

Oral Health Improvement in Nursing Homes

Poor oral health affects overall health, increasing the risk of pneumonia and other conditions, particularly among older adults living in nursing homes. Through two, Civil Monetary Penalty (CMP) awards from the Centers for Medicare & Medicaid Services (CMS), TMF Health Quality Institute implemented an oral health improvement intervention in Texas and Oklahoma. The purpose of the intervention was to teach direct care nursing home staff how to provide person-centered oral care that improves key oral health-related outcomes for Texas and Oklahoma nursing home residents.

Project Overview

Intervention

The intervention included creating statewide oral health older adult advisory workgroups and developing a nursing home oral health promotion toolkit and education curriculum. Baseline and post-program assessments, including the basic screening survey (BSS) for oral health, were conducted to determine improvement in resident oral hygiene and incidents of oral health infections and related conditions. BSS data was provided to the states to support statewide surveillance data to determine the burden of oral health issues in older adults and addressing the Healthy People 2020 oral health objectives.

These projects involved all nursing home staff to help nursing home residents in Texas and Oklahoma improve their oral health. Stakeholders worked toward sustainable support of the project and created accessible resources and policies for older adult oral health care. To provide resident-centered care education to the nursing home staff, licensed dental hygienists taught onsite classes at participating nursing homes. The nursing home oral health toolkit included visual aids, oral care checklists and a quick-reference guide to assist leadership in using toolkit resources.

Methodology

TMF recruited 120 Texas nursing homes and 43 nursing homes throughout Oklahoma. Advisory groups were formed in both states, comprising professionals from long-term care, oral health and senior health quality improvement, to provide guidance to improve resident person-centered oral care and to reduce oral infection. Dental hygienists deployed the oral care toolkit, education curriculum and sustainability support tools in each nursing home after the advisory groups approved content for the materials. Nursing home resources included staff education presentations, a free online continuing staff education resource, and oral care educational resources in English and Spanish, which included recommendations for oral health practices. Other tools included oral care educational videos, daily and

annual oral health assessment tools, oral health promotion posters, and daily oral care reference badge cards for nursing staff.

Outcomes

Approximately 4,928 nursing home leadership and direct care staff in Texas and 3,006 in Oklahoma participated in oral care education. After training, staff showed improvement in oral care knowledge (Texas showed an average increase of 35% and Oklahoma showed an average increase of 30%).

To assess improvement in facility oral health practices after intervention, a nine-question oral survey was implemented to assess activities, such as staff training and dental care resources to assist residents with oral care, and resident oral screenings. There was a 74% and 98% survey completion rate in Texas and Oklahoma facilities, respectively. The survey demonstrated a 14% increase in residents brushing their teeth two times per day; a 12% increase in residents flossing two times per week; and an 18% increase in daily resident oral screenings performed by staff in Texas nursing homes. In the Oklahoma facilities, post-intervention results demonstrated a 15% increase in quarterly staff oral care training; a 50% increase in using floss or interdental cleaning aids among residents; and an 18% increase in daily resident oral screenings by staff.

Additionally, 1,200 BSS surveys in Texas and 402 surveys in Oklahoma were completed. This surveillance data was submitted to strengthen the state data repositories gauging oral health burden. The table below lists the BSS surveillance oral health status outcomes for Texas and Oklahoma.

Texas <i>(BSS completed on 1,200 residents)</i>	Oklahoma <i>(BSS completed on 402 residents)</i>
<ul style="list-style-type: none"> • Untreated decay: 50.16% • Root fragments: 48.93% • Need for periodontal care: 33.77% • Edentulous: 19.51% • Never or two or more years since last dental visit: 61.64% 	<ul style="list-style-type: none"> • Untreated decay: 52.24% • Root fragments: 48.76% • Need for periodontal care: 47.77% • Edentulous: 24.38% • Never or two or more years since last dental visit: 30.35%

Discussion

To improve access to the toolkit, the project team designed a quick reference guide to highlight oral health education and to explain how videos and materials can be used for 30-minute in-service trainings. This guide along with as badge cards and posters were mailed to nursing homes. Long-term care leadership in both states recommended the comprehensive oral health intervention continue to reach additional nursing homes.

Nursing home staff experienced lack of knowledge with oral health and systemic health. TMF anticipates the staff will use this new knowledge to continue to develop residents’ personalized oral care plans. Many nursing staff reported increased confidence to perform oral health care for resistant residents, as well as residents diagnosed with dementia.

Personalized oral care plans have been shown to impact overall resident health. In addition to the assessment outcomes, facilities reported specific changes they have made and will continue to make as a result of the oral health intervention.