



EXECUTIVE SUMMARY

System Transformation:

A Three Domain Framework to Innovating Oral Health Care

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Purpose and Significance

Dentistry has historically focused on invasive procedures within a fee-for-service model. The traditional dental care model has not advanced at the same rate as other health care sectors, leaving many without access to equitable care. Dentistry's slow adaption to a world in which both public and private payors are seeking person-centered, value-based, and prevention-oriented care exposes many providers and care organizations to greater financial stress. The COVID-19 pandemic exacerbated much of what is broken in dental care delivery. Therefore, this event is catalyzing an overdue and necessary structural change. We propose an expanded model for primary and secondary prevention using emerging technology and transformative methodology.

This promising new oral health model will be cost-effective, efficient, and more equitable. The Three Domain Framework builds on health promotion and disease prevention while supporting value-based care. Consequently, oral health professionals and dentistry are at a fork in the road: either return to the traditional fee-for-service surgical model or embrace a new paradigm of oral health care that focuses on overall health as an outcome.

A Roadmap for the Future

Operationalizing Three Domains to Enhance Oral Health

The Three Domains create a primary care-like structure for oral health care delivery. This structure facilitates value-based payment models and enables patients to invest in their oral health. The Three Domain framework forms an interdependent care environment that prioritizes prevention but provides oral health providers and the patient an ability to determine the treatment that best meets the needs of the patient. Care teams can tailor the domain approach to the specific needs of the patient while leveraging opportunities for whole-person health. By prioritizing primary care and prevention through Domains One and Two, whole-person health is deeply integrated into the care delivery process.

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Tele-Prevention



Domain One builds an accessible, convenient, evidence-based virtual care delivery approach to accompany oral health care delivery that applies technology for enhanced disease prevention and whole-person health.

Minimally Invasive Care



Domain Two focuses on minimally invasive care that reverses or slows early disease stages using a program of anticipatory guidance and collaborative decision-making with patients.

Integrated and Personalized Care



Domain Three introduces personalized oral health care that prolongs the life of hard and soft tissues by reducing tooth/tissue mortality through risk stratification, medical-dental integration, the utilization of predictive analytics, and safe, individualized surgical intervention.

The domains framework introduces an elevated model of dental care that emphasizes patient and provider safety while addressing crucial gaps in both financial viability and inequitable access to care. The Three Domain Model for Dentistry achieves the following:

1. Encompasses three non-linear domains of oral health investment that facilitate financial viability and improved population health.
2. Emphasizes the need for safe, sustainable, and diverse business models that prioritize patient health and wellness.
3. Facilitates the capacity of hybrid teledentistry models to effectively coordinate care for underserved, poorly served and never served communities.
4. Centers personalized care based on individual disease process rather than a one-size-fits all “repair and replace” model.
5. Encourages systemic interprofessional changes in oral health care delivery to mitigate health inequities.
6. Evolves and expands patient choice through care innovations and technology enhancement.



Positive Transformations: Catalysts of the Three Domain Framework

- Building an evidence-based virtual environment for oral health care can escalate disease prevention efforts and enhance whole-person health. Teledentistry can facilitate integrated, wholistic care in conjunction with medical, mental health, and other providers as a component of telehealth.
- Minimally Invasive Care (MIC) can reverse or slow early disease stages using a program of anticipatory guidance and collaborative decision-making with patients. MIC often leverages risk-stratified care to identify health contributors and facilitate shared decision-making. This proactive primary-to-secondary care approach also limits the amount of aerosol production during care delivery.
- A recognition that oral health is inextricably connected to overall health status. By prioritizing primary care and prevention, whole-person health is deeply integrated into the care delivery process. Tissue health and structural integrity in the mouth can be altered by poor systemic health (and vice versa). Interprofessional care teams should work closely to manage each personalized care plan. Patients will appreciate the opportunity to co-design their health/treatment plans to focus less on the traditional drill and fill approach and more on prevention and Minimally Invasive Care.
- The Three Domain Framework emphasizes the active inclusion of social determinants of health (SDOH) in dental care. Care teams, oral health networks, and health care payors can more easily create SDOH referral networks and health information exchanges for prioritizing whole-person health needs.
- The Three Domain approach is non-linear, meaning oral health care teams can choose any one of the three domains as a place to begin. This enables providers to explore a new model of dentistry by starting in a domain that supports the comfort and experience of the care team as well as the unique needs of the patient population.

A Pathway to Better Outcomes

The CareQuest Institute for Oral Health is taking significant steps to support providers, patients, payors, and other key stakeholders as they transition to care delivery using the domain approach for oral health. Using data collection and analysis, the planned activities below will inform a stepwise implementation of short- and long term strategies to support the Three Domain Framework.

Short-Term:

- Introduce financial strategies and associated billing structures to remain flexible and responsive during the changing dental landscape.
- Establish interprofessional care team designs to support oral health case management and care-coordination efforts.
- Redefine Relative Value Units (RVUs) to ensure financial stability of care teams and maintain a high value by consumers for oral health care.
- Provide education, training, and clinical technical assistance on medical or minimally invasive care and teledentistry to support clinical care associated with Domains One and Two.
- Implement pilot programs throughout a variety of care sites and networks with rigorous data collection to inform guidance on best practice approaches.
- Create and disseminate comprehensive technical assistance documentation addressing questions and concerns about implementing these domains of care, based on community feedback.
- Create observable outcome measures and an evaluation process associated with each domain of dental care.
- Propose guidance and infrastructure as well as new products and technology for implementing wholistic, value-based systems of care that involve dental, oral health, and other health providers working interprofessionally to promote optimal health outcomes.
- Recommend health information technology solutions that cohesively integrate medical and dental electronic health records while improving care coordination.
- Identify state and federal regulatory barriers to the delivery of personalized and integrated services and develop intervention strategies.

Each domain reinforces connections between social and structural determinants of health while promoting new opportunities to demonstrate value-based solutions that connect care providers, communities, and consumers

Medium- & Long-Term:

- Stimulate federal, state, and private sectors to invest and lead the transformation into value-based care delivery within the domain framework.
- Provide educational guidance and instruction for schools of dentistry and dental hygiene to teach the domain approach of oral health care to future dental care teams while adopting new business models for clinical care used in education.
- Create recommendations under each domain of care for working with special populations (e.g. individuals with disabilities, older adults, rural communities, etc.).
- Develop educational platforms to train care teams and payors on the financial and billing components associated with the domain approach.
- Provide guidance on advancing partnerships to address community support needs and social determinants of health.

In this re-engineered approach to oral health care delivery, the domain framework can advance patient and provider well-being while reducing the cost burdens associated with poor quality of life due to oral disease. Domains One and Two form a primary and secondary care structure in dental operations to prevent and mitigate disease advancement for a more streamlined and individualized method to the surgical care model of Domain Three. The development of primary and secondary care structures within dental operations is a divergence from the outdated “drill and fill” process. Each domain reinforces connections between social and structural determinants of health while promoting new opportunities to demonstrate value-based solutions that connect care providers, communities, and consumers. As seen with similar tactics by our medical counterparts, this system empowers patients to invest and actively engage in their own health.

CareQuest Institute for Oral Health

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