CareQuest Institute for Oral Health®

ORAL HEALTH OHIO

IMPACT REPORT

Partners in Progress

Pursuing Medical-Dental Integration in Ohio

SUGGESTED CITATION:
CareQuest Institute for Oral Health. *Partners in Progress: Pursuing Medical-Dental Integration in Ohio*. Boston, MA: July 2025. DOI: 10.35565/CQI.2025.2005.

IMPACT REPORT

Partners in Progress

Pursuing Medical-Dental Integration in Ohio

Contents

Authors*

Julie Geiler, MA
Integration Consultant
Oral Health Ohio

Wai-Sum Leung, MS, RDH
Educational Engagement Manager
CareQuest Institute for Oral Health

Rebekah Mathews, MPA
Vice President, Health Transformation
CareQuest Institute for Oral Health

Caroline McLeod, MS, RDH
Value-Based Care Solutions Manager
CareQuest Institute for Oral Health

Marla Morse, MSW, MPA
Executive Director
Oral Health Ohio

Eric P. Tranby, PhD
Director, Analytics & Data Insight
CareQuest Institute for Oral Health

Matt Vermillion, MBA
Senior Program Manager, Health Transformation
CareQuest Institute for Oral Health

*listed in order alphabetically by last name

Acknowledgments

Mary Bayham, MPH
Children's Hospital Colorado

Hannah Cheung, MPH, MS, RDH
Health Sciences Specialist
CareQuest Institute for Oral Health

Brandon Frizzell
Data Engineer
CareQuest Institute for Oral Health

Lisa Heaton, PhD
Science Writer
CareQuest Institute for Oral Health

David Krol, MD, MPH, FAAP
Medical Director
Connecticut Children's Hospital

Morgan Santoro, MPH
Biostatistician
CareQuest Institute for Oral Health

Kelly Schroeder, MS, RDH
Program Evaluation Specialist
CareQuest Institute for Oral Health

Adrianna Sonnek, MPH
Manager, Health Informatics
CareQuest Institute for Oral Health

Madison Vinson, MSHI
Data Engineer
CareQuest Institute for Oral Health

Participating Practices

- Corcoran Privitera Family Dental
  - Peebles
  - Waverly
- Midwest Dental Center
- Village Dental
- John DiTraglia, Inc.
- Nationwide Children's Hospital
  - Franklin Care Center Pediatrics
  - Navarre Primary Care Center
- Southern Ohio Medical Center (SOMC) Pediatric Associates

Executive Summary

Oral health is a critical component of overall health, yet many Ohioans face barriers to accessing dental care, particularly in rural areas.

Dental caries, or tooth decay, remains the most prevalent, yet preventable, chronic disease among children and impacts their development, social confidence, and academic performance. To address access needs, the Medical Oral Expanded Care (MORE Care®) Ohio pilot program (MORE Care OH), led by CareQuest Institute for Oral Health and Oral Health Ohio, aimed to integrate oral health services into pediatric primary care settings and establish referral networks between medical and dental practices.

MORE Care OH operated over two years and consisted of three health-system-affiliated or private pediatric medical practices and four private dental practices spanning six Ohio counties. Participants were supported through a learning management system, coaching, and an alternative payment model (APM) that incentivized quality data reporting and performance in care delivery. The program engaged nearly 20,000 pediatric patients from November 2022 to November 2024, with improvements observed in the delivery of oral health services for children.

Key areas of impact included:

- **Integration of Oral Health Services:** Medical participants successfully incorporated oral health risk assessments, fluoride varnish applications, and discussion of patient self-management goals into an average of 8% of well-child visits over the course of the program. Dental participants focused on caries risk assessments and increased provision of preventive care by 4% while decreasing surgical interventions by 4%.
- **Closed-Loop Referrals:** Established a closed-loop referral system between medical and dental practices, enabled 407 total dental referrals, and ensured improved, coordinated patient care
- **APM:** The APM linked financial incentives to performance measures, encouraging measurement and provision of preventive oral health services and integrated care.

The MORE Care OH program demonstrated the potential for integrated, value-based care to improve oral health outcomes for children. By fostering collaboration between medical and dental practices and incentivizing preventive care, the program made strides in addressing access to oral health in Ohio. This comprehensive impact report outlines the MORE Care OH program's design, implementation, and outcomes toward improving oral health access, quality, and integration.

Introduction

When people think about good oral health, they often think about white teeth and smiling faces. We are taught to regularly brush and floss, eat healthy foods, and drink lots of water to have a healthy mouth. However, good oral hygiene practices are only part of having a healthy mouth. Environmental factors — like access to dental care and social drivers of health — also impact the ability to have and maintain good oral and overall health.[1]

Dental caries is the number one chronic disease among children,[2] and oral health is a key indicator of a child's overall health.[3] In the United States, nearly one in two children experience dental caries before the age of 19, and roughly one in ten adults aged 65 or older suffers complete tooth loss.[4] Aside from tooth loss, dental caries can lead to many adverse effects including pain, developmental issues, lack of social confidence, and poor academic performance,[3] which can have lasting impacts across the lifespan. While it is important to understand that each state has its own contextual factors (policies, geography, communities, etc.) that play a critical role in accessing care and improving oral health.

One of the strongest drivers of tooth decay in children is poverty, and in Ohio, many children have untreated tooth decay, particularly those covered by Medicaid. Despite Ohio ranking eighth nationally in Medicaid reimbursement rates for children's oral health services, access to dental care remains a challenge, especially in rural areas, with one in five children having not seen a dentist in the past year.[8] The issue is further exacerbated by dental workforce constraints, evidenced by the presence of nearly 161 dental professional shortage areas across the state.[6] According to the State Oral Health Plan, three main factors influence oral and overall health: social drivers of health (housing, transportation, education, income, etc.), health behaviors (e.g., oral hygiene habits, diet), and clinical care.

8:1
physician-to-dentist ratio[5]

161
dental professional shortage areas[6]

1.3+ million
Ohio children enrolled in Medicaid[7]

50%
of Ohio 3rd graders have a history of tooth decay and about **20%** have untreated tooth decay[7]

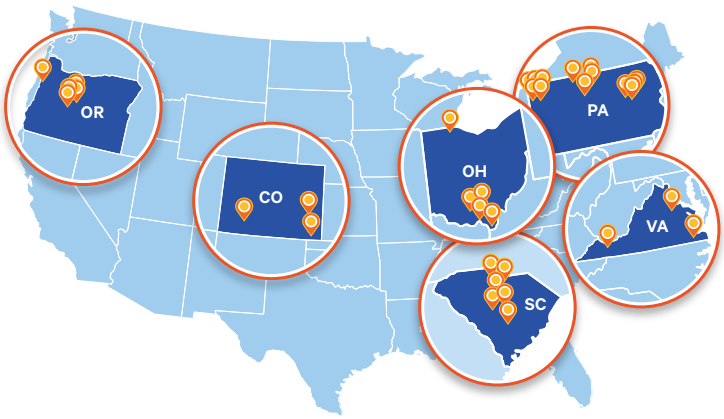
2x more likely
to have untreated tooth decay if child is covered by Medicaid in Ohio[7]

To improve oral and overall health, the State Oral Health Plan identified several priorities, including oral hygiene, access to oral health care, and preventive oral health services.[9]

In 2020, Oral Health Ohio (OHO), a statewide oral health coalition, aligned its efforts with broader health care transformation initiatives by exploring how oral health could complement Ohio Department of Medicaid's Next Generation Managed Care program, which aims to improve care quality and reduce health care disparities. OHO embarked on a yearlong stakeholder engagement process to investigate the potential of value-based care (VBC) in dentistry, which focuses on improving health care quality and cost by influencing provider decisions, patient satisfaction, and health outcomes[10] through integrated care.[11]

Recognizing the importance of oral health within comprehensive care, OHO hosted listening sessions with over 30 stakeholders — including policymakers, health plans, providers, professional associations and state health departments — from October 2020 to 2021. These sessions helped build consensus and inform a framework for implementing VBC in dentistry in Ohio. Stakeholders recognized medical-dental integration (MDI) as a valuable opportunity to enhance access to oral health care and elevate the role of dentistry in health improvement. Because of limited collaboration between medical and dental providers, MDI can help build stronger connections between providers and support more personalized, patient-centered care, making VBC more effective and sustainable. By testing MDI across diverse practice types, the state could build upon the longstanding efforts of Federally Qualified Health Centers (FQHCs) in Ohio, which have worked to integrate oral health into primary care for many years.[12] Stakeholders recommended a novel approach for the state, testing MDI within private practices to see how care coordination can occur outside health center settings.

Figure 1. States That Have Implemented MORE Care Since 2015



MORE Care®

Medical Oral Expanded Care (MORE Care) is a quality improvement program of CareQuest Institute that has been implemented in five states since 2015 (Figure 1).[13] It aims to integrate oral health competencies and capabilities into primary care practices while building patient-centered referral networks with local dental practices. The MORE Care framework combines clinical care improvement, state/community infrastructure support, and local partner training to implement lasting change that makes oral health care more accessible, integrated, and equitable.

The MORE Care framework also allows communities to make modifications based on their specific needs. In Ohio, the localized approach focused on four specific aims to improve oral health for children ages 0–18:

1. Incorporate oral health risk assessments, fluoride varnish applications, discussion of patient self-management goals, and dental referrals into medical well-child visits.
2. Focus on risk assessment, elevating preventive care, and discussing patient self-management goals during dental visits.
3. Establish closed-loop referrals that ensure ongoing two-way communication between medical and dental practices for the entire referral cycle.
4. Continue medical-dental integration efforts after conclusion of the program.

Drawing from the insights gathered during statewide stakeholder engagement and listening sessions to build consensus on the role of dentistry within VBC, implementation of MORE Care in Ohio incorporated the testing of an alternative payment model (APM). This model linked financial incentives to performance measures aimed at boosting preventive oral health services.

While MDI has shown success in managing chronic disease and promoting collaboration between health care providers,[14] sustainable payment models are still difficult to implement. The traditional fee-for-service (FFS) payment system promotes fragmented care and reimburses for quantity of care provided over quality of health outcomes. APMs, like the design within Ohio's comprehensive primary care program (CPC)[15] and CPC for Kids, are increasingly used to financially incentivize care quality and coordination, including oral health care.[16] The MORE Care APM utilized a traditional fee-based design that provided bonus incentive dollars[17] for integration-focused services (e.g., dental referrals), enhancing quality improvement and incentivizing preventive oral health care and referrals between dental and medical practices.

Program Design

Recruitment and Curriculum

To determine how MORE Care could be most impactful to local communities, market research and area-level data were used to identify counties with the highest oral disease prevalence, particularly dental caries, among children. The Ohio Children's Opportunity Index (OCOI), a tool developed and owned by the Government Resource Center at Ohio State University, synthesizes over 34 variables measuring neighborhood conditions relating to health outcomes. Muskingum, Scioto, Ross, Pike, Hardin, Lucas, Adams, and Lawrence counties were identified for recruitment. Selected program participants from these counties consisted of three health-system-affiliated or private pediatric primary care practices and four private dental practices.

At the beginning of the program, participating practices enrolled in a nine-month virtual learning management system where they completed self-paced modules, as well as pre- and post-module assignments, and engaged in interprofessional peer-to-peer learning (e.g., discussion boards and cohort virtual meetings). Table 1 below details the program's educational components for medical and dental participants. See Appendix A for more details on the curriculum.

Table 1. MORE Care Educational Components for Participants

Medical	Dental
American Academy of Pediatrics (AAP) *Smiles for Life* Modules • Introductory lessons on oral risk assessments, patient self-management goals, fluoride varnish application, and dental referrals	***The Clinician's Companion* — CareQuest Institute** • A guide for disease management framework and how to implement it in practice

MORE Care Lessons/Activities
• Supplementary coursework to support change implementation and development of technical infrastructure
  • Provider/staff training, workflow development, establishment and refining of medical electronic health record (EHR) reporting capabilities, and implementation of Plan-Do-Study-Act (PDSA) cycles
	MORE Care Lessons/Activities
	• Supplementary coursework to support change implementation and development of technical infrastructure
	  • Provider/staff training, workflow development, establishment and refining of dental EHR reporting capabilities, and establishment of interprofessional referrals systems

Fluoride Varnish Training • Hands-on training of providers to apply fluoride varnish	

Each medical participant was paired with one dental participant to complete referrals within the program. While participants were encouraged to work with their referral partners, they could refer to any provider outside of the program. Throughout the nine-month training period, participants established working relationships and processes for closed-loop referrals with their program referral partners. Monthly coaching sessions were provided to participants with an Ohio-based implementation consultant and office hours with CareQuest Institute staff throughout the program.

After the training phase, the program cohort entered a 15-month sustainability phase where participants:

- Improved efficiency of workflows established in the previous phase
- Maintained coordinated closed-loop referral relationships
- Continued to submit monthly data reports on program performance measures
- Addressed progress and challenges for sustaining changes made through coaching sessions, data technical assistance, and cohort virtual calls

Cohort activities officially launched in November 2022 and concluded in November 2024.

Data Collection and Alternative Payment Model

A mixed methods approach combining quantitative and qualitative research methods was used to evaluate the program's impact on the oral health outcomes of pediatric patients aged 0–18. To understand progress against program aims, a limited data set from each practice was collected and evaluated throughout the program. Each practice extracted encounter-based data from their EHR and submitted the reports to CareQuest Institute using a secure portal for a baseline period (November 2021–October 2022) and then monthly from November 2022 to October 2024. One dental practice could not manually submit the required data due to technical challenges with their dental EHR, necessitating use of an application programming interface, which allowed automatic data extraction directly from their dental EHR by CareQuest Institute. Additionally, as participants reported data during the program, CareQuest Institute completed data quality checks and provided technical assistance to support needed data corrections. While performance measures varied between medical and dental practices, all measures focused on delivery of oral health care (see Appendix B and C for program performance measures). As practices submitted the required data each month, CareQuest Institute transferred that data into interactive digital dashboards (Figures 2 and 3) that displayed the performance measures for each practice to evaluate their progress toward benchmarks (goals) and identify areas for improvement.

Figure 2. Dental Performance Dashboard

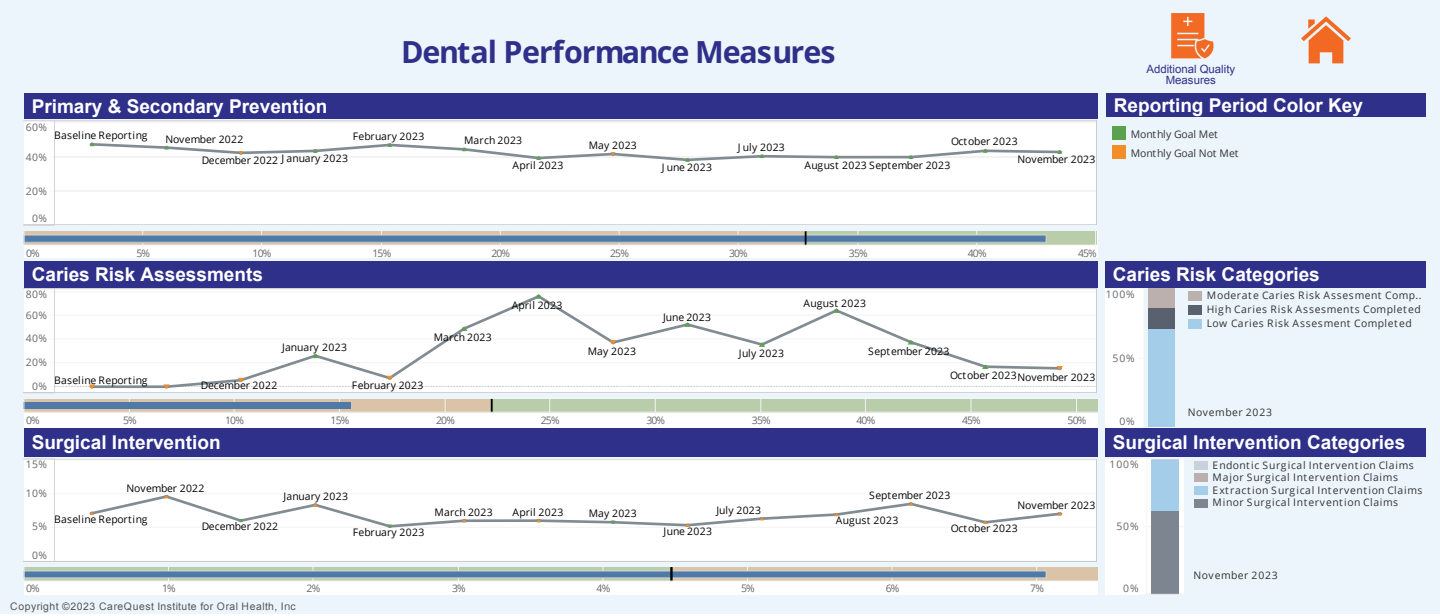
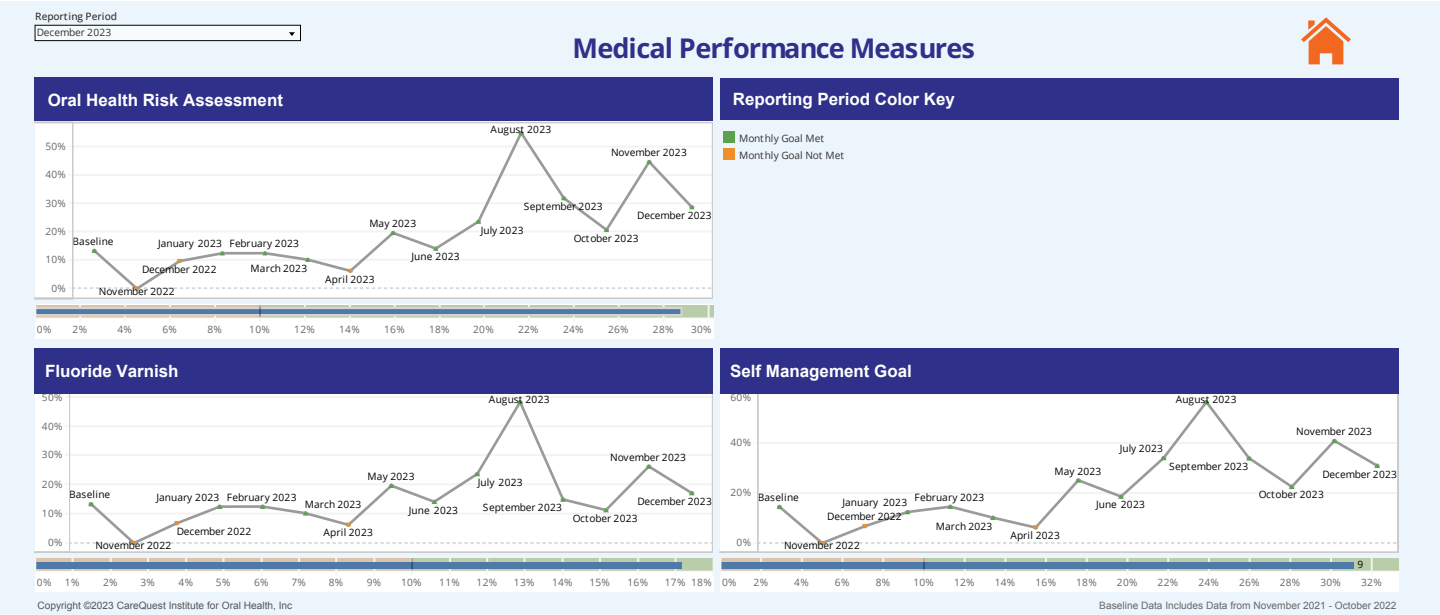


Figure 3. Medical Performance Dashboard



Participants were compensated for providing preventive services through an APM simulation using an industry-standard fee-for-service (FFS) linked to quality design.[17] On top of and apart from normal FFS reimbursement for claims by payers, practices earned incentive dollars based on their performance measure achievement. Incentive dollars were awarded based on timeliness and quality of reported data (known as pay-for-reporting) and performance measure achievement against set benchmarks (known as pay-for-performance) according to a set schedule of six payouts over the course of the program. The participants faced no financial risk in the APM and could not lose money if they did not reach their performance measure benchmarks. This design supported participant proficiency in data reporting and encouraged growth and ongoing improvement with provision of oral health services. (See Appendix B and C for performance measure benchmarks.) Each practice was eligible to receive up to $25,000 from the APM arrangement.

In addition to the quantitative data collected for performance measurement, qualitative data was used to add further context to quantitative outcomes. Qualitative data was collected by an evaluation expert from CareQuest Institute who was not directly involved with the program. An implementation consultant from OHO also kept a qualitative log of participant experience, progress, and challenges as coaching sessions occurred throughout the program.

Exploring Program Impact

MORE Care aimed to demonstrate how measurable improvements in access to preventive oral health care and health outcomes could be achieved in Ohio through integration and care coordination, including strengthening interprofessional referral networks. To accomplish this, the program sought to enhance data infrastructure, decision-making, and participant capacity to drive equitable, accessible, and integrated care in local communities. This section provides a comprehensive look at the outcomes of these efforts and evaluates the impact the program had on patients and the health care system.

Impact to Communities

As the landscape of health care evolves, understanding the individuals and communities cared for is crucial in crafting solutions that effectively address their needs. Throughout the program, participants engaged with 19,983 patients, including 13,980 medical patients and 6,003 dental patients. To gain insights into the communities served and analyze the care provided, patient demographic information was collected. Key demographics reported by participants included patient gender, age, race, and ethnicity. Collecting this demographic data (see Figure 4) allowed for a better understanding of the individuals served by practices involved in the program.

Participants were also encouraged to collect and report demographic information such as patient/caregiver preferred language and social drivers of health, but collection was hindered by inadequate software capabilities to track specific demographic data fields and lack of standardized processes among staff to collect the information from patients. While participants faced challenges collecting patient demographic

Figure 4. Patient Demographic Information

Medical practices reported patient gender as approximately **50% male** and **50% female**, while **dental practices** reported **38% male** and **60% female**.

While **72%** of medical patients were ages 0–6, only **24%** of dental patients were ages 0–6.

Dental practices reported a wider range of patient ages compared to medical practices:

- **29% were ages 7–10**,
- **34% were ages 11–15**, and
- **4% were ages 16–18**.

Only **medical practices** reported information on patient race and ethnicity:

- **60%** patients identified as **white**.
- **29%** identified as **Black or African American**.
- **9%** identified as **Hispanic**.
- **<1%** identified as **Asian**.
- **<1%** identified as **American Indian**.
- **37%** were of **unknown** race and ethnicity.

Demographic data may not add to 100% due to duplicate data or patients being able to choose more than one category

information, they also emphasized the importance of understanding the needs of the communities they serve as foundational to promoting care access and health equity. During virtual monthly peer-to-peer calls, participants shared insights into the needs of their patient populations, which included:

- Transportation barriers made it difficult for some patients to attend follow-up dental appointments. Referred practices were often 30–60 minutes away, which posed a significant challenge for patients without reliable transportation.
- Insurance coverage also posed challenges for patients, as referred dental providers were sometimes out of network.
- In some cases, patients or their guardians could not be reached after the dental referral because of challenges with phone communication.

To address the patient needs that emerged, participants worked together to develop solutions where possible. Guided by program curriculum, medical participants used motivational interviewing and warm handoffs such as direct phone calls between providers for scheduling. One dental participant even contacted referred patients directly to confirm appointment scheduling and encourage follow-through. Participants could not address every identified challenge and noted that system-level changes (e.g., policy changes) were needed to support a fair opportunity for everyone to attain health.

Infrastructure for Transformation

At the outset of the program, seven participants representing a total of five medical and dental practices completed an online VBC readiness assessment to evaluate their capacity and infrastructure to take on care transformation efforts. Responses from the assessment indicated that participating practices provided either medical or dental services only, none offered co-located medical and dental care, and most did not have medical-dental referral processes in place:

When asked how likely they were to implement **"a bidirectional [referral] process between medical and dental"**:

- 14% (one respondent) had **already deployed** this process.
- 71% stated bidirectional processes were **in development** or discussion stages.
- 14% (one respondent) had **not considered** its implementation.

Most participants (86%) considered themselves somewhat or very knowledgeable about VBC, but many (71%) also acknowledged the challenge of continuity of patient care across the health system when implementing VBC. Responses from the survey indicated challenges with technology to coordinate care and collaborate:

When asked about **technology to support bidirectional processes and coordinated care**, participants indicated that:

- 83% of dental respondents indicated **that their electronic record system did not interface with other systems** (e.g., medical health record).
- The two greatest challenges to implementation were **managing and tracking referrals (66%)** and **data collection and reporting (66%)**.

Though technology for bidirectional communication and information sharing was indicated as a challenge, participants generally saw the value of a collaborative approach in managing patient health. The program sought to support participants in preparing for care transformation by enhancing their readiness for collecting and using data to make decisions, monitor progress on goals, and support coordinated care. During the first few months of the program, participants received one-on-one technical assistance from CareQuest Institute to review performance measures, data requirements, and electronic reporting capabilities. Additionally, as participants reported data during the program, CareQuest Institute completed data quality checks and provided technical assistance to support any needed data corrections. In return for setting up a reporting process and submitting the required monthly data, participants were compensated with incentive dollars based on the completeness, quality, and timeliness of data reported (see Appendix B for Pay-for-Reporting measures). With technical assistance from CareQuest Institute, participants reported quality and complete data at 100% for the duration of the program and earned a total of $106,750 pay-for-reporting incentive dollars.

Accessible Oral Health Care

VBC aims to support disease prevention and promote health by improving access to preventive care.[18] Both medical and dental settings served as key access points for patients to receive preventive oral health services. The program supported medical participants with resources to complete oral health risk assessments, fluoride varnish application, and discussion

of self-management goals. Medical practices demonstrated an increase in the proportion of patients aged 0–18 who received oral health services during a well-child visit:

During the program, an average of **8% of all well child visits** — and **10% of Medicaid covered visits** — included an oral health risk assessment, self-management goal discussion, and fluoride varnish application compared to **<1% of well-child visits before the program began.**

Delivery of oral health services increased over the course of the program, with upward of 19% of well-child visits including an oral health risk assessment, fluoride varnish application, and self-management goal discussion during the sustainability phase (starting August 2023) of the program (Figure 5) .

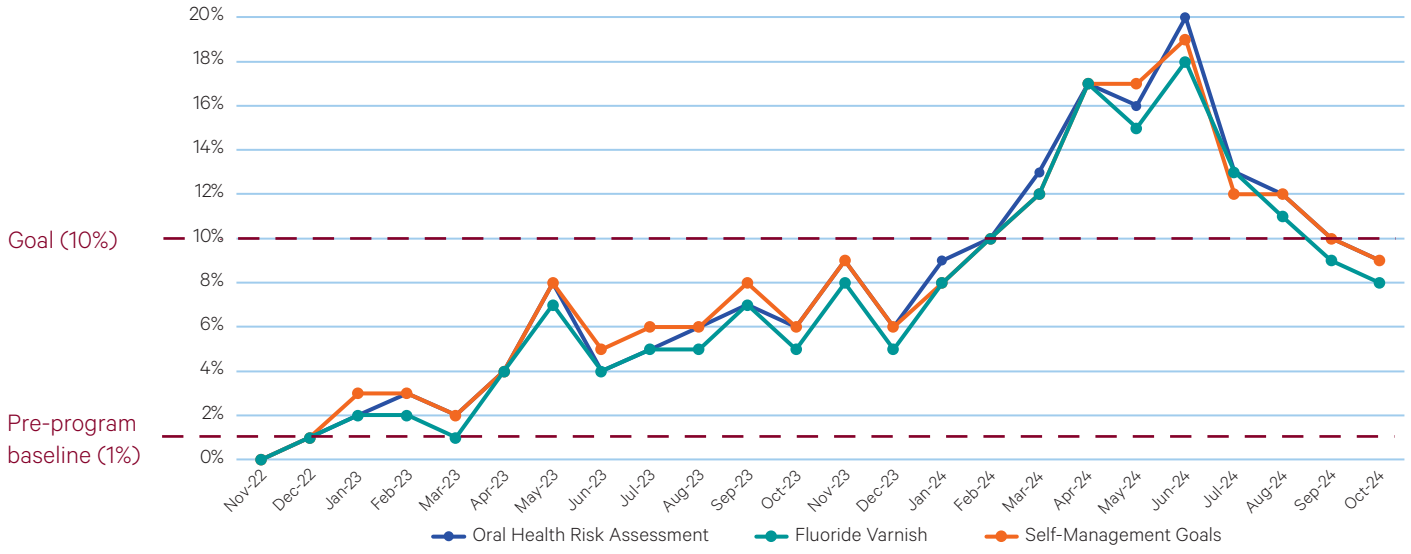
The Ohio Department of Medicaid reimburses Code of Procedural Terminology (CPT) 99188 as a bundled service to support the inclusion of oral health risk assessments, fluoride varnish application, and self-management goals for children up to age 6 in medical settings, when all services are provided on the same day. Challenges with the CPT 99188 bundled service code arose when all corresponding services were not provided on the same day. Participants also encountered difficulties stocking fluoride varnish due to limited supply availability.

> **"Patients seem to really appreciate the added emphasis of oral health and the addition of fluoride varnish, and [the well-child visit] provides an opportunity to speak with the entire family."**
>
> **— Participant**

Proper coding and billing through medical EHRs were problematic because codes for oral health services were not incorporated initially.

Although participants encountered coding challenges, all medical participants shared that patients found value in oral health services during well-child visits.

Figure 5. Percentage of Oral Health Services Delivered by Medical Participants, by Month



Several key factors influenced medical participants' ability to deliver oral health services over time:

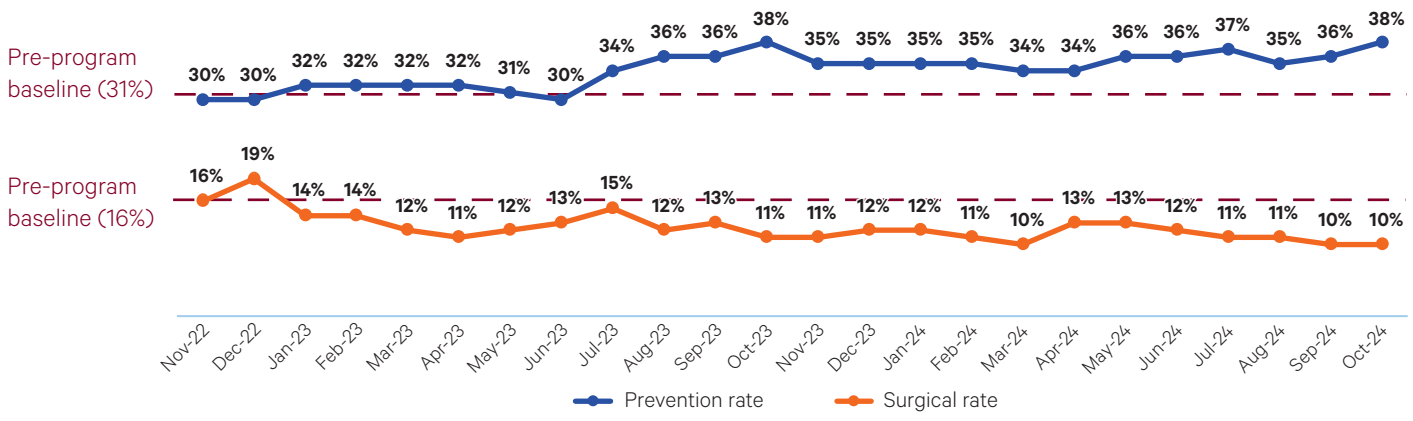
- Early in the program, delivery of preventive oral health services was low as practices focused on integrating new services — securing fluoride varnish, training staff, and establishing protocols for application, documentation, and billing. Workforce shortages, staff turnover, and practice structure influenced implementation. Smaller, independent practices adapted more quickly, while larger, multisite practices dealt with extra administrative processes and adapted more slowly. Although larger practices had more challenges at the start, they ultimately adopted changes, leading to a large-scale impact in their organizations.
- Ohio Medicaid reimbursement for oral health services during medical well-child visits was limited to children aged 0–6, disincentivizing service delivery for children ages 7–18.
- Some patients expressed concerns about the safety of fluoride varnish application, negatively affecting uptake.
- Using this peer network to collaborate, medical participants increased service delivery over time as they shared resources, established foundational processes, and worked together on solutions to common challenges.

In addition to assessing oral health in primary care, access to regular preventive care and treatment of dental disease in the dental setting is imperative to oral health. The program supported dental participant capacity to engage patients in caries risk assessment, increase preventive services (e.g., fluoride varnish, sealants, prophylaxes, self-management goals), and decrease the need for surgical intervention (e.g., fillings, crowns, tooth extractions). Dental participants increased their use of caries risk assessment and found that patients had high caries risk:

The percentage of patients who had a documented **caries risk assessment** that were due for one **increased during the program (46%)** compared to **before the program began (1%).** Most patients **(56%) had a high caries risk**.

Caries risk assessment is an important tool for understanding an individual's risk for developing new dental caries and helped dental participants customize preventive care. The rate of preventive dental service delivery and surgical dental services as a percentage of all oral health services delivered were monitored simultaneously to understand their relationship and any changes over time. Dental participants increased their preventive dental services to an average of 34% compared to 30% at pre-program baseline while decreasing their surgical dental services to an average of 12% compared to 16% at pre-program baseline (see Figure 6).

Figure 6. Percentage of Preventive and Surgical Services Delivered by Dental Participants, by Month



By monitoring patient self-management goals, dental participants could intentionally document discussions with their patients about oral hygiene routines, nutrition choices that support oral health, and other high-risk lifestyle choices such as tobacco use. The number of documented self-management goals increased by 100% during the program (2,440 goals) compared to baseline (0 goals).

Key factors influenced dental participants' ability to deliver tailored, preventive oral health services over time:

- Increases in documented preventive services may be partly due to the use of Current Dental Terminology (CDT) codes for self-management goals such as oral hygiene, nutrition, and high-risk behaviors like first-time tobacco use. Previously, participants often performed these services without using codes D1310, D1320, and D1330, likely because these services are not usually reimbursable.
- Like medical participants, dental participants faced workforce shortages and staff turnover, particularly among dental hygienists and assistants, which limited their capacity to innovate and improve care delivery.
- Peer-to-peer learning supported collaboration and knowledge sharing, especially around prevention-focused care. For example, participants exchanged scheduling strategies to improve access to recall appointments.
- Patient-reported pain levels influenced appointment adherence, with higher pain increasing the likelihood of keeping appointments.
- Program dental participants often received referrals for pediatric patients needing complex procedures or anesthesia, contributing to higher surgical rates at the individual practice level in some cases.

Paying for Preventive Care: The Alternative Payment Model

The APM tested in MORE Care was designed to improve upon the fee-for-service (FFS) payment system that pays for each service delivered independent of its effect on health outcomes and cost.[17] As the primary reimbursement model in which oral health services are paid, FFS incentivizes treating oral disease by paying more for surgical dental services than for preventive services.[19] In the program APM, participants earned incentive dollars for providing preventive care in addition to their standard FFS reimbursements, thereby encouraging a focus on prevention and supporting increased overall payment for preventive care.

Medical and dental participants worked toward specific performance measure goals and earned a flat fee or total cost percentage (for prevention and surgical rate measures) for each completed service. Participants achieved their individual performance measure benchmarks most months and earned incentive dollars. The one exception to this was for surgical intervention rate: in only 43% of months was the benchmark of 5% below average baseline count reached (Table 2).

Over the course of the program, participants earned a total of $204,695 pay-for-performance dollars (separate from pay-for-reporting dollars) for providing oral health services. As previously noted, each practice could earn up to $25,000 under the APM arrangement. All dental practices earned the maximum incentive amount, and one of the three medical practices reached the maximum.

The incentive dollars earned showcased that participants aligned their behavior and processes toward provision of preventive oral health services. Due to the presence of multiple program components (APM, educational training, coaching),

Table 2. Participant Performance Measure Achievement

	Performance Measure	Bechmark	Percentage of Months Benchmark Was Achieved
Medical Participants	Oral health risk assessment	10% of well-child visits	68%
	Self-management goals	10% of well-child visits	70%
	Fluoride varnish	10% of well-child visits	58%
Dental Participants	Caries risk assessment	5% above average baseline count	76%
	Preventive intervention rate	5% above average baseline count	70%
	Surgical intervention rate	5% below average baseline count	43%

the sole impact of the financial incentive is not clear; however, both dental and medical participants increased their provision of, and achieved performance goals for, preventive oral health services.

Several key factors influenced participants' ability to achieve their goals and earn dollars in the APM arrangement:

- EHRs and staffing issues challenged participants' ability to report complete data on time.
- Participants varied in their capacity to deliver oral health services. Medical participants generally required more time and resources than dental participants to scale new services. Larger practices had strong data systems and staffing but lacked the ability for rapid changes needed for APM success. In contrast, smaller practices adapted more quickly but often lacked the technology and personnel to support data-driven decisions and sustained performance.
- Performance monitoring via dashboards helped participants identify gaps and improve performance, leading to increased incentive earnings. For example, dental participants boosted earnings by incorporating caries risk assessments after identifying low initial rates.
- Frequent participant questions about APM design and benchmarks suggested the model was overly complex and not fully aligned with practice readiness or needs.

Finally, the testing of a prevention-focused APM uncovered some limitations in the design intended to motivate behavior change:

- Although dental participants effectively treated children with high surgical dental needs (e.g., caries), the emphasis on prevention in the APM financially disincentivized treating caries, especially impacting Medicaid-enrolled children, who tend to have a disproportionately higher rate of caries compared to children not enrolled in Medicaid.
- The 10% benchmark for oral health services during well-child visits favored smaller medical practices, which saw fewer patients and could more easily meet this goal. Larger practices often have competing priorities or struggled to adapt quickly, making the goal feel out of reach for them at times.
- During the program, Ohio increased medical and dental Medicaid reimbursement for preventive care. Because of these changes, the noted increase in improved oral health services by participants may not be fully attributable to the program incentive.

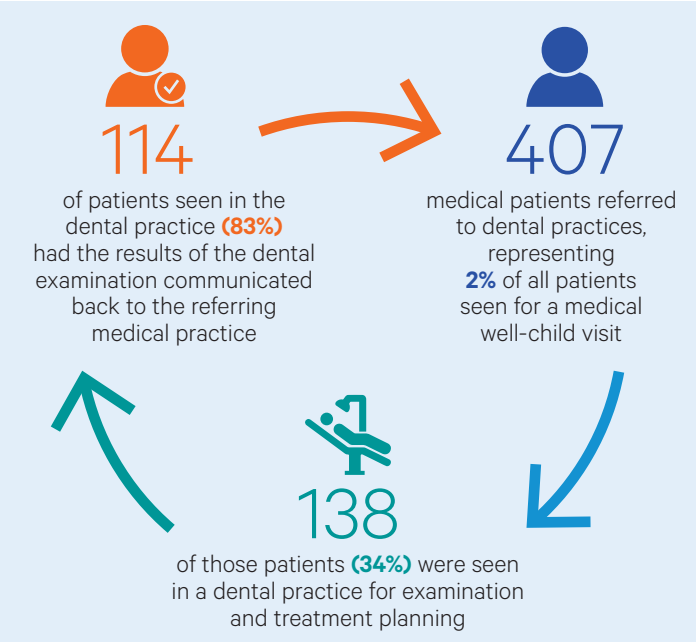
> **"There have always been silos, there was no crisscross. It's great that we can work together and take care of kids."**
>
> **— Participant**

Integrated, Coordinated Care

A key component necessary for successful MDI is communication between medical and dental teams. The creation and deepening of relationships is critical for the establishment of trust between these traditionally siloed systems of care. Establishing trust builds confidence that there are resources in the community that medical and dental professionals can contact easily and rely on to provide patient care.

MORE Care supported participants' capacity and resources to connect medical and dental care through closed-loop referrals and care coordination. All medical and dental practices successfully completed closed-loop referrals, with participants beginning to refer patients and track the completion of referrals, noting overall success with the closed-loop referral process (see Figure 7).

Figure 7. MORE Care Closed-Loop Referral Process



Key factors influenced participant ability to complete referrals:

- Incentive dollars earned for completed referrals encouraged collaboration and care coordination.
- EHRs between medical and dental practices were not interoperable, meaning they could not exchange patient information. Participants used a program-specific referral template to manage and track referrals. One practice streamlined this by collecting monthly referrals in a shared folder and directly calling their partner for urgent dental needs to expedite the process.
- Some dental referrals did not result in completed dental appointments due to workforce capacity, distance between practices, insurance issues, or missed appointments.
- Patients with established dental homes or dental visits at nonprogram sites were excluded from referral tracking.
- Participants formed a peer network to share challenges and solutions, improving coordinated oral health care.

MORE Care medical and dental participants found that communicating and working with each other was key to the success of closed-loop referrals. While complete referrals were accomplished, the end goal is to see improved oral health, with patients becoming and remaining disease free for months and years to come.

Establishing rooted, community-based relationships between medical and dental professionals is as important as the number of patients that benefited from this project.

Amplifying Impact Beyond the Learning Community

As participants found success in improving delivery of preventive oral health services and completed referrals, they shared and spread their learnings:

- Medical participants shared tools and workflows for integrating oral health into primary care with peers in other locations, including residency programs.
- By introducing MDI into a pediatric residency program, one medical participant enhanced their residency program's training by exposing pediatric providers to the provision of oral health services early in their careers.
- Participants shared their successes nationally through blogs, articles, and presentations, so others could learn from their experiences.[20, 21, 22]
- A medical participant received certification credits from the American Board of Pediatrics, highlighting MORE Care OH's success in advancing oral health care quality and meeting Maintenance of Certification Part IV standards for a local quality improvement project.

In addition to efforts by program participants to share learnings, MORE Care OH's community of stakeholders (e.g., health care providers, state associations, regulators, legislators) routinely disseminated information on program efforts, reinforcing the commitment and momentum that initially launched the program.

- Program reports, including breakdowns of patient impact by legislative district, were shared with Ohio policymakers and legislators.
- Program leaders shared progress reports with Ohio Department of Medicaid and Managed Care Organizations (MCOs).
- MORE Care was recognized as a quality improvement activity by the Ohio Department of Medicaid and received investment from CareSource, a participating MCO.

Efforts to share learnings beyond the group of participants resulted in spread of evidence for the viability of MDI and helped maintain interest across the multiyear project. The shared interest in MORE Care across Ohio stakeholders, stemming from the consensus-building effort in 2020–2021, indicates a strong opportunity for program results to further shape MDI and set best practices in Ohio.

Establishing rooted, community-based relationships between medical and dental professionals is as important as the number of patients that benefited from this project. MORE Care participants have broadened their understanding of how to care for their patients, and these improvements will continue to benefit their communities long after this project.

The Path Forward

The experiences and lessons learned through MORE Care Ohio led to valuable recommendations for advancing collaboration among a range of stakeholders, both within the state and nationally, to improve oral health for all.

While the dental workforce in Ohio faces constraints, integrating oral health into medical settings and coordinating care with dental settings can improve access. Central to creating sustainable progress are consensus building and elevating community voices. Investments and strong interprofessional relationships are equally important to ensure resources and policies are properly aligned to drive better oral and overall health outcomes, as summarized in the tables on the following pages.

> **"The normal life that [patients] can live once they get their dental issues taken care of, which for some can be major, *is significant*. It's a small role [policy influencers] play but we can help people and do a lot of good."**
>
> **— Ohio Stakeholder**

Investments Are Foundational to Improvement

Lessons Learned	Recommendations for the Path Forward
• Investing time and resources into staffing and workforce models that support oral health integration are critical and don't have to be expensive or complicated. • Intentional training and process planning (e.g., workflows, documentation) are crucial to the success of MDI. • Buy-in from leadership, commitment from oral health champions, and a mindset toward continuous improvement are important elements for successful integration efforts regardless of practice size or type. These same characteristics are important to keep oral health integration and care coordination prioritized over time. • At times, workforce capacity challenges impacted program participants from scheduling timely dental appointments for patients referred by medical participants.	**Practice Level** • To integrate oral health services, medical practices need to identify staff to serve as oral health champions. Medical practices can leverage several training resources online, such as the AAP *Smiles for Life* curriculum. • Ensure practice staff are equipped with tools (e.g., screening templates, workflows, data) for medical-dental integration. Use referral templates and secure email to overcome technical challenges for care coordination while pursuing EHR interoperability. **Systems Level** • Health systems should consider including oral health services in practice/provider dashboards to encourage service delivery as a part of primary care. **Ohio** • Encourage payers to reimburse medical providers for oral health services (e.g., oral assessments, fluoride varnish) and care coordination services with dentistry for children ages 7–18. • The Ohio Department of Medicaid and its MCOs should prioritize oral health in quality improvement efforts. • To encourage care coordination, the Ohio Department of Medicaid and MCOs should consider standardizing assigned medical and dental homes for members and make provider relationships easily accessible information. • Expand the dental workforce available to care for communities through programs like the Ohio Oral Health Access Supervision Program (OHASP), Expanded Function Dental Auxiliary (EFDA), or Community Dental Health Coordinator (CDHC). • Leverage the Community Health Worker program to bolster care coordination as a means to improve oral health access challenges among Ohio's 161 dental professional shortage areas.
• The ability to securely exchange health information and referrals between providers (interoperability) is essential to efficient, coordinated care and enhancement of patient experience and access to care. • With participant creativity, technology was supportive of quality clinical data collection and integration, but improvements in interoperability and data exchange standards are needed. • It is important to create standardized processes, implement easy-to use tracking mechanisms (e.g., spreadsheets), and dedicate staff time to care coordination in order to effectively track the completion of referrals (i.e., closed loops).	**Practice Level** • Practice leadership should evaluate how well the organization uses oral health EHR data to support reporting and improve care quality across the team. • Practice leadership should explore public and private funding opportunities to support interprofessional practice (e.g., care coordination staff) and improved capacity of dental practices to leverage EHRs for securely sharing dental data (e.g., system upgrades). **Systems Level** • Health information technology stakeholders must ensure regulations and vendor products support electronic medical-dental communication to improve health care system integration. **Ohio** • Incentivize dental participation in the health information exchanges to simplify and streamline data sharing and improve communication between medical and dental practices.

Interdisciplinary Relationships Are Critical for Whole-Person Health

Lessons Learned	Recommendations for the Path Forward
• Building relationships across medical and dental practices required intentional effort and proved to be a highly valued, essential factor in enhancing patient access to oral health care. • Regular virtual engagement of participants as a peer network fostered shared learning and collaborative solutioning. • Large or small private health care practices can leverage their unique resources and position in the community to build referral relationships and integrate care.	**Practice Level** • Practice leadership (i.e., owners or C-suite) and providers should seek opportunities to engage with peers from other health disciplines as a foundation for strong referral networks. • Peer networks should support shared, continuous learning and collaborative solution building for integrated care processes at and among practices. **Systems Level** • Accrediting bodies and academic institutions should ensure inclusion of oral health training as a core curricular requirement within the formal educational curriculum and accreditation standards for medical professionals (e.g., nursing, pharmacy, and behavioral health schooling). • Government agencies and professional organizations should incorporate or broaden oral health topics in their continued education programs for medical professionals. **Ohio** • The Ohio Department of Medicaid should enhance oral health integration and dental referrals as named priorities within their Population Health and Quality Strategy and/or the Outcomes Acceleration for Kids program. • The Ohio Department of Medicaid and its MCOs should leverage quality improvement projects to support development of interdisciplinary networks at scale.
• Patient demographic data was not collected in a standardized manner, limiting the ability to have full patient information for holistic, coordinated care between medicine and dentistry. • Participants worked together to iteratively adapt their referral processes as patients shared feedback around the feasibility of scheduling and attending dental appointments.	**Practice Level** • Better availability of patient demographic information (e.g., race, ethnicity, preferred language, special health care needs) would add depth and context for referral relationships, allowing providers to identify patient needs more holistically and consider them in coordinating care. • Efforts at the practice level to assess social drivers of health in a standardized way (e.g., screening) would help providers address needs that often hinder patient access to care. **Systems Level** • State agencies, in collaboration with the Centers for Medicare & Medicaid Services and other health industry stakeholders, should work together to advance health information technology, focusing on structured data and data field standards, to make demographic data collection easier to better meet patient needs. **Ohio** • The Ohio Department of Medicaid and its MCOs should integrate pertinent dental utilization data, such as the fluoride varnish bundle (CPT 99188) and dental claims, into their existing databases for a comprehensive view of member health. • In addition to provider-to-provider referral efforts, MCOs could implement targeted member outreach to encourage dental follow-up after fluoride varnish applications in medical settings. • Community needs assessments and local community health improvement plans (CHIP) used by hospitals and the Ohio Department of Health to monitor and address community benefit should incorporate dental care and access.

Broad Change Requires Collaboration

Lessons Learned	Recommendations for the Path Forward
• Driven by interest in exploring MDI as a means of VBC in dentistry, MORE Care tested an APM. This model was successfully implemented in a variety of care settings and received buy-in among participants as a means of building stronger foundations for integrated and coordinated care. • Lack of Medicaid reimbursement for fluoride varnish for children aged 7–18 discouraged greater provision of oral health services for children of all ages within medical practices.	**Practice Level** • An APM's design and performance targets should be clear and easy for participants to understand. • Data visualization through dashboards and scorecards is a crucial feedback loop for providers and program sponsors to jointly use in monitoring performance. • APMs can be effective tools to promote MDI when shared goals are incentivized. **Systems Level** • Simpler APMs like the FFS-plus-incentive design used in MORE Care can be effective in driving desired improvements in care delivery without exposing participants to downside financial risk. • Use of simple APMs along with data visualization tools can support capacity building in VBC. **Ohio** • Payers and provider groups should consider simple APMs as tools to promote care integration in addition to using them to improve access and quality of care. • Insights can be leveraged from experiences with the Comprehensive Primary Care for Kids Program and the MORE Care Ohio impact report by the Ohio Department of Medicaid, as well as MCOs and program stakeholders, to evaluate methods to further target interventions to promote oral health integration. • Expanding Ohio Medicaid reimbursement for oral health services (CPT 99188) where provided in a nondental setting to include children ages 7–18.

Projects like MORE Care require commitment and support from individuals and organizations to create sustainable impact.

On behalf of CareQuest Institute and Oral Health Ohio, we would like to thank our many partners for their dedication to this project. For those who participated in OHO's listening sessions and members of the VBC Committee, we would like to thank you for sharing your voices and providing crucial insights into how we designed this project. We would like to thank Patterson Dental — Cincinnati, Ohio, for providing oral hygiene kits to medical and dental practices, the OSU Government Resource Center for providing Opportunity Index Data, and Elevate Oral Care for training medical practices on the application of fluoride varnish. We also acknowledge the financial contribution of CareSource to Oral Health Ohio to support program operation.

To our MORE Care clinical participants and support staff, this project could not have happened without you. We are grateful to have built partnerships with each of you and thank you for allowing us to capture your efforts to make your community, and fellow Ohioans, healthier. Your willingness to learn, share your knowledge, and support your colleagues is a testament to your professionalism, passion, and desire to make oral health services in Ohio more accessible, equitable, and integrated.

Special Thanks to:

- Corcoran Privitera Family Dental
- John DiTraglia, Inc.
- Mercy St. Vincent Medical Center, Pediatric Residency
- Midwest Dental Center
- Nationwide Children's Hospital — Franklin Care Center
- Patterson Dental — Cincinnati, OH
- Southern Ohio Medical Center (SOMC) Pediatric Associates
- Village Dental
- Kelli Bingham
- Dr. Paul Casamassimo
- Dr. Joseph Crowley
- Susan Lawson
- Elizabeth Leonin
- Dr. Beau Meyer
- Kelly Simmons
- Dr. Clarence Thomas

Appendices

Appendix A: MORE Care Ohio Medical and Dental Curricula

Curriculum Overview: Medical

Key
- **S4L:** Smiles for Life module, focused on clinical care
- **MCM:** Recorded MORE Care module, focused on implementation
- **Coaching/TA:** State facilitator supports teams through 1:1 touchpoints, email, etc.
- **Pre-work:** Activity that teams will complete before action call
- **Mountly Action Call:** all teams and facilitators join each month, share progress, questions, troubleshooting
- **Post-work:** activity teams complete after action call

Month 1 — Introducing MORE Care
S4L: Oral systemic link
MCM: Intro to MORE Care
Pre-work: Create Huddle Board
Monthly Action Call
Post-work: Revisit Huddle Board

Month 2 — Oral Health Integration
S4L: Child Oral Health, Caries Risk, and FV
MCM: Integrating Oral Health
Pre-work: Develop visit workflow
Monthly Action Call
Post-work: Adding Oral Health to the workflow

Month 3 — Continue Work Around Integration
S4L: Oral Exam
MCM: No module
Coaching/TA
Pre-work: PDSA Cycle
Monthly Action Call
Post-work: Reflection activity

Month 4 — Care Coordination
MCM: Oral Health Care Coordination
Pre-work: Develop referral workflow
Monthly Action Call
Post-work: (Partner activity) Strengthening Communication

Month 5 — Team Showcase
***No modules**
Coaching/TA
Pre-work: Prepare for Showcase
Monthly Action Call: Showcase
Post-work: Showcase reflection

Month 6 — Sustainability
MCM: Sustaining Oral Health
Pre-work: Sustainability brainstorm
Monthly Action Call
Post-work: Sustainability planning

Month 7 — Planning for Spread
MCM: Spreading Oral Health Efforts
Pre-work: Spread brainstorm
Monthly Action Call
Post-work: Spread planning

Month 8 — Continue Work on Sustainability and Spread
***No modules**
Coaching/TA
Pre-work: Prepare for group call
Monthly Action Call
Post-work: Prepare for Showcase

Month 9 — Final Showcase
***No modules**
Coaching/TA
Pre-work: Prepare for Showcase
Final Call: Team Showcase

Curriculum Overview: Dental

Month 1 — Introducing MORE Care
S4L: Oral systemic health
MCM: Intro to MORE Care
Pre-work: Huddle Board
Monthly Action Call
Post-work: Revisit Huddle Board

Month 2 — Effective Communication and Caries Risk Assessment
Clinician's Companion
- Introduction to the Clinician's Companion (pages 1–13)
- LEARN: Recognize the Patient and Caregiver's Oral Health and Habits (pages 13–22)
- "Taking It Chairside" activity (page 22)

Team Discussion and Discussion Board Post
Monthly Action Call (Optional)

Month 3 — Risk-Based Preventive Care
Clinician's Companion
- ACT: Intervene to Provide Risk-Based Preventive Care (pages 23–28)
- "Taking It Chairside" activity (page 28)

Team Discussion and Discussion Board Post
Monthly Action Call (Optional)

Month 4 — Care Coordination
MCM: Oral Health Care Coordination
Pre-work: Develop referral workflow map
Monthly Action Call
Post-work: Building Communication Pathways

Month 5 — Using Data for Improvement
Clinician's Companion
- Quality improvement and using data to understand your population

Team Discussion and Discussion Board Post
Monthly Action Call: Showcase

Month 6 — Recare Intervals Based on Risk
Clinician's Companion
- BRING BACK: Continue to Care Through Timely Follow Ups (pages 38–39)
- "Taking It Chairside" activity (page 39)

Team Discussion and Discussion Board Post
Monthly Action Call (Optional)

Month 7 — Using Data for Improvement, Continued
Clinician's Companion
- Quality improvement and using data to understand your population

Team Discussion and Discussion Board Post

Month 8 — Sustainability
MCM: Sustainability: Holding the Gains
Pre-work: Sustainability brainstorm
Monthly Action Call (Optional)

Month 9 — Final Showcase
***No modules**
Pre-work: Prepare for Showcase
Final Call: Team Showcase

Appendix B: Pay-for-Reporting Measures

Measure	Tiered Benchmarks
1. Completeness of reported clinical data	100% of required data 50–99% of required data 1–49% of required data 0% of required data
2. Completeness of reported demographic and social data	100% of required data 75–99% of required data 50–74% of required data 25–49% of required data 1–24% of required data 0% of required data
3. Quality of reported data	100% quality — No deviations or inconsistency issues with data extraction 0% quality — Any deviation or inconsistency without notifying CareQuest Institute of anticipated changes at least two weeks prior to submission

Appendix C: Pay-for-Performance Measures

Medical Practice Measures	Benchmarks
1. Percentage of patient encounters with an oral health risk assessment	10% of all well-child visits
2. Percentage of patient encounters with oral health self-management goals	10% of all well-child visits
3. Percentage of patient encounters with fluoride varnish application	10% of all well-child visits
4. Percentage of patients referred to a dental provider participating in MORE Care	Not standardized; participants chose their own goals and were given a flat fee for each referral
5. Percentage of patients with dental consultation and treatment plan received from dental provider participating in MORE Care (closed-loop referral)	Not standardized; participants chose their own goals and were given a flat fee for each referral
Dental Practice Measures	**Benchmarks**
1. Percentage of patients with caries risk assessment	5% above average baseline count of caries risk assessments
2. Percentage of all services that are primary and secondary preventive procedures	5% above average baseline count of preventive procedures
3. Percentage of all services that are surgical procedures	5% below average baseline count of surgical procedures
4. Percentage of patients referred by a MORE Care participating medical provider with a dental consultation	Not standardized; participants chose their own goals and were given a flat fee for each referral

References

1. Deborah A. Verlinden, Sijmen A. Reijneveld, Caren I. Lanting, Jacobus P. van Wouwe, and Annemarie A. Schuller, "Socio-Economic Inequality in Oral Health in Childhood to Young Adulthood, Despite Full Dental Coverage," *European Journal of Oral Sciences* 123, no. 4 (June 2019): 248–253, https://pmc.ncbi.nlm.nih.gov/articles/PMC6593773/.

2. US Preventive Services Task Force: Karina W. Davidson, Michael J. Barry, Carol M. Mangione, Michael Cabana, Aaron B. Caughey, Esa M. Davis, Katrina E. Donahue, Chyke A. Doubeni, Martha Kubik, Li Li, Gbenga Ogedegbe, Lori Pbert, Michael Silverstein, James Stevermer, Chien-Wen Tseng, and John B. Wong, "Screening and Interventions to Prevent Dental Caries in Children Younger Than 5 Years: US Preventive Services Task Force Recommendation Statement," *The Journal of the American Medical Association* 326, no 21 (December 2021): 2172–2178, https://jamanetwork.com/journals/jama/fullarticle/2786823.

3. U.S. Department of Health and Human Services, *Oral Health in America: Advances and Challenges*, National Institutes of Health, December 2021, https://www.nidcr.nih.gov/sites/default/files/2024-08/oral-health-in-america-advances-and-challenges-full-report.pdf.

4. U.S. Centers for Disease Control and Prevention, "Oral and Dental Health," accessed April 4, 2025, https://www.cdc.gov/nchs/fastats/dental.htm.

5. Becker's Dental + DSO Review, "Number of Active Dentists vs. Physicians in Each State," accessed April 4, 2025, https://www.beckersdental.com/benchmarking/number-of-active-dentists-vs-physicians-in-each-state/.

6. Health Resources & Services Administration, "Health Workforce Shortage Areas," accessed April 4, 2025, https://data.hrsa.gov/topics/health-workforce/shortage-areas.

7. Medicaid Committee Meeting (House Medicaid Committee Testimony Governor Mike DeWine's Executive Budget Proposal, SFY26–27)," Ohio Department of Medicaid, February 25, 2025, https://ohiohouse.gov/committees/medicaid/meetings/cmte_h_medicaid_1_2025-02-25-0330_145.

8. Barbara Carnahan and Junhui Qian, "The Oral Health of Ohioans — Are We Getting the Job Done?" Oral Health 2024 Symposium, November 2024, https://odh.ohio.gov/wps/wcm/connect/gov/948a9581-236b-4703-8db3-7ebd07d04484/Oral+Health+in+Ohio_2024.pdf?MOD=AJPERES.

9. David J. Owsiany, "State Health Assessment Shows Progress on Oral Health in Ohio," Ohio Dental Association, accessed June 4, 2025, https://www.oda.org/news/state-health-assessment-shows-progress-on-oral-health-in-ohio/.

10. Centers for Medicare & Medicaid Services, "Value-Based Care," accessed April 4, 2025, https://www.cms.gov/priorities/innovation/key-concepts/value-based-care.

11. Antonia Barranca-Enríquez and Tania Romo-González, "Your Health Is in Your Mouth: A Comprehensive View to Promote General Wellness," *Frontiers in Oral Health* 14, no. 3 (September 2022): 971223, https://www.frontiersin.org/journals/oral-health/articles/10.3389/froh.2022.971223/full.

12. "Introducing the OACHC Integrated Health Team!" OACHC Informer Blog, Ohio Association of Community Health Centers, December 7, 2024, https://www.ohiochc.org/blogpost/1222405/506200/Introducing-the-OACHC-Integrated-Health-Team.

13. Christine Kanan, Kelli Ohrenberger, Mary Bayham, Sarah E. Raskin, Eric P. Tranby, and Sean Boynes, "MORE Care: An Evaluation of an Interprofessional Oral Health Quality Improvement Initiative," *Journal of Public Health Dentistry* 80, no. S2 (October 2020): S58–S70, https://onlinelibrary.wiley.com/doi/full/10.1111/jphd.12407?msockid=2741036a36e760f60d2f108137206151.

14. Elanor Fleming, Julie Frantsve-Hawley, and Myechia Minter-Jordan, "Health Equity Needs Teeth," *AMA Journal of Ethics* 24, no. 1 (January 2022): E48–56, https://journalofethics.ama-assn.org/article/health-equity-needs-teeth/2022-01.

15. Ohio Department of Medicaid, "Comprehensive Primary Care," accessed April 4, 2025, https://medicaid.ohio.gov/resources-for-providers/special-programs-and-initiatives/payment-innovation/comprehensive-primary-care/comprehensive-primary-care.

16. Rachel M. Werner, Ezekiel J. Emanuel, Hoangmai H. Pham, and Amol S. Navathe, *The Future of Value-Based Payment: A Road Map to 2030*, Philadelphia, PA: Penn Leonard Davis Institute of Health Economics, 2021, https://ldi.upenn.edu/our-work/research-updates/the-future-of-value-based-payment-a-road-map-to-2030/.

17. Health Care Payment Learning & Action Network, *APM Framework*, 2017, https://hcp-lan.org/workproducts/apm-refresh-whitepaper-final.pdf.

18. Cleveland Clinic, "Value-Based Care," Accessed April 17, 2025, https://my.clevelandclinic.org/health/articles/15938-value-based-care.

19. Marko Vujicic and Guy David, "Value-Based Care in Dentistry," *The Journal of the American Dental Association* 154, no. 6 (June 2023): 449–452, https://jada.ada.org/article/S0002-8177(23)00204-0/pdf.

20. "Double the Care: How Medical-Dental Integration Is Expanding Access in Ohio," CareQuest Institute (blog), CareQuest Institute for Oral Health, May 16, 2023, https://www.carequest.org/about/blog-post/double-care-how-medical-dental-integration-expanding-access-ohio.

21. "Voices from the Field: Drs. Taiwo Ngo and Kehinde Obeto on the Benefits of Medical-Dental Integration," CareQuest Institute (blog), CareQuest Institute for Oral Health, June 12, 2023, https://www.carequest.org/about/blog-post/voices-field-drs-taiwo-ngo-and-kehinde-obeto-benefits-medical-dental-integration.

22. Matthew Vermillion and Rebekah Mathews, "Medical-dental Integration in Ohio: Improving Prevention and Coordination at the Local Level," *Journal of Dental Hygiene* 98, no. 3 (June 2024): 19–24, https://jdh.adha.org/content/98/3/19.

CareQuest Institute for Oral Health

CareQuest Institute for Oral Health® is a national nonprofit championing a more equitable future where every person can reach their full potential through excellent health. We do this through our work in philanthropy, analytics and data insights, health transformation, policy and advocacy, and education, as well as our leadership in dental benefits and innovation advancements. We collaborate with thought leaders, health care providers, patients, and local, state, and federal stakeholders to accelerate oral health care transformation and create a system designed for everyone. To learn more, visit carequest.org.

This report and others are available at carequest.org.