision of Dental Care

As PFK’s affiliated hospital, Nationwide employs the traditional model of dental care for the pediatric population: some dental providers on staff but mostly a faculty comprised of community dentists. Nationwide dental providers cover primary, secondary, and tertiary dental care to the tune of about 50,000 visits a year. However, it is the relationship with the Medicaid managed care plans and the contracting dental plans that gives insight into the ways in which PFK’s work under an ACO model really starts to intersect the provision of dental care.

According to Sean Gleeson, the agreement that PFK has with the various managed care organizations (MCOs), includes full risk for dental care as well as the medical component. PFK’s goal from the beginning was to offer a “one-stop shop” for the managed care plans by offering the full spectrum of pediatric services so that—in line with the principles of the accountable care model—they could begin to break down the silos that have at times led to fragmented, poorly coordinated care for many in the US, especially the underserved pediatric population.

Although PFK believes strongly in the whole-health paradigm, PFK leadership is candid about their need to prioritize their efforts in improving the care experience—and the provision of dental care has needed to take a backseat to more pressing items with a greater overall and immediate impact on child health. PFK’s work under the CMMI grant has been focused on three things: children with complex needs, premature births, and the growing behavioral health needs of the pediatric population. Gleeson explains that not only are these aspects of care important for the long-term wellbeing of their patients, they also represent the highest potential for short-term savings within their system—savings that could be reinvested into improving other aspects of their care, including dental.

Dental care, on the other hand, is not seen as a prime candidate for savings for several reasons. Gleeson explains that since the dental benefit comes by way of the state Medicaid program, the main issue by far is access—not improper utilization. This is especially true in the rural areas where many children go without crucial preventive care and as a result, are frequently in need of high-cost restorative care—care that can only be accessed, in many cases, where sites are equipped with anesthesiology support to allow dentists to carry out intensive surgeries. Such demand on the secondary and tertiary dental systems across the US has created immense backlogs in care, including at Nationwide.

To mitigate the need for restorative care, PFK has experimented with distance medicine strategies, leveraging traveling dental hygienists to help give access to those in outlying regions. However, state regulations, the state dental board, and legislative limits have made that fairly difficult to do. As an alternative, PFK has made efforts to train pediatricians and family physicians to do fluoride varnish applications. Fluoride varnishes are especially important in the rural areas where children's only access to potable water is well water—which, unlike many of the urban water systems, is not fluoridated, leaving children more susceptible to caries.

Cost-saving Efforts

One of the dental plans with whom PFK works is Dentaquest, a group with a national footprint ranging from Massachusetts to California. Dentaquest noted the backlog of procedures across their many networks, specifically young children waiting for extensive restorative procedures that take place in the operating room, which was also observed by PFK's leadership and Nationwide's former chief of dentistry, Dr. Paul Casamassimo. Even after these expensive procedures were done, they found that these same patients were returning with extensive caries. Dentaquest, beginning with Boston Children's Hospital in Massachusetts and later with six more sites across the US, including Nationwide, implemented an evidence-based disease management approach to reduce and manage cavities in children under the age of five.

The approach included employing risk assessment practices and principles that enabled providers to identify high-risk patients who could benefit from the program. They then engaged the families to encourage self-management and prescribed a topical fluoride along with directions on when and how to use it. Based on the provider's assessment, high-risk patients were asked to come back for a follow-up visit. Patients who returned for restorative treatment received

disease management in that same visit in the form of a caries risk assessment, a fluoride varnish and the establishment of some self-management goals. Results from their efforts across the seven sites showed a 55 percent decrease in operation room utilization, a 69 percent decrease in the rate of new cavitation, and a 50 percent decrease in the amount of patients complaining of pain in their most recent visit.

Through the pilot, Dentaquest claims to have saved several hundred thousand dollars by keeping children out of the operating room. Casamassimo believes that all were able to benefit from the program: Dentaquest saved money, the hospitals alleviated somewhat their operating room backlogs and were able to share in the savings and the state Medicaid program benefited from the reduction in costs. Despite such promising outcomes, however, Casamassimo questions the sustainability of the model unless the state Medicaid dental program substantially increases their reimbursement for preventive dental services. Certainly Dentaquest, PFK, and all those involved are not alone in the search for the right financial incentives; this is an issue that is frustrating providers from all over the care spectrum attempting to find a financial model that truly rewards value-based care.

The first step toward more accountable care in dentistry, according to Casamassimo, is paying providers to carry out preventive care. The current state is what Casamassimo calls “problem-based care-seeking behavior,” referring to a common scenario in which a patient only sees the dentist when he or she is suffering from immense tooth pain. Casamassimo recently published a study that sought to understand the effects that early dental care can have on dental spending for children later in life. His findings conclude that children who get care earlier in life require a much lower amount spent to fix teeth and fewer restorative procedures. This approach, however, requires an investment mindset from the state Medicaid agencies, since they will be paying more upfront for an increased amount of preventive services that may someday result in lower costs. Add these additional expenditures to the current demand for restorative services, and states begin to come up against substantial budget limitations, though Casamassimo thinks it can be done by putting parameters around what is expected and including some risk-sharing.

IV. Challenges to Dental Care Provision

Although Nationwide dental providers make up the largest portion of the various dental networks, the sheer volume of pediatric Medicaid patients and their distance from Nationwide's main footprint makes PFK reliant upon providers

operating far outside of their ability to influence. Casamassimo notes an example in which some of the dental providers within PFK's network took some patients across the Ohio River to a hospital that charged, in their estimation, five times the going rate for general anesthesia for several dental cases. Casamassimo adds, "I won't say it's fraud, but it's certainly a problem." However exorbitant the charge may have been in this particular case, the concern from PFK's standpoint was more around the idea that if they are overcharging for the anesthesiology, then perhaps they are overutilizing as well—which could signal improper and even dangerous care decisions. From a financial standpoint, the dental plan has the incentive to follow up on that and make sure everything is done according to best practices.

Despite the examples of potentially improper utilization, PFK leadership is confident that the tradeoff between quality control and creating access through extended dental networks is a good one. Gleeson explains that PFK does not get much involved with the dental care plans and lets the health plan manage that relationship instead, noting that the goals of the health plan and the goals of PFK are very much in alignment. Plans like Dentaquest, he adds, are "just encouraging what we'd be encouraging so there's no sense in us trying to get involved." When asked if he thought that the role of the dental plans as the intermediary would ever be subsumed by the ACO, as PFK continued to expand

and refine its care management strategies, Casamassimo responded that he does not foresee such a thing. "We just don't have the manpower to do it, so we're going to rely on these different subcontractors to do all of the credentialing and the follow-up and the looking for a quality of care and for fraud and those kinds of things. And I think [for] the foreseeable future they're happy with that."

V. Results

Partners for Kids prides itself on taking full financial risk and clinical responsibility for the pediatric Medicaid population. Despite operating within the capitated environment, Gleeson explained that not every provider within the organization has "adjusted their mindset, their thinking and their processes to be in compliance, to be value-based . . . on everything that happens." He adds that dental, as with other service lines, will over time have to improve and figure out ways to be successful in a value-based contracting environment. "That hasn't happened yet. It will . . . [Culture] change takes a long time, and you start working on it one section at a time, one patient population, one issue at a time." Gleeson thinks that in order to be an ACO that can honestly claim to have successfully improved the total health of a population, oral health will have to be a part of their strategy.

Permanente Dental Associates (PDA)

The following case study profiles Permanente Dental Associates, P.C. (PDA), a dental care provider primarily in partnership with the insurance company Kaiser Foundation Health Plan (KFHP). Together with KFHP insurance companies partner with Permanente doctor groups they form the Kaiser Permanente (KP) brand.

Although PDA shares some of the characteristics of an ACO (care coordination, capitated arrangement, outcomes focused), it is not a full ACO in the sense that it is a completely integrated medical provider and payer. However, the Kaiser Permanente Dental Program has been among the earliest adopters of an integrated approach to care delivery and specifically to integrating dental care into overall care. In some ways, PDA represents one of the more advanced models of dental integration into care delivery.

For this case study, we interviewed John Snyder, DMD, the CEO and Dental Director of Permanente Dental Associates.

I. ACO Background and Market Overview

Permanente Dental Associates (PDA)	
Year Established	1974
Lives Covered	240,000
Patient Population	Commercial; Medicaid (~5K)
Primary Payer Mix	Kaiser Foundation Health Plan
Payment Arrangement	Capitated PMPM
Dental Providers	145 dentists
Dental Staffing Structure	Directly employed: (100 partners, 37 associate, and 7 special contract)

Formed in 1974, Permanente Dental Associates (PDA) is a for-profit professional corporation that provides dental services to the Kaiser Foundation Health Plan (KFHP) members in parts of Oregon and Southwest Washington.

Although the ACO model is currently a subject of wide consideration, the origins of PDA and its ACO-like model date to the late 1960s when Mitch Greenlick, PhD, the founding director of the Kaiser Permanente Center for Health Research (CHR) in Portland, received a grant from the President Lyndon B. Johnson administration to provide

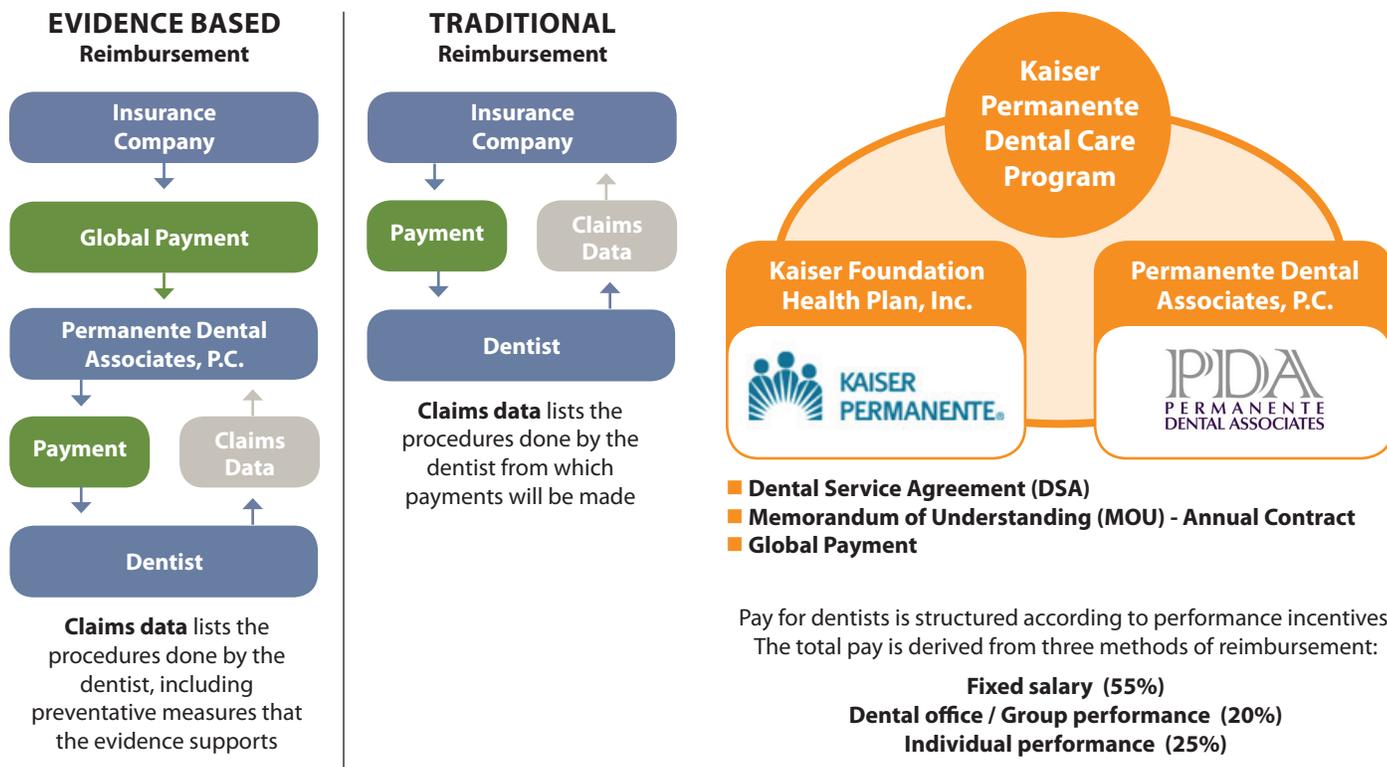
medical and dental care to underserved populations. In an arrangement that echoes what is now referred to as global payments, Greenlick and the CHR believed that there could be an effective and viable model to provide oral health care to underserved populations through a prepayment program. Following the early successes of this program in the late 1960s, PDA formed with the sole purpose of delivering dental care to Kaiser Foundation Health Plan (KFHP) members.

Kaiser Foundation Health Plan (KFHP) is segmented into seven autonomous regions throughout the United States.¹¹ Although KFHP operates in several markets nationwide, the relationship with PDA and the provision of dental services to plan members is only available to Kaiser Permanente members in Northwest region, which encompasses Southwest Washington State, and the Willamette Valley region of Oregon.

In the Northwest, Kaiser Permanente has 17 dental offices that are typically located in or adjacent to Kaiser's medical facilities and serves 240,000 dental patients. Dr. Snyder, described their patient population as unique within the sphere of managed care—in that they are generally healthy. Dr. Snyder believes that integrated dental services have been crucial in keeping this population healthy, stating that although some patients “may have a chronic disease, we can leverage the dental visit touch-point for people who don't have any illnesses, and get them into preventative services like, say, get their influenza vaccination, because we can talk to them about the importance of that during their dental visits.”

Although there are no competitors that offer closely integrated medical and dental care as with Kaiser Permanente, the overall dental market in the Northwest is competitive. For instance, Willamette Dental Group (WDG) is a private corporation that operates a traditional HMO model with more than 50 dental office locations in the region. Moda Health, a part of Delta Dental, is also strong in the region.

PDA views the integration of dental care into a coordinated health program as crucial to keeping its patient population healthy. Beyond any direct correlation between dental health and specific chronic illnesses, one of the benefits of integrating and coordinating dental care is that it serves as an additional patient engagement and intervention touch-point. Dr. Snyder stated that “if you haven't been in for your



mammogram or your colorectal screening or your cervical cancer screening, our dentists know that when you come into our office. And our hygienists know that. And we can inform and encourage you because half of our offices are physically integrated into the health center. They're either on the same campus or they're right in the same building. And so you can coordinate that care really effectively by just talking to them about, 'hey, go out and get that appointment for your colorectal screening scheduled. Here's your reminder.' And we use these care-gaps reports to really help our patients coordinate their preventative care."

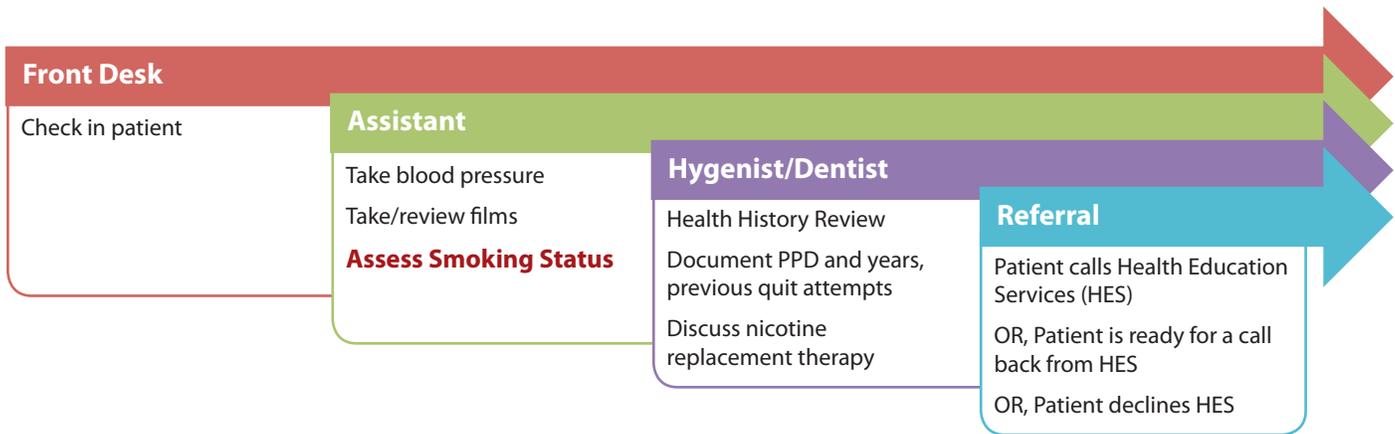
II. Payment Arrangements and Risk Sharing

Despite the fact that PDA and KFHP began their dental partnership in the early 1970s, the two entities did not formalize an operating agreement until January 1, 1985. Today the Dental Services Agreement (DSA) governs the Kaiser Permanente Dental Program relationship with financial arrangements captured in a Memorandum of Understanding (MOU) to determine the global payments that PDA receives from Kaiser Foundation Health Plan (KFHP), which is primarily based on the per-member per-month fee for each Kaiser Permanente member's dental coverage.

Although most of Kaiser Permanente's health plan members are either private or employer-sponsored, PDA does serve a limited Medicaid population who are part of the HealthShare Coordinated Care Organization, an ACO-like program ran by the Oregon Health Authority to cover the Medicaid population. Through this relationship, PDA provides dental services to the limited subset of the Medicaid population that receives Kaiser Permanente medical coverage and are assigned by HealthShare. This relatively small population (around 5,000 individuals) is able to access all of the benefits and services that traditional members receive through the Kaiser Permanente health plan, which generally includes preventative, diagnostic, restorative, emergency and prosthetic services.

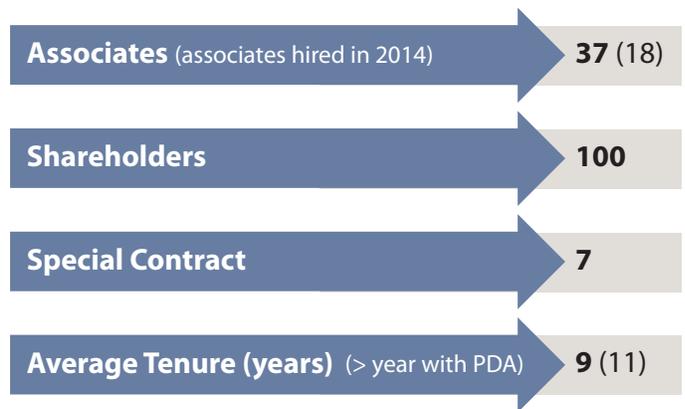
PDA embraces a heavily evidence-based and data-driven dental philosophy and has a formalized process to monitor quality, measure outcomes, and determine best practices. Dr. Snyder stated that PDA "captures data on everything." From this data capture, PDA has designed a set of around 40 evidence-based quality measures, similar to HEDIS, to track quality and outcomes in four categories:

- 1. Patient Care Experience** measures patient satisfaction with the care they received and whether they received



care in a timely manner. The Kaiser Dental Program uses Press Ganey to administer patient satisfaction surveys to track quality and access to measure the care experience. Counting only the “top box scores,” (e.g., very good) PDA asks patients to rate their satisfaction on several measures, including: time between calling and being seen, dentist concern for your questions and worries and dentist concerned for your overall health. This data also helps to inform the program for office staffing and appointments.

- 2. Patient Safety** measures gauge whether PDA is promoting a “culture of safety” for its patients. Patient safety measures rely on a staff survey that examines whether staff and dentists are encouraged (feel empowered) to speak up about errors and near misses. It also relies on a documentation review that examines whether the dentist performed a “procedural pause” prior to a surgical procedure; the percentage of patients who had a recall visit with their dentist of record; and if the patient did not see their dentist of record, was the dentist of record informed of the visit and care plan? PDA believes that tracking this data promotes a culture of safety that is not punitive and relies on openness to solve system issues, using data to find the root cause of problems and learn from it.
- 3. Resource Stewardship** quality measures track how efficiently each office is treating patients and the dollar-per-patient care hour for the overall office. This generally measures how well providers are using their full licensure capabilities and ensures that each clinic offers a broad scope of practice.



- 4. Clinical Effectiveness** quality measures track how well dentists adhere to practicing evidence-based care by tracking procedures recommended by PDA’s evidence-based guidelines. For instance, PDA tracks sealant rates for patients within certain age ranges; dentists report whether the sealant is not indicated, if a sealant was placed and if not, whether or not there is a treatment plan in place to have the sealant procedure done. This metric tracks how well a dentist is adhering to either delivering the care (e.g., sealant) or instituting a care plan that addresses the issue. Another metric within the clinical effectiveness bucket tracks tobacco cessation referrals. PDA collects data on the number of patients that followed through with an intervention plan—if a patient either talks to a cessation counselor, schedules a follow-up appointment with a counselor or receives a smoking cessation product from the dental office.

These quality measures are used by PDA to divide the global payment among its dental providers. PDA emphasized its belief that evaluation of the quality measurements and distribution of incentives remain solely within the dental practice (instead of the health plan) because as a professional group, dentists were better positioned to measure quality and outcomes.

Care Coordination

Information sharing between Kaiser medical and dental providers is crucial in coordinating patient care. One hundred percent of PDA's dental providers are routinely using KFHP's Patient Support Tool (pictured right), which is a platform that contains a patient's provider information and the care plan that each provider has recommended for the patient. This means that when a patient visits a Kaiser Dental clinic, his or her dentist will see the name of the patient's PCP and any tests, treatments or interventions that the PCP may have recommended as follow-ups. For instance, a dentist may ask his patient if he completed a colon cancer screening that was recommended during his last PCP visit. If the patient had not completed the screening, then it is identified as a "care gap."

Dr. Snyder stated that, "dental is the number one department of 37 medical departments of people touching the health care system that have care gaps," and PDA works to close these gaps by encouraging their patients to schedule preventive care with their medical team (e.g., colorectal screenings or cervical cancer screenings). Likewise, PDA expects that the physicians are speaking to patients to close gaps in dental care. This strategy is proving effective: the dental program ranks first out of 37 Kaiser Permanente medical departments in care gap opportunities and is the second highest ranked department in closing care gaps. In November 2014, Dental closed 32,893 care gaps, which is a 44.8% closure rate. Family Medicine was the only department to close more gaps (33,927).

KAISER PERMANENTE

Name: SMITH, TOM
HRN: XXXXXXXX

Primary Care Physician: Merrill Ahrens (0149E)

These recommendations are based on information regarding your general health, your age, and national guidelines for preventive care. Your clinician may determine that you need these tests more or less frequently.
Our records indicate you are due for the following:

Lab tests—Please bring this chart with you to any Kaiser Permanente laboratory. Most medical offices provide lab services between 8 a.m. and 5 p.m. Monday through Friday. Fasting is not required for any of these recommended lab tests. Your clinician may schedule additional tests for you. Please check with a lab representative when you come in.

Test	About this test	Test code - for lab use
Blood tests		
Diabetes monitoring test (HbA1c)	This test measures average blood glucose levels. Generally lower levels are better, and for most patients a level under 7 is best.	2921552
Urine/stool tests		
Colon cancer screening test	A simple home stool test (FIT) can detect colon cancer at an early stage, when treatment can save your life. The test should be repeated yearly. Any positive test should be further evaluated with an examination of your colon. To request a FIT kit, please call us toll-free at 855-517-8382.	18734273

Vaccinations--Please go to any Nurse Treatment Room located in most primary care buildings to get your vaccinations (shots). First, please check in at the registration desk.

Vaccine	About this vaccine
Tetanus (Tdap)	Tetanus, diphtheria, and pertussis vaccine is a one-time vaccination for everyone age 7 and over. Regular tetanus booster shots should follow every 10 years.

III. Provision of Dental Care

Because PDA operates as a multi-specialty group practice, it offers a wide scope of services within the organization. Offering a full scope of services also means that the conditions and complexities of their patients can also vary widely—some may be receiving complex surgical procedures, while others have only routine check-ups. This has led PDA to institute a system of patient stratification and tracking that is integrated with the EHR system that classifies patients based on their oral health status. Patients are classified into the following categories:

- 1. Blank:** Programming is not able make a determination of Oral Health Status.
- 2. OHS-1:** Wellness. Requires only 12-month exam/recall.
- 3. OHS-2:** Maintenance. Moderate perio/caries risk with stable perio condition.

“No one has a 40-minute touch-point in health care anymore other than us... We have you captive and you can't talk back. And we can provide all sorts of preventative messages to you as part of that touch-point.”

– John Snyder, DMD, Dental Director and CEO, PDA

4. **OHS-3:** High Needs. Requires treatment that if not addressed could cause pain within 12 months.
5. **OHS-4:** Unknown. Has not had exam in past 15 months.
6. **OHS-N:** New patient. Has not had dental appointment since 2005.

PDA then monitors these patients over time to track patient oral health. Generally, PDA has found that most membership starts out with more specialty and restorative services and they transition to mostly diagnostic and preventative services where the focus is on health maintenance. 2014 was the first year that they tracked these data, so complete results and analysis are forthcoming.

The 145 dentists who make up PDA are important to its success. PDA's leadership emphasizes that its model of care and the ownership and governance—dentists owned and operated—where dentists are in most leadership positions and have oversight of the performance of the group is a critical part of its structure. The typical dentist employed by PDA has prior experience in a group practice model of care and has completed an advanced training program (e.g., General Practice Residency [GPR] or Advanced Education in general Dentistry [AEGD]), and Dr. Snyder describes a culture of general career satisfaction for PDA dentists, the average dentist tenure of nine years supports this claim.

In a managed care setting especially, a lack of capacity within the clinical practice can threaten efficiency by diminishing overflow and just-in-time care capabilities that could necessitate care referrals into the larger community and drive costs.

IV. Challenges to Dental Care Provision

Cultural challenges between dental and medical providers generally do not exist between PDA and Kaiser Permanente. This is largely because the model of care, a part of Kaiser Permanente since 1974, has been engrained in the culture of both dental and medical providers. PDA's embrace of an evidence-based approach has also helped—they have tested the hypothesis that dental care improves overall health and have data to back up these assertions. For instance, in a study published in the *Journal of the American Dental Association*,¹² PDA was able to show a correlation between that receipt of dental care and a reduction in diabetes-specific health care utilization.

Although PDA has proved its model in Kaiser Permanente's Pacific Northwest region over the last 40 years and believes that this model can be applied elsewhere, Kaiser Foundation Health Plan has not yet embraced it nationally. However, a number of factors have recently made PDA's aspirations to expand by partnering with KFHP in additional regions more persuasive. First, the Affordable Care Act expands oral health coverage for children by requiring that all Qualified Health Plans offer pediatric dental service as an Essential Health Benefit, which increases incentives and overall capital to expand dental programming. Second, there is a growing body of evidence that suggests a correlation between oral health and its impact on chronic disease management and cost containment, which is increasing buy-in within the medical community. Finally, there is a growing awareness within the general public through mainstream publications¹³ that dental care is important for/to overall medical health and wellness.

Although these factors make expansion of PDA's model an attractive proposition, there are still a number of challenges to expanding this model nationally. One of the major challenges is that a common informatics system—a common EHR that includes both medical and dental—is necessary to effectively coordinate medical and dental care. These systems are complex and expensive to implement and especially so in places that already have a system in place: In many cases it is easier and less costly to build a common informatics system from the ground up rather than retrofit or retrain personnel on a new system. Furthermore, the regulatory environment and hesitancy on the part of health plans to share patient health information between medical and dental providers without onerous security assurances poses an obstacle to a care model that relies heavily on coordination and communication.

Given that PDA is integrated within Kaiser Permanente's system, it has a distinct advantage in overcoming these issues. All seven of Kaiser's regions use Epic's EHR platform (Epic recently released its first dental platform), which will help immensely with opportunities to grow and expand into other regions since it has been cost prohibitive to use two informatics platforms.

PDA's culture that embraces an evidence-based practice philosophy may actually make quick expansion challenging, and PDA's own selective hiring criteria sometimes makes recruitment of new dentists difficult. The acquisition of group practices would be the quickest path to expanding in new markets, but finding established group practices that share its

culture of evidence-based dentistry may be proved difficult. Furthermore, PDA's core belief that dentists need to be the organizational leaders and have the oversight of the group—as opposed to a limited owner that is prevalent in other group practice models—may pose additional cultural challenges.

V. Results

PDA has been a successful organization in terms of demonstrating the value of integrating dental care and in terms of professional satisfaction for its dentists. They also have the evidence to back up these claims.

PDA is uniquely positioned, leveraging common informatics systems with the medical care team, to play a role in the conversation that is occurring around wellness and total health. Additionally, PDA has a unique touch-point in dentistry that no other group has and have proven that they are effective in closing patient care gaps.

In addition to examining care gaps, PDA has also shown that their coordinated care model is resulting in higher

adherence on HEDIS measures. The integrated Medical/Dental Group had higher adherence on all four HEDIS prevention measures and higher adherence on seven of 10 HEDIS chronic illness measures when compared to Medical Only Group. PDA's dentists performed well on their own too: The Dental Group had higher adherence on all four HEDIS prevention measures and had higher adherence on seven of seven HEDIS chronic illness measures when compared to Non-Dental Group.

PDA's philosophy of being completely dentist driven, owned and governed has led to a high level of professional satisfaction for its dentists. This is evidenced by its employee make-up where 70 percent of its dentists have bought into the practice as shareholder owner, and the average tenure of its dentists is nine years (11 years for dentists who have been with PDA for more than one year). PDA is an organization that has demonstrated the value of integrating care and built a highly functioning dentist-centered practice that is a desirable place for dentists to practice.

Trillium Coordinated Care Organization

The following case study profiles the efforts of Trillium Community Health Plan, an ACO serving Medicaid beneficiaries in Lane County, Oregon. This case presents the perspective of an ACO with recent integration of dental care. To understand this arrangement, we interviewed Terry Coplin, CEO, and Jim Connolly, Senior Vice President of Provider Affairs.

I. ACO Background and Market Overview

Trillium Coordinated Care Organization	
Year Established	2011
Lives Covered	90,000+
Patient Population	Medicaid
Primary Payer Mix	Oregon Health Plan
Payment Arrangement	Global capitation
Dental Providers	4 Dental Care Organizations
Dental Staffing Structure	Various; employed or contracted by multiple DCOs

Trillium is one of 16 organizations operating in Oregon under the Coordinated Care Organizations initiative. As a Coordinated Care Organization (CCO), Trillium is expected to integrate the various aspects of care—including dental care—that have previously operated within different silos into a coordinated experience for Oregon’s Medicaid beneficiaries. Although the CCO program in Oregon was established in 2011, Trillium has experience serving Lane County, Oregon, for almost 30 years.

Trillium’s roots can be traced back to LIPA (Lane County Independent Practice Association), an independent physician association of 350 doctors that participated as a subcontractor to the local managed Medicaid plans during the 1990s. By early 2000, most commercial plans had exited the market, and LIPA took over 30,000 lives, quickly developing claims processing and care management systems but operating under the insurance exemption Oregon allowed organizations serving the Oregon Health Plan. In time, LIPA’s owners would establish Trillium, a separate entity, to help service the dual eligible population that required applying to CMS for approval as a Medicare Advantage Plan. During this time, LIPA built coordinating competencies working with the county—who oversaw

mental health and other related services—to better integrate the physical health, chemical dependency and mental health aspects. However, those programs were partitioned in ways that made managing care with any continuity difficult. When the CCO program was created in 2011, Trillium’s leadership saw it as an opportunity to get all the lives they were managing under one umbrella and truly create the integration that it had worked for years to develop.

The CCO legislation in Oregon required that many of the individual aspects of care—including dental care—be rolled into the newly established organizations no later than July 1, 2014. CCOs were required to contract with every Dental Care Organization (DCO), Oregon’s term for a dental plan, which previously contracted directly with the state in a given region. Legislative efforts were made relative to dental care to preserve the status quo and keep the DCOs working directly with the state for an extended period of time. DCO leadership and several members of the state legislature had concerns about how the shift from contracting directly with the state to subcontracting through the newly established CCOs would affect their operations. The DCOs had made significant capital investments into infrastructure and worried that some of the responsibilities of the plans would be moved internally to the CCOs. Additionally, there were concerns about how CCOs would measure and compare the DCOs once the information started to flow. When legislative efforts to maintain the status quo faded, opportunities arose for the two groups to come together, and they began to have more beneficial discussions that led to a period of negotiation. Trillium CEO Terry Coplin recounts that “Once things got moving, covering the expanded population quickly took top priority.”

To facilitate communications early on, Trillium’s leadership convened a monthly work group on dental care. The objective was to get the local and, at times, regional representatives from the DCOs and their staff in the room to talk with community members and work on common problems. Shared issues included smoking cessation for pregnant women that dental providers would be able to catch. In the meetings, there was also a need to talk about the safety net clinics that, as a result of Medicaid expansion, were seeing their clientele diminish. All of the DCOs responded to assure these clinics could be reimbursed for seeing patients. Trillium’s leadership describes their partnership with the

Despite official direction from the state on quality metrics, several DCOs have made organizational commitments to hold themselves to certain practices. Two DCOs will be conducting CAMBRAs (Caries Management by Risk Assessment) on all children. Another will be doing periodontal assessments on all patients.

III. Provision of Dental Care

Access to Pediatric Care

Access to pediatric dentists has historically been limited, and DCO's patient population is too small to justify bringing their own dentists into the area. Each DCO approached the issue of pediatric capacity a little differently. One group would occasionally bring in a pediatric dentist from Salem or send patients outside the network, which ended up being more expensive and more common than they would have liked. Another group was able to leverage their other books of business to convince three pediatric dentists it was in their best interests to treat the Oregon Health Plan patients at OHP rates.

Pediatric-Specific Office

One private practice contracting with Advantage dental services is testing a new approach. Several local pediatric dentists realized while moving to a new office that their old location could still serve as a great dental office. They brought in another pediatric dentist and now use that old location to service Oregon Health Plan patients. On their assigned days, the dentists, with their assistants, rotate through the previous office, while front office and some back office personnel work in conjunction with all the dentists. With this strategy they have been able to treat a large number of the pediatric population.

Efforts to Coordinate Care

Just as hospitals have "frequent fliers" that show up at the emergency department for non-emergent issues, so do dentists. It is not uncommon for patients who have put off routine and preventive dental care to show up in the ED for non-emergent situations that could have been easily

addressed during normal business hours at the dental office. Coplin commented that, prior to the program's dental inclusion, dental care was a complete black box:

"We had no idea what was going on with dental care. What we were reacting to were complaints from both our emergency departments and many primary care [physicians] about having patients with dental pains show up in their venue and wondering why they weren't being taken care of by these DCOs."

Most DCOs, according to Trillium's leadership, are now looking to place care coordinators in each office to address these sorts of issues. Capitol Dental Care in particular has plans to place a care coordinator in offices to work specifically with Trillium's patients.

In the future, dental offices will have access to a system the state is currently implementing called the Emergency Department Information Exchange (EDIE). The EDIE system will provide readily accessible information about any admission to any ER department. Additionally and more importantly, EDIE will provide this information to a physician or dental organization via their electronic health record system if one of their members visited the ER, so the provider can follow up.

Another feature of Trillium's care management strategy could have a substantive impact on the coordination between physical and dental health. Trillium currently has a care plan software platform that is used on the physical health side and is integrated with behavioral health, with the goal to eventually integrate dental as well. This system would be shared across all provider types. One example of how this tool could be used on the dental side is that when pregnant women are seen for the prenatal checkup, part of the checklist is to encourage women to get an oral exam. At this point, Trillium is not yet able to share that information with the dentists but has plans to.

Despite lacking a comprehensive strategy across all DCOs, some positive changes appear to be taking place as a result of rudimentary coordination efforts. A recent study conducted by Trillium looked at the number of patients showing up in the ED, primary care offices, and urgent care centers with

dental pain. Physicians were anxious to see if those numbers had decreased since the DCOs came on board. Despite an overall increase in the amount of visits (and therefore costs) due to an almost doubling of the patient population resulting from Medicaid expansion, on a per-capita basis, there was actually a noticeable decrease. Exact results are forthcoming according to Trillium leadership.

IV. Challenges to Dental Care Provision

Apart from the early legislative challenges, other aspects of the CCO program have created difficulties for the provision of dental care. Early on, the various DCOs encountered connectivity issues in shifting responsibility from the state to the various CCOs for things like eligibility, at times overwhelming their IT departments—issues that have mostly been worked out at this point.

Another challenge that Trillium's leadership tried to proactively address was the tendency that medical organizations like Trillium have to work on dental from a medical frame of reference. Trillium's leadership brought

in people that had specific experience working with both dentists and dental care organizations to help explain to the medical staff why dentists do the things they do and to explain to the DCOs why the medical staff does some of the things they do. Trillium's early experience seems to indicate that such a strategy has paid off.

V. Results

Since the integration of dental has been relatively recent, results are limited to Trillium's internal analysis on ER visits as previously mentioned and anecdotes from Trillium's frontline care coordinators. Stories relate mostly to patients who, for the first time, have someone helping them make connections with the traditional physical health and the mental and dental resources now available to them. Additionally, Oregon's CCO program has built into it a heavy emphasis on reporting such that those with interest in the direction of the state's grand experiment can expect to have plenty of evaluation data as the program moves forward.

Endnotes:

1. Iowa Health and Wellness Plan Dental Wellness Plan Fact Sheet. Available at http://dhs.iowa.gov/sites/default/files/iowaHealthandWellness_Dental_FactSheet.pdf
2. Iowa Medicaid Accountable Care Organization (ACO) Agreement. Available at [http://dhs.iowa.gov/sites/default/files/ACO Agreement 470-5218 %28Final 3 14%29.pdf](http://dhs.iowa.gov/sites/default/files/ACO%20Agreement%20470-5218%20Final%20314%29.pdf)
3. Damiano P, Bentler S, Momany E, Park K, Robinson E. Evaluation of the IowaCare Program: Information about the Medical Home Expansion. Health Policy Research. 2013 Jun 1; Available at http://ir.uiowa.edu/ppc_health/81
4. Eligible adults ages 19-64 with an income between 0-133 percent FPL and are not otherwise eligible for Medicaid or Medicare.
5. Kaiser Family Foundation. Medicaid Expansion in Iowa. Available at <http://kff.org/medicaid/fact-sheet/medicaid-expansion-in-iowa/>
6. Minnesota's Medicaid program covers adults with incomes up to 200% of the Federal Poverty Level.
7. Hennepin Healthcare System, Inc. Health Services Plan and Community Health Needs Assessment. Available at https://www.mnhospitals.org/Portals/0/Documents/data-reporting/CHNA/hcmc_p_050360.pdf
8. See Minnesota Statute 256B.0756 establishing the Hennepin and Ramsey counties pilot programs. Available at <https://www.revisor.mn.gov/statutes/?id=256B.0756&year=2011>
9. Stratis Health. Demographics Affecting Health – Hennepin County Profile. Available at <http://www.culturecareconnection.org/documents/HennepinCounty.pdf>
10. Accountable Care News, Volume 1 Number 5, December 2010 "Medicaid and Pediatric Accountable Care Organizations: A Case Study"
11. Northwest, Northern California, Southern California, Hawaii, Colorado, Georgia, and Mid-Atlantic states.
12. Assessing the association between receipt of dental care, diabetes control measures and health care utilization. *J Am Dent Assoc.* 2012 Jan;143(1):20-30.
13. See Michelle Healy. Dental therapists aim to fill dental-care gap. *USA Today.* Jan 2, 2013. Available at <http://www.usatoday.com/story/news/nation/2012/12/21/dental-therapists-minnesota/1731979/>