

Executive Summary

NARROWING THE RURAL INTERPROFESSIONAL ORAL HEALTH CARE GAP

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**COLORADO
RURAL HEALTH
CENTER**
The State Office of Rural Health

**PENNSYLVANIA OFFICE OF
RURAL HEALTH**

South Carolina Office of
Rural Health

DentaQuest
Partnership
for Oral Health Advancement

NARROWING THE GAP



As the health care delivery system in the United States evolves, both opportunities and challenges exist for patient care, professional training, practice methodologies, and care team communication. Born out of this ongoing healthcare evolution, oral healtha interprofessional practice (IPP) is an approach to care that integrates and coordinates dental medicine with primary care and behavioral health to support person and population health. IPP has demonstrated early promise, with positive patient outcomes and reductions in total cost of care.¹⁻¹⁰ In fact, the Health Resources and Services Administration (HRSA) recently provided recommendations and guidance on the integration of oral health into primary care and stated its importance with overall health.¹¹ Traditionally, the dental profession has existed within a siloed environment. However, this medical-dental divide is being addressed as medical systems, insurance carriers, federal and state governments, patient advocacy groups, and health care organizations look for oral health interventions and prevention strategies to improve person outcomes, patient and provider satisfaction, and reduce the cost of providing and receiving care.⁷⁻¹⁰

Rural Health Clinics (RHCs) and their communities face unique challenges that act as barriers to IPP, which minimize or delay its benefits and result in incomplete care pathways for patients that are neither integrated nor coordinated. Rural areas are more likely to be located within Dental Health Professional Shortage Areas (DHPSAs), have limited transportation options, higher rates of poverty, larger percentages of uninsured and underinsured residents, and populations with greater health care needs.^{10, 12-16} This summary highlights the contents of the MORE Care: Narrowing the Interprofessional Oral Health Care Gap white paper that provides RHCs, State Offices of Rural Health (SORH) and Rural Health Care Systems (RHS)—the health care providers, stakeholders, and organizations that impact care in rural settings—with information to initiate interprofessional oral health networks (IPOHNS) that integrate and coordinate person-centered oral health care in their communities.

a. **Oral health** – As a fundamental component of health and physical and mental well-being, oral health is multi-faceted and includes the ability to speak, smile, smell, taste, touch, chew, swallow and convey a range of emotions through facial expressions with confidence and without pain, discomfort and disease of the craniofacial complex. [FDI World Dental Federation]

INTERPROFESSIONAL ORAL HEALTH: A NATIONAL ISSUE WITH RURAL IMPLICATIONS



Poor oral health is a national problem that impacts overall health and contributes significant expense to the US health care system.¹⁷ The U.S. Surgeon General declared oral

disease a silent epidemic in 2000.¹⁸ More recently, analyses of oral health care have revealed the significant impact oral disease has on overall health and well-being, societal and care costs, the student-education process, as well as on individual workforce sustainability and loss of wages.¹⁹⁻²¹ In rural areas, oral health issues are even more distressing. For example, adults in rural communities are more likely to have all their natural teeth missing than their non-rural peers, and untreated tooth decay is more common.^{10,12} Children living in rural areas are more likely to have unmet dental needs, less likely to have visited a dentist in the past year, and less likely to see a dental care team for ongoing preventive care.¹⁵⁻¹⁶ Additionally, DHPSAs are disproportionately located in non-metropolitan areas.^{12,14}

As IPP expands, additional opportunities for oral health to impact whole-person care are emerging. Oral health interventions by primary care teams,

including oral health assessments, fluoride varnish application, risk factor identification, and oral health coaching, show great promise in reducing oral disease risk and improving oral health awareness.²²⁻²⁴ The bi-directional nature of IPP allows dental care teams to have opportunities to participate in primary care that includes screening and identifying systemic diseases like diabetes and other chronic conditions, providing health and nutrition coaching, performing behavioral health screening, encouraging tobacco cessation, prevention, and secondary smoke avoidance, as well as, participating with immunization processes.²⁵⁻²⁷ Recent evaluations report that dentists consider medical screening important, primary care providers find value in dentists providing chairside medical screening, and the screening for systemic disease in the dental office is accepted by patients.²⁸⁻³⁰ When medical and dental care teams participate in this type of collaborative approach, IPP creates a scenario that enables patients to realize the connection with oral health and overall well-being, encourages healthy behavioral change, and promotes the practice of prevention strategies.

THE MORE CARE INITIATIVE

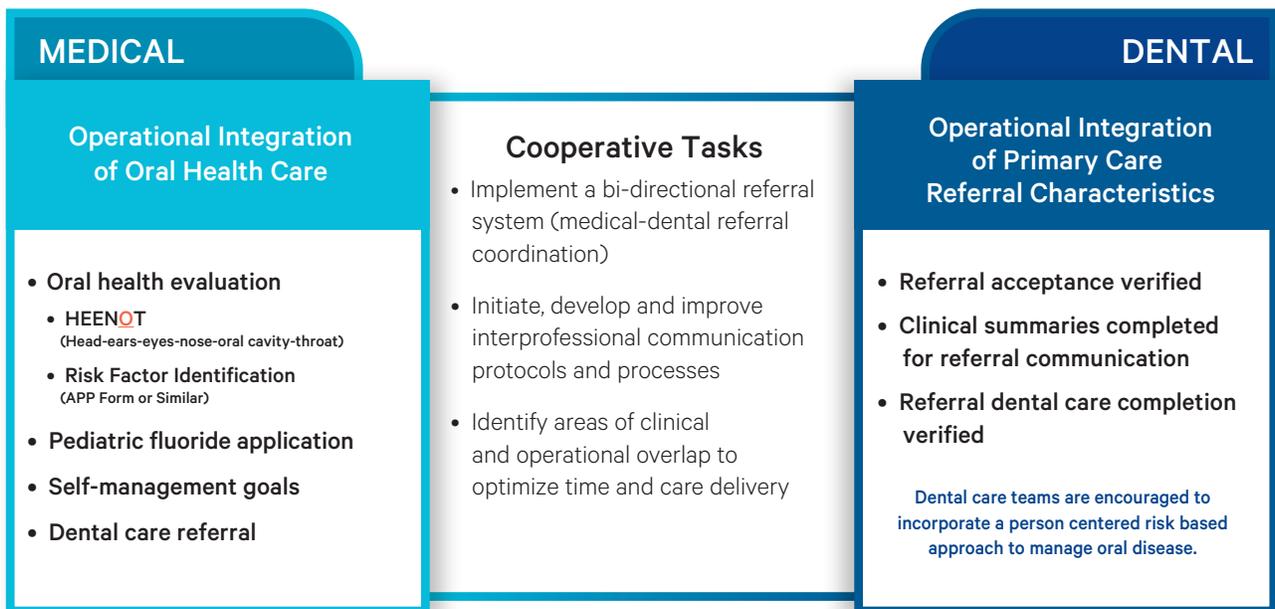


Using a collaborative design, the DentaQuest Institute partnered with the South Carolina Office of Rural Health and the Medical University of South Carolina (MUSC)^b to test pilot models (Phase 1)

that integrated oral health into primary care and built dental care referral networks [Figure 1]. Currently, Phase 2 of the initiative is focusing on prototyping the care design with partners at the Colorado Rural Health Center and the Pennsylvania Office of Rural Health. A total of 21 primary care team sites and 15 dental care partners are participating in 3 states. The MORE Care (Medical Oral Expanded Care) Initiative advances oral health promotion in primary care by assisting teams on strategies for approaching clinical care delivery of oral health services in a novel way through training and teaching clinical staff new skills that include oral health-specific

motivational interviewing, the implementation of quality improvement practices, and measuring for impact. In addition, MORE Care develops relationships and formalizes referral networks with dental care providers. Dental care teams are guided in facilitating the referral relationship to meet the needs of the patient and the primary care teams or system. Dental care teams are encouraged to adopt risk-based disease management practices for caries and periodontal disease management.³¹ Cooperative tasks are then developed and shared between the teams to fortify a bi-directional referral system between dentistry and primary care medicine, improve interprofessional communication, and identify areas of overlap to optimize time and care delivery.

Figure 1: MORE Care Overview



b. In South Carolina, the Initiative process was augmented through an Oral Health Workforce Grant [#T12HP28882] administered by HRSA to support MUSC and its program, the Rural Oral Health Advancement in Delivery Systems (ROADS).

THE CHALLENGES AND OPPORTUNITIES OF THE MORE CARE INITIATIVE



The initial challenges and opportunities during Phase 1 and Phase 2 of MORE Care were varied and, at times, complex. They involved state-, community-, and practice- level activities and allowed for expanding knowledge on the

integration of oral health in primary care and the coordination of care with medical and dental network partners. As seen in **Table 2**, MORE Care partners identified five elements vital to creating a milieu conducive for the initiation of rural interprofessional oral health networks that include:

- **Create an improvement environment**— providing operational expertise to ensure a strong financial foundation and implementing quality improvement policies and protocols to improve or refine care standards.
- **Establish oral health proprietorship**— integrating and coordinating care among community partners to better understand, evaluate, and improve community-based oral health.
- **Develop dental referral networks**— producing a fairer market to offset oral health disparities between rural and urban health care system components and improve care coordination through warm handoffs and practitioner extension opportunities.
- **Facilitate health care model transitions**— providing leadership, expertise, and guidance by state-level organizations and stakeholders to help health care teams navigate changes in the health care environment.
- **Ensure access to health information technology**—developing health technology infrastructure to support interprofessional systems and building platforms for electronic health records/practice management systems (EHR/PMS).

Table 2: Key Factors Impacting the Initiation of Interprofessional Oral Health Networks

Key Factors Impacting the Initiation of Interprofessional Oral Health Networks		
Key Factors:	Challenges:	Opportunities:
<p>An Environment of Improvement</p>	<p>Quality Improvement (QI): QI practices are seen with less frequency in interdisciplinary rural health care, and the current QI methods being adopted by medicine are not being applied by dental care teams.</p> <p>Financial Foundation: Limitations with accurate financial projections have been proposed as a barrier to achieve sustainability in the rural healthcare environment.</p> <p>Incentives for quality improvement practice has been limited and when employed, inconsistent.</p>	<p>Quality Improvement: The growth of quality improvement education, protocols and policies has allowed care teams proprietorship to impact patient care, improve daily operations, and focus on quadruple aim goals.</p> <p>Patient-Centered Medical Home (PCMH)^c recognition is rooted in performance improvement and can provide the foundational systems of care (i.e., team-based care, referral management) that support interprofessional oral health practice. PCMHs can lead to higher quality and lower costs, as well as improve patients' and providers' experience of care.</p> <p>Financial Foundation: Rural practices, both primary care and dental, face financial challenges. Improvement coaches can assist care teams by providing expertise in operational performance to ensure a strong financial foundation.</p> <p>Provide assistance with care flow patterns, templates for oral health visits, and providing direction on billing and coding to maximize financial sustainability.</p>
<p>Oral Health Proprietorship and Support</p>	<p>The effect of the current fragmented rural health system results in a higher cost of care, greater risk of poor disease management^d, and dental provider teams becoming isolated.</p>	<p>Various medical, dental, public health, and industry organizations have proposed a position (or set of position tasks) dedicated to understanding, evaluating, and improving community-based oral health. Case management facilitation can be a function of this position, as well.</p> <p>Many states feature an oral health coalition that disseminates information related to best practices and oral health partnerships that can impact community health. They function as a collaborative of like-minded community and state leaders proposing solutions for improving oral health.</p> <p>A dependable and well-organized onsite oral health training service provides an organizational structure for education/training and creates a pathway to develop oral health champions.</p>

c. **Patient centered medical home** – a care delivery model through which patient care is coordinated by primary care physicians to ensure that patients receive the necessary care when and where they need it, in a manner they understand

d. **Disease management** – a system of care administration that applies population health and risk-based stratification to more effectively stabilize and prevent disease of at-risk populations

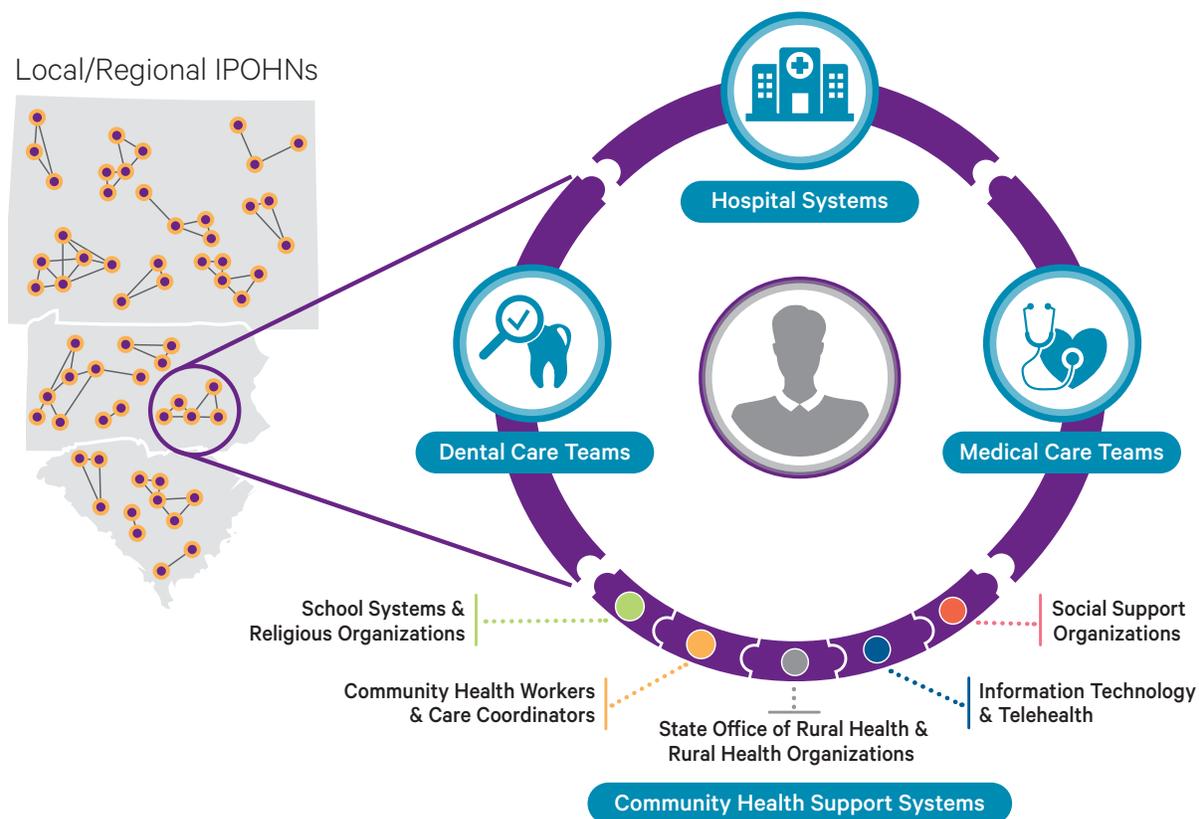
Key Factors Impacting the Initiation of Interprofessional Oral Health Networks

Key Factors:	Challenges:	Opportunities:
<p>Dental Referral Networks</p>	<p>Referral Process: As the need for improved interprofessional communication grows, reports within dentistry and medicine reflect various issues impairing effective care coordination: provider time constraints, breakdown in care coordination/ management, communication failure, variation in education and training, and lack of adequate insurance coverage and a lack of access to providers for patients in need of care.</p> <p>Capacity of dental care is traditionally much smaller than capacity in medical care.</p> <p>Referral Personnel: The majority of Dental Health Professional Shortage Areas are located in non-metropolitan regions. Completing a transportation-friendly referral network can be difficult for primary care teams providing rural oral health.</p>	<p>Referral Process: Previous studies have demonstrated a link between a strong referral system and increased patient satisfaction, better health outcomes, and reduced cost of care. Warm handoff procedures and improved care coordination will be vital in reducing the practice chaos often seen with broken appointments.</p> <p>Hospital systems in rural environments have a more fluid infrastructure to initiate referral management between dental and medical care teams. They are more likely to incorporate warm handoffs which show more promise than other methods to improve appointment completion. Comparative models based on these concepts could be developed for wider dissemination and knowledge exchange.</p> <p>Referral Personnel: The use of practitioner extension methodology (community dental health coordinators, dental care team members embedded with medical and behavioral health teams, and virtual dental home or similar telehealth practices) has shown early promise.</p> <p>There is an opportunity for rural health system financial incentives to help produce a fairer market between rural and urban health care system components, such as state and federal loan repayment programs and oral health access grants.</p> <p>Future development to extend rural designation privileges to dental care teams would provide a financial sustainability tool via cost-based reimbursement.</p>

Key Factors Impacting the Initiation of Interprofessional Oral Health Networks

Key Factors:	Challenges:	Opportunities:
<p>Facilitating Health Care Model Transitions</p>	<p>The current health care system is in a transition period with multiple care models emerging as well as disappearing.</p>	<p>State-level organizations and stakeholders can provide leadership, expertise, and guidance to help health care teams navigate changes in reimbursement structure; understand local, state, and federal requirements; address the increased needs of data and technology; and expand and enhance patient/care management.</p> <p>The advent and advancement of Medicare Access and CHIP Reauthorization Act (MACRA) and Accountable Care Organizations (ACOs) along with improved population and personal health care financial models will open the healthcare market to new models of care and facilitate changes for health consumers toward prevention-based care and the achievement of optimal health as opposed to stabilization of chronic disease.</p>
<p>Health Information Technology</p>	<p>With high costs and lack of operability, the current health information technology (HIT) environment stagnates IP oral health networks, especially in rural areas.</p> <p>Inadequately functioning EHRs and lack of software support are commonly reported reasons for increased cost and correlate to dissatisfaction with case management and care reporting.</p>	<p>Development of health technology infrastructure to support IP teams with a high functionality in IT operations and a means of ongoing training to provide the best tools for interprofessional practice.</p> <p>HIT report writer programs and third-party HIT management companies show early promise to connect multiple providers, through various electronic health records/practice management systems (EHR/PMS), to real-time practice and patient quality metrics. High costs will need to be addressed.</p> <p>Development of multiple IP networks working within a collaborative may result in a better platform for EHR/PMS enhancements or changes due to a larger licensee pool.</p> <p>As state health information exchanges (HIE) improve and expand, both primary care and dental care teams will have the ability to share patient information and payment structure, ensuring that the highest level of patient safety and continuity of care is realized.</p>

Figure 2: Local and state level organization for IPOHN initiation demonstrating the community partners needed to develop a care pathway with the four key partners: hospital systems, dental and medical care teams, and community support systems.



FUTURE IMPLEMENTATION

Enhancing and upgrading interprofessional oral health networks requires investment, ownership, and coordination. As observed during MORE Care’s Phase 1 and 2 cohorts, the most advantageous design to rural IPOHN initiation appears to be with individual IPP oral health care collaboratives and networks specific to a geographic region [Figure 2]. These networks work together to solve local problems, develop population-specific care processes, and coordinate with state-level organizations to bring together regional partners based on community need. At a practice activity level, it was advantageous for MORE Care teams to integrate workflows that addressed oral health as not one more thing, but part of a primary care team’s differential diagnosis and process for identifying the signs and symptoms of upper gastrointestinal system disease within the

oral cavity (dental caries, periodontal disease, and cancer). In addition, the MORE Care improvement process platform created an environment that provided input on performance, action planning guidance, and allowed for the exchange of innovation and best practices among individual care networks. The MORE Care teams worked with community and state partners to demonstrate that interprofessional oral health integration and coordination is viable and will lead to a positive impact for patients and communities.

FOR MORE INFORMATION, SEE THE FULL REPORT:

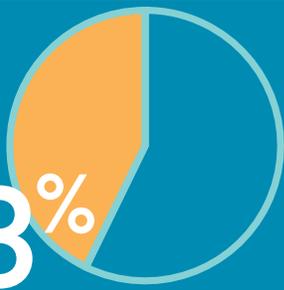
MORE Care: Narrowing the Rural Interprofessional Oral Health Care Gap

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Of the nation's
62 MILLION
rural residents –

43%



LACK ACCESS TO DENTAL CARE

90% of
systemic diseases have
**oral
manifestations**



45 MILLION
AMERICANS
live in
**dental health
shortage areas**



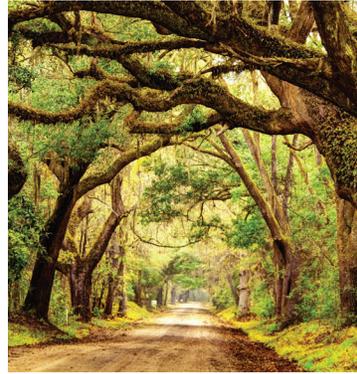
1 IN 5

cases of **total** tooth
loss is linked to
DIABETES

Water
in rural
areas



IS LESS LIKELY
to be
fluoridated



70% of adults
65 and older have
no dental benefit



111 MILLION
people visit a medical provider
and not a dental provider



27 MILLION
visit a dental provider
and not a medical provider

**ORAL HEALTH
DISEASE**



is associated with
childhood obesity

**UNTREATED
TOOTH DECAY**

is observed
**more
frequently**
in rural areas



80% of
North Americans suffer
from some form of
periodontal disease



Early childhood
caries is



5x
more common
than asthma

40% of those
who had chemotherapy
have oral symptoms



Rural
adults



ARE **MORE** LIKELY

to have **ALL** of their
teeth missing

Rural
children



ARE **LESS** LIKELY

to have
visited a dentist

164 MILLION
HOURS OF WORK
are **lost** by adults
each year due to
DENTAL EMERGENCIES



Children missed

51 MILLION
HOURS OF SCHOOL
due to ORAL DISEASE

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