MOTIVATE

Maine's Oral Team-Based Initiative: Vital Access to Education

Oral Health Leads to Total Health

MOTIVATE Project Needs Assessment Executive Summary

Prepared for:

LUNDER • DINEEN

Health Education Alliance of Maine

In collaboration with Massachusetts General Hospital

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EXECUTIVE SUMMARY

INTRODUCTION & BACKGROUND

Oral health is a critical area of educational need throughout Maine. Lunder-Dineen Health Education Alliance of Maine (Lunder-Dineen) with a statewide advisory team of Maine-based experts has established **MOTIVATE:** ***Oral Health Leads to Total Health.*** The MOTIVATE acronym stands for: **M**aine's **O**ral **T**eam-Based **I**nitiative: **V**ital **A**ccess **T**o **E**ducation. This innovative and Maine-tailored education pilot program is in response to national calls-to-action from the U.S. Surgeon General, American Dental Association, Robert Wood Johnson Foundation, and others to raise awareness about the connection between good oral health and good overall health. The pilot program's mission is to use the latest research findings to improve, promote and protect the oral and overall health of older adults residing in long term care homes. An overarching goal for this program is statewide expansion into other long-term care (LTC) environments. This quality improvement pilot program model is informed by evidence-based programs and best practices in the science of adult learning to develop an education framework in a collaborative education and practice model.

Maine has one of the oldest populations in the country, which makes older adult health an area of high educational need and a priority for Lunder-Dineen. Older adults have unique oral health needs and many health disparities exist for this population. The need for dental services increases as we transition into old age. Poor oral health has sizeable social and economic consequences, and an adverse impact on overall health. Poor oral health is not a normal part of aging. Long-term care settings present a unique opportunity to work with an interprofessional team on developing evidence-based standards that improve quality of life and overall health from simple enhancements in oral health care. As a result, Lunder-Dineen is collaborating with key stakeholders from across Maine and has a vision for this pilot project to optimize aging through interprofessional oral health education. The following experts serve in an advisory capacity for the MOTIVATE pilot, informing the pilot development and its associated needs assessment process and measures of success:

- Leonard Brennan, DMD, Co-Director, Harvard Dental Geriatric Fellowship Program
- Demi Kouzounas, DMD, Immediate Past President, Maine Dental Association and Long Term Delegate to the American Dental Association
- Marilyn Gugliucci, PhD, Director of Geriatrics Education and Research, University of New England
- Jennifer A. Crittenden, MSW, Assistant Director, University of Maine Center on Aging
- Rodney A. Larson, PhD, RPh, Dean, School of Pharmacy, Husson University
- Timothy Martinez, DMD, Associate Dean of Community Partnerships and Access to Care, University of New England College of Dental Medicine
- Nancy L. Foster, CDA, EFDA, RDH, EdM, Assistant Professor-Dental Health Programs, University of Maine at Augusta, Bangor

Additional project guidance is provided by the MOTIVATE Ad Hoc Advisors:

- Maria C. Dolce, PhD, RN, CNE, Associate Professor, Northeastern University School of Nursing
- Timothy Oh, DMD, FACD, FPFA, FICD, Director, Caring Hands of Maine Dental Center
- Lenard W. Kaye, DSW/PhD, Director, University of Maine Center on Aging
- Carole A. Palmer, EdD, RD, LDN, Professor and Head, Division of Nutrition and Oral Health Promotion, Department of Diagnosis and Health Promotion, Tufts University School of Dental Medicine
- Lewis N. Estabrooks, DMD, MS, Board member, OMS National and Chairman, Fortress Insurance Company

The mission of the MOTIVATE pilot project is to improve, promote, and protect the oral and systemic health of Maine long-term care residents. This quality improvement pilot project will center on using innovative, interprofessional, evidence-based, and sustainable educational model to 1) improve oral and systemic health for residents in long-term care settings; 2) advance the skills, expertise and interprofessional education and practice among providers and health care professionals in Maine; and 3) help raise awareness of the connection between oral and overall health. The key components of this model include a blended interprofessional learning model, the infusion of high quality supplies into LTC and the use of staff oral health champions.

While long term staff training materials and curricula exist on the topic of oral healthcare, this type of quality improvement pilot program has not been undertaken within LTC settings in a manner that is comprehensive and interprofessional in focus. As such, the MOTIVATE Pilot Advisory Team made the decision to undertake a needs assessment that would determine the most effective and efficient oral health care education methods and content (skills, attitudes, & knowledge). The following objectives guided the needs assessment process, the results of which are summarized in this document:

a. Identify staff practices associated with oral health care for long-term care residents.
b. Identify stakeholder perspectives, experiences, and desires regarding oral health care for the residents.
a. Determine the key elements and approaches for this provision of oral health care to residents.
b. Determine perceived challenges to providing resident oral health care in LTC settings.
c. Use primary data collection from volunteer LTC sites throughout Maine to develop suggestions for MOTIVATE training development and implementation.
d. Establish approaches for educating staff on oral health care that address the key elements and perceived challenges noted from this needs assessment.

During the early MOTIVATE planning process, the needs of older adults in general and LTC residents in particular were discussed. Given the unique nature of LTC as compared to assisted living, a decision was made up front to focus the needs assessment and pilot efforts on LTC settings. Based on existing literature, we know that LTC residents are at a higher risk for poor oral health as compared to those receiving assisted living level of care. During the needs assessment process, secondary data (literature review and review of existing training curriculum)

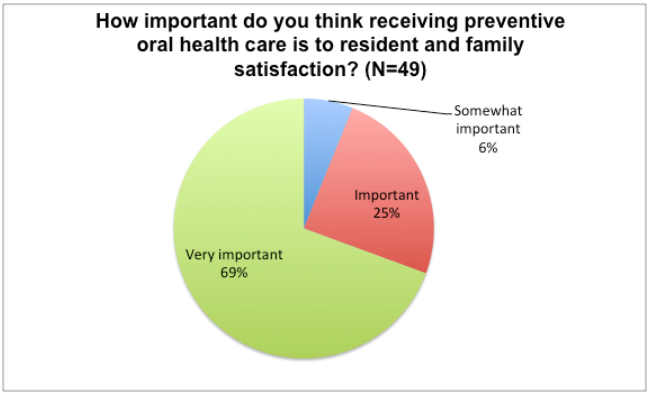
along with primary data (survey and focus groups) was collected to provide a comprehensive picture of the unique needs of LTC staff, residents, and their families with regard to oral health care. Survey data was collected from 392 direct care and administrative staff from LTC homes throughout Maine along with several focus groups held with staff, residents and family members who utilize LTC. The resulting data provided the educational framework from which the MOTIVATE blended learning program was developed.

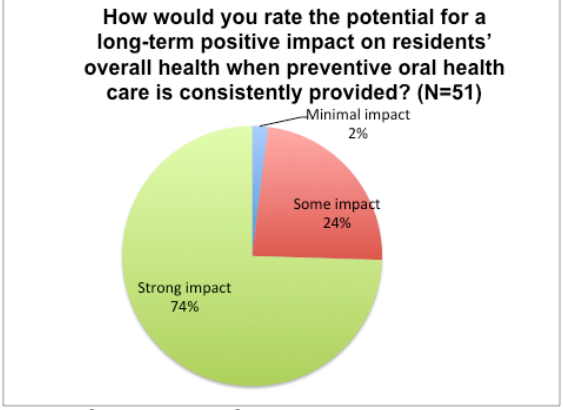
KEY FINDINGS

Importance of Oral Health Care in LTC

> *"It [oral care] is important to her and it is important to me to help maintain health."* –LTC family caregiver

The importance of oral health in long term care settings is clear. The maintenance of good oral health is important not only for a healthy mouth but also for overall systemic health. Poor oral health that leads to inflammation and infection has been shown to be a risk factor for chronic and acute conditions such as pneumonia, kidney disease, diabetes, and heart disease. Poor oral health can also lead to difficulty eating, speech impairment, and mouth pain which can further impact one's quality of life. Age-related dental changes put older adults at particular risk for poor oral health, including periodontal disease. Older adults in particular have the highest rates of periodontal disease (Lamster & Ahluwalia, 2014).





LTC settings provide care to some of the most medically fragile and frail older adults. With the use of long term care services expected to continue to grow to include as many as 27 million recipients of care by 2050, long term care settings will continue to be an important point for oral health promotion (Family Caregiver Alliance, 2015).

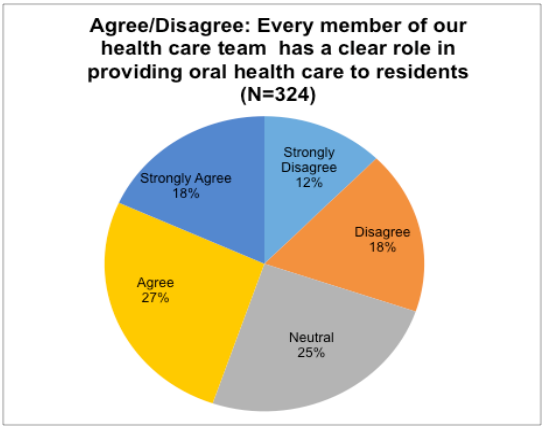
> *"I think that preventative oral care is an important part of a resident's health…"* –LTC staff

Existing research indicates that LTC administrators view oral health as an important component of health care provided in LTC settings (Wintch, Johnson, Gurenlian, & Neil, 2014). Across the board, LTC administrators, staff, residents, and care partners (family/friends) engaged in the MOTIVATE needs assessment process articulated an interest and commitment to the provision of regular oral healthcare. LTC administrative staff view oral healthcare as a component of good resident care that fits with their LTC home mission. In

addition, a majority of administrative staff surveyed suggested that ongoing staff involvement and leadership throughout the curriculum development and pilot phases will be a key component to implementation success.

Interprofessional Care Is Key

The nature of LTC care requires coordination among many different professionals to provide high quality care to residents. This coordinated care requires knowledge and use of the following key competency among the team: interprofessional values/ethics, team roles and responsibilities, communication, and team work/collaboration skills (Interprofessional Education Collaborative Expert Panel, 2011). Interprofessional education in LTC settings has been found to be an effective strategy for increasing oral health knowledge and skill levels among interprofessional team members (Bonwell, Parsons, Best & Hise, 2013). Support from interprofessional care has been found among LTC administrators who have been found to support innovative approaches to oral health in LTC (Wintch et al., 2014).



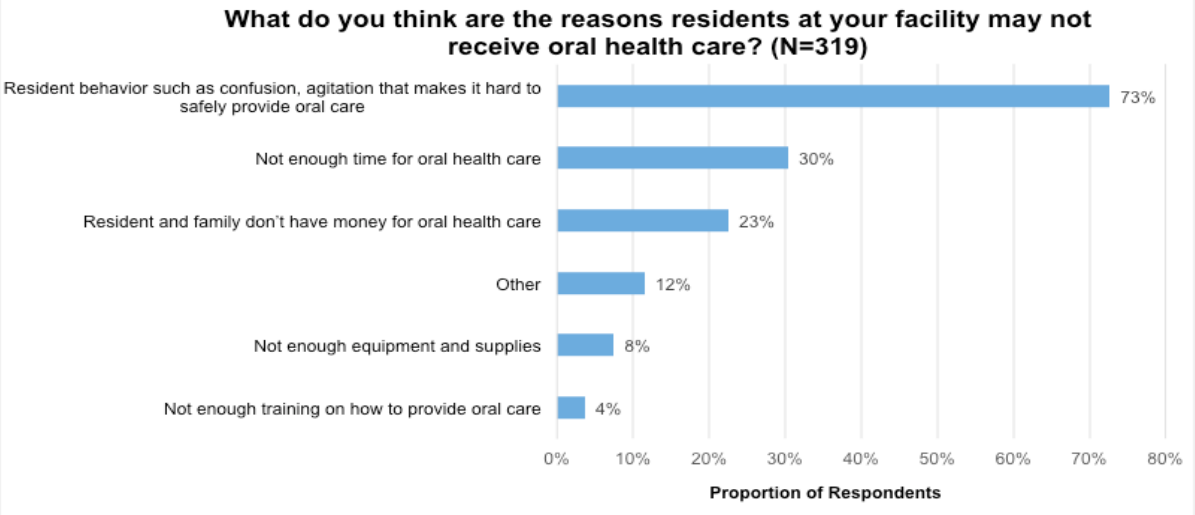
MOTIVATE needs assessment research found support for both the importance of interprofessional oral health care while also uncovered key gaps in such care that could be addressed through the MOTIVATE quality improvement pilot. For example, little under half of LTC direct care staff surveyed agreed or strongly agreed (45%) that every member of the care team has a clear role in providing oral health care to residents. An additional 30% of respondents disagreed or strongly disagreed that every care team member has a clear oral health role and 25% indicated that they were neutral or unsure. Staff members were also asked to rate the importance of improving interprofessional collaboration to meet resident oral health needs. Most respondents (84%) felt that improving such collaboration was important or very important.

Challenges to Oral Health Care in LTC

> *"I wish now I still had mine. I lost all of my teeth when I was 16."* –LTC resident

Providing oral healthcare for the most frail residents is challenging and in LTC settings is often a neglected component of care provision (MacEntee, 2006). In Maine, as many as a third of nursing home residents exhibit behaviors that directly impact the care that staff can provide (Centers for Medicare & Medicaid Services, 2016). Oral health care-related barriers noted by long term care staff in previous research studies include a fear of being biten by a resident during oral health care provision, resident refusal of care, bad breath, lack of time, and a perception that oral health care did not fit with one's direct care role (Reed, Broder, Jenkins, Spivack, & Janal, 2006). Along these lines, direct care staff surveyed through the MOTIVATE project indicated the following barriers to oral health care in LTC: resident behavior (86%), the need for additional staff training (70%), and lack of access to an oral health

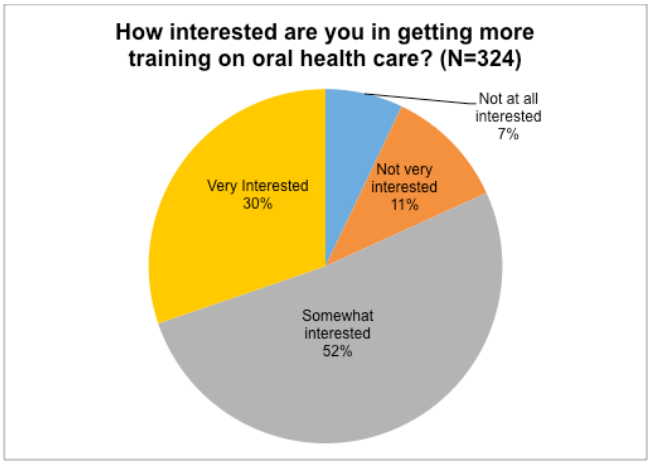
provider (62%) were cited as the top barriers to care. The lowest cited barriers were "other" reasons (4%), cost of equipment and supplies (10%), and additional equipment needed to provide care (26%).

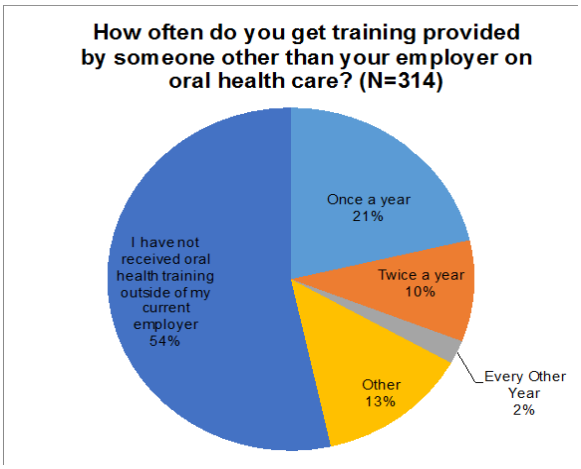


Staff Training Needs

> *"A lot of people don't put that together (the health significance of good oral health) and I think if they need to have the education to know and understand what that is"* –LTC staff

Existing research has noted that while staff in long term care settings place a high importance on oral health care, many do not have formal education on oral health care techniques (Wårdh, Jonsson, & Wikström, 2012). Information collected through the MOTIVATE project indicates that over half of LTC staff respondents (54%) have not had oral health training outside of their current LTC employer. Almost one third (31%) report receiving outside training once or twice per year. Additional responses identified the outside sources of training, which included professional school and training, other employers, or at a dental office, usually during their personal dental visits. More than three quarters of respondents indicated at least some interest in receiving additional oral health training.





For those who received training prior to their work with their current employer, the top two training topics they learned about were the importance of oral health care (91.7%) and how to clean teeth and dentures (85.3%). Over 50% of respondents learned about topics concerning oral pathology, such as gum disease and tooth decay. Less than half were trained on issues related to interacting with residents about oral health.

Priority Training Areas and Design Elements

MOTIVATE survey respondents wanted more education around oral health interactions with residents including how to uncover problems residents don't tell us (54.8%) and working with challenging patients (51.7%). Less than half expressed a desire to learn more about various oral pathology topics or teaching residents about oral health.

Desired Oral Health Training Topic	% of staff respondents
How to uncover problems residents don't tell us	54.8%
Working with challenging patients	51.7%
Quick fixes for oral health problems	44.8%
When to wait and when to worry	43.8%
How drugs affect oral health	43.1%

Curriculum Design Priorities

The following were the top priorities identified for oral health quality improvement pilot program design in LTC settings:

High potential for positive impact on resident and family satisfaction: Staff place a high priority on resident and family satisfaction and view the provision of oral healthcare as having a high potential for supporting residents and their families.

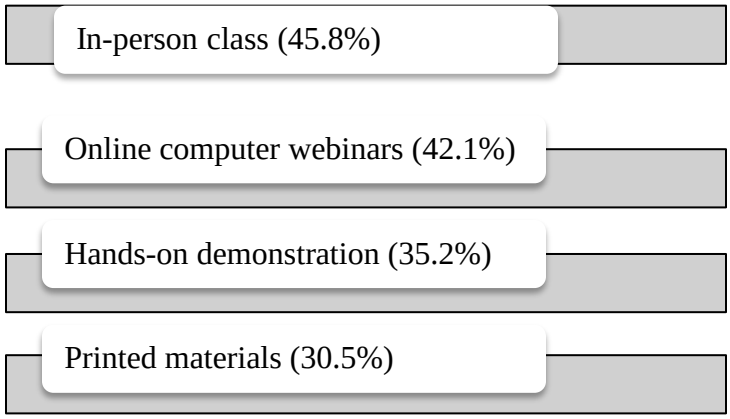
On-going availability of the education for all new staff: About a third of LTC staff surveyed noted that staff turnover is likely to impact training implementation. To address this, new staff members should have access to oral health training content as they onboard and in an ongoing fashion throughout their employment.

Training time should be reasonable: LTC settings are fast paced work environments. Thirty percent (30%) of direct care staff surveyed indicated that lack of time can be a barrier to the provision of oral healthcare in LTC settings. Not only should care techniques accommodate this reality but also the training format and time required should be developed with this challenge in mind.

Ability for direct care staff to apply new knowledge and skills to resident care: Resident care is the focus of LTC and its operations. Training content should easily be translated and applied to improve the health and wellbeing of residents.

Learner satisfaction with the program: From and administrative perspective, learner satisfaction is an important component of oral health care training. To achieve this satisfaction, training should include priority topics and formats of interest.

Preferred Training Formats: Feedback from LTC staff indicates that the following training formats are preferred methods for delivering oral health care training:



MOTIVATE PROGRAM GUIDING PRINCIPLES

Based on a review of the data collected the following points have been identified as most salient to address as MOTIVATE curriculum is developed and deployed at pilot sites:

I. **Focus on LTC mission touch points**. Focusing on delivering education and care that connects to LTC home mission touch points would be a good approach for the MOTIVATE quality improvement pilot to consider. Residents are a central focal point for LTC homes and MOTIVATE will need to articulate how training will support this focus on care. Specific touch points noted included (a) connecting oral health care to high quality resident care, (b) oral health care that advances resident and family satisfaction, and (3) oral health care that is resident and family centered. Emphasizing oral care approaches, staff training, evaluation measures, and staff and resident communications to these mission-related touch points would be a congruent approach to advancing oral health.

II. **Incorporate staff in the planning and implementation process.** Based on staff survey and focus group findings, it will be critical to incorporate LTC staff feedback throughout the MOTIVATE development process from curriculum formation, to implementation to evaluation of the model. LTC staff are interested in the topic of oral health care but may face challenges to implementing care.

III. **Design a plan for training new staff**. Staff hiring is an ongoing process and the MOTIVATE quality improvement pilot can be designed so as to be implemented at various stages of employment. For example, integrating oral health into orientation training will ensure all staff have baseline oral health care training. Offering ongoing refresher content throughout staff employment tenure will aid in ensuring all staff are

accessing training and advancing their knowledge on oral health care at various stages of their employment.

IV. **Define interprofessional team roles for the provision of oral health care.** The current study uncovered a considerable amount of variation in the understanding and articulation of oral health care roles within the interprofessional team. Additional planning will be needed to identify the most appropriate oral health care roles for each team member and how to best educate and prepare staff members for their respective interprofessional roles would support staff and possibly advance resident oral health care. As MOTIVATE oral health care interventions will be designed to support LTC staff systems, standards of care, and procedural practices, understanding interprofessional staffing and policy implications for oral health care responsibilities will aid implementation.

V. **Implement the MOTIVATE quality improvement pilot using techniques and approaches that are efficient, provide flexibility, and accommodate the limited time available for staff training.** Both survey and focus group data document that staff time for training efforts is limited. The MOTIVATE model will need to incorporate unique approaches for effective training in a fast paced environment. When staff time is allotted for training, it is best provided off-unit where direct care staff can focus on training content without interruption. For training modules that may be provided via computer providing paper backups or audio versions of training materials will allow staff to complete the training without being anchored to a computer and will allow for flexibility when training cannot be provided off-unit. In essence, recording of training completion needs to accommodate multiple methods and providing access to the learning materials in forms other than on a computer will make training content accessible to those staff who may lack computer skills or have limited computer access. It is important to note that completion of training by staff when not in duty or in their own homes is not a favorable staff training method and should be avoided.

VI. **Clarify existing oral health training at implementing LTC homes.** Research data suggest conflicting findings about the level of staff education on oral healthcare within LTC. Some staff receive training during orientation and others do not. Prior to implementing MOTIVATE trainings, it will be important to gain additional clarity around the existing oral health training provided to staff at orientation and identify which groups of staff receive such training currently. Once this training content is identified, it should be cross-referenced in MOTIVATE trainings to avoid duplication of efforts.

VII. **Support training efforts through the use of staff champions.** Survey and focus group data supports the use of oral health champions at MOTIVATE implementation sites who can build energy, interest, and compliance with oral health care throughout the LTC home setting. Survey data collected for the needs assessment process noted the use of peer mentoring and train-the-trainer practices within LTC and these

mechanisms could be used to create an oral health champion or peer leader component to further support MOTIVATE implementation. For example, MOTIVATE could use higher level CNAs with more experience as designated direct care leaders in oral health who would receive special training and support that would enable them to help other CNA staff provide oral health care. Since MOTIVATE uses an interprofessional educational framework, occupational or speech therapists could also be recognized as staff champions in addition to nurses and CNAs.

VIII. **Gain a deeper understanding of how MOTIVATE practices can be supported by policies and procedures at implementing LTC sites**. Some of the challenges to oral health care noted in the needs assessment research cannot be addressed through training alone. The MOTIVATE quality improvement pilot implementation will be assisted if there was an integration of oral health care into ongoing staff training schedules, care planning processes, and unit staffing. Once standards for basic oral health care and procedures of training have been established, future MOTIVATE effort could include investigating how policies and procedures at implementing sites can be modified to further support oral health care throughout each LTC home.

IX. **Build staff oral care knowledge base in order to focus on high need content areas.** Early MOTIVATE modules need to address building a basic level of understanding about oral health care and its connection to total health. Since LTC staff are likely to have varying levels of exposure to and training in oral health care, this will ensure that all staff have the same working knowledge of this topic. Additional content areas should emphasize how to care for residents who present challenging behaviors due to memory loss, dementia, mental health issues, or physical limitations such as stroke. Specific areas for early curriculum development include:

- Considering oral health issues as a cause for resident behavioral changes
- Conducting an efficient oral health assessment
- Providing oral care to challenging residents
- Quick fixes for oral health problems including denture repairs
- When to “wait” and when to “worry”
- How drugs affect oral health

X. **Provide high quality oral care equipment, supplies, and approaches to complement MOTIVATE training.** Improving oral health care provision extends beyond training. Suggestions gathered from LTC staff included upgrading to softer, smaller, and battery powered toothbrushes, non-fluoride products that can be swallowed without ill-effects, mouthwashes that are gentle on the mouth, mouthwash and toothpaste with pleasant flavoring, hand flossers, and denture cleaning products. These products would need a dedicated storage space on each unit with associated staff training (procedures) on where to locate oral health equipment, how to replenish equipment and supplies, and who will be responsible for doing so. The MOTIVATE quality improvement pilot would be designed to support the products and systems within LTC settings.

XI. **Strengthen communication among staff, residents and families about oral health care.** Training and oral care implementation efforts should bolster strong communication across staff lines and between staff and residents/families. By increasing the understanding regarding why oral health care is important, staff can increase their ability to assess the level of satisfaction that residents and families have with the oral health care that is provided.

XII. **Increase access to dental providers.** Access to dental care providers is an ongoing need for LTC homes. While this need is not a primary focus of the MOTIVATE model, it is one that could be addressed through existing partnerships within the MOTIVATE advisory team. This includes bringing practicing dentists as well as dental medicine and dental hygiene students into LTC settings to provide care for those who are unable to travel to a dentist or who cannot otherwise afford dental care. This component would complement MOTIVATE trainings and daily care provided by staff.

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