Addressing Oral Health among Aging Rural Populations

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Established in 1980, at The University of North Dakota (UND) School of Medicine and Health Sciences in Grand Forks, ND

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Background

Center for Rural Health partnership and funding with the North Dakota Department of Health, Oral Health Program (2015)

- DentaQuest dollars
- Survey of long term care (LTC) facilities oral health policies and attitudes around dental care
- Pre/Post assessments for LTC facilities participating in mobile dental program

Dental Visits for People 65 years of age and Older

- Roughly 1.4 million U.S. nursing home residents in 2014.
- People ages 65 or older make up 15% of the U.S. population (49.2 million people).
People ages 65+ with Dentist or Dental Clinic Visit in Past Year for any Reason, 2016


North Dakota and the Nation

Figure 1. Percentage of Elderly who Accessed Dental Care in the Past Year, 2008-2014
In 2016, Nonmetro (rural) counties had a larger proportion of their overall population aged 65 and older.

Rural Elderly

Percent of Population ages 65+ in 2016

- U.S.: 15.0%
- Metro (urban): 14.0%
- Nonmetro (rural): 17.7%

Population 65 and Older - 2016
Dental Care Access in Rural Communities

• As of December 2017, 62,916,553 people in the U.S. were living in Dental Health Provider Shortage Areas (HPSAs)
• In 2016 there were 60.9 dentists for every 100,000 people
• The dentist/100,000 pop. ratio ranged between 41.16 (Arkansas) and 88.52 (District of Columbia)
• In North Dakota, each Dental HPSA was defined as a rural community by the U.S. Census Bureau
Oral Health & Overall Health

Evidence suggests that poor oral health and gum disease are linked with increased hospitalizations, readmissions, respiratory infections, diabetes, dementia, poor nutrition, pneumonia, chronic obstructive pulmonary disease, and behavioral change in the elderly.
Oral Health & Overall Health

- Subjects with severe gum infection had a 4.3-times-higher risk of ischemic stroke (cerebral ischemia) than subjects with mild or without gum disease.\(^a\)
- People who had chronic gum inflammation for 10 or more years were 70% more likely than people without gum inflammation to develop Alzheimer’s disease.\(^b\)
- The risk of pneumonia among LTC patients was significantly reduced among those receiving oral care. LTC residents receiving oral care had a rate of morality due to pneumonia about half that of those residents not receiving oral care.\(^c\)
- Among patients with chronic obstructive pulmonary disease (COPD), having fewer teeth, a high plaque index score, and low tooth-brushing times were all significantly associated with COPD exacerbations.\(^d\)

\(a.\) [http://stroke.ahajournals.org/content/35/2/4966](http://stroke.ahajournals.org/content/35/2/4966)  
\(b.\) [https://alzres.biomedcentral.com/articles/10.1186/s13195-017-0282-6](https://alzres.biomedcentral.com/articles/10.1186/s13195-017-0282-6)  

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Dental Coverage for Nursing Home Residents

- Neither Medicare Part A nor Medicare Part B cover dental care, dental procedures, cleanings, fillings, tooth extractions, dentures, dental plates, or other dental devices.
- Services covered by Medicaid vary for each state.
- In 2015, CMS programs covered 38% of overall health expenditures and only 12% of dental expenditures.
Medicaid and Long Term Care

- Roughly 64% of nursing home residents are covered by Medicaid
- Medicaid is the primary payer for long term care
- [Dental Coverage for Nursing Home Residents](https://www.kff.org/infographic/medicaids-role-in-nursing-home-care/)

Dental Care Provisions among North Dakota LTC Facilities

- Only 50% of facilities had a written plan of care for dental needs in place.
- Of the 23 with a written plan of care for dental needs in place, only 3 had had any dental professional assist or review said plan.
- Nursing facilities were more likely to have a plan of care for dental needs in place (57%) than basic care (25%).
- Nursing care facilities were more likely (87%) than basic care (50%) to offer oral health training to nursing and nurse aide staff.
More than a quarter of facilities indicate there was no initial dental exam, while only 7% indicated a dental provider was responsible.

### Oral Health among North Dakota Nursing Home Residents: Insurance Status, 2016

- **Edentulous**: 0%
- **Substantial tooth loss**: 69%
- **Untreated decay**: 29%
- **Root fragments**: 26%
- **Severe gingivitis**: 31%
- **Needs periodontal care**: 25%

Data provided by the North Dakota Department of Health Oral Health Program, Basic Screening Survey for Older Adults 2016
Goal: Create a Standard Dental Screening Tool for Nursing Home Residents

• Funding: DentaQuest, North Dakota Department of Health, Oral Health Program
• Priority identified by the North Dakota Older Adult Oral Health Work Group
• Additional interest from:
  • North Dakota Long Term Care Association
  • North Dakota Dental Association
  • Bridging the Dental Gap

Method and Approach

• Crosswalk of Items to Include in the Initial Dental Screen
  • Code of Federal Regulations (CFR) for nursing home care
  • CMS Minimum Data Set (MDS) Resident Assessment Instrument (RAI) 3.0
  • Basic Screening Survey for Older Adults recommended by the Association of State and Territorial Dental Directors
  • National and international templates/recommended best practices
Priority Items for the Screening Tool

Federal law (42 C.F.R. § 483.20) requires all nursing home facilities conduct an oral health assessment upon admission of a new resident, and periodically. Federal law also requires that long term care facilities:

- Obtain routine and emergency dental services from an outside resource to meet resident needs
- Assist residents with making appointments and arranging transportation, as requested
- Within 3 days, refer patients with lost or damaged dentures
- Assist residents in applying for dental service reimbursement
Section L of the MDS 3.0 RAI

Effective October, 2017 nursing homes will record the following dental problems present in a 7-day look-back period:

• Broken or loosely fitting full or partial denture
• No natural teeth or tooth fragment(s)
• Abnormal mouth tissue (ulcers, masses, lesions)
• Obvious or likely cavity or broken natural teeth
• Inflamed or bleeding gums or loose natural teeth
• Mouth or facial pain or discomfort with chewing
• Unable to examine


Review of the Dental Screening Tool

• North Dakota Department of Health, Oral Health Program
• North Dakota Older Adult Oral Health Work Group
• North Dakota Dental Association, Board of Directors
• Focus Group Review
Focus Group

Representation from:

- North Dakota Department of Health Oral Health Program
- Dental providers
- Director of Nursing from a rural nursing home
- Nursing home administrator
- North Dakota Department of Human Services (Medicaid)
- Bridging the Dental Gap (health center providing mobile dental care for nursing home facilities)

The Standardized Dental Screening for New Nursing Home Residents: A Promising Practice Guide may be found at:

https://ruralhealth.und.edu/assets/1123-4538/standardized-dental-screening-for-new-nursing-home-residents.pdf
Promising Practice

A dental hygienist (DH) will complete the dental screen in the nursing home facility within 14 days of admission of a new resident (page one). The unit charge nurse will complete page two of the resident oral health screen and develop the daily dental care plan based off of the recommendations in the screening tool. The DH will provide the screening under general supervision of a dentist. The billing will occur under the supervising dentist. The DH will indicate that a dental exam is to be scheduled within 6 months of the screening with a practicing dentist (most likely the dentist supervising the care of the DH).
The unit charge nurse will complete page two of the resident oral health screen and develop the daily dental care plan based off of the recommendations in the screening tool.

Barriers

- Participation among dental providers
- Participation among nursing facilities
- Physical environment needed for dental screens
- Reimbursement
- Supervision laws
- Prescribing authority
Solutions

• Dental provider education, referrals, opportunity
• Nursing home education
• State Medicaid programs – “Dental Screen” billing code
• Public health hygienists, preventive screen only

Daily Oral Care Plans

Using the Completed Screening Tool, the unit charge nurse can develop the Daily Oral Care Plan. The plan should

• Indicate the resident’s ability to assist in his/her own dental hygiene.
• List all supplies included in the individual’s oral health toolkit.
• Track frequency of dental care needed and provided (e.g., number of times brushing per day).
• Provide a place for direct care providers to note any observed dental concerns.
Oral Health Toolkit

Each resident should be supplied an oral health toolkit containing supplies needed to maintain good oral hygiene. Supplies required in a resident’s oral health toolkit are determined by the initial oral health screen and may include:

- Toothbrush
- Kidney dish
- Floss handle
- Floss
- Toothettes
- Denture cleaner
- Toothpaste
- Facecloth
- Mouth prop
- Denture cup
- Proxabrush
- Denture brush
- Prevident
- Daily oral care plan
- Chlorhexidine Mouthwash

Contact us for more information!

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The full Promising Practice Guide may be found at:
https://ruralhealth.und.edu/assets/1123-4538/standardized-dental-screening-for-new-nursing-home-residents.pdf

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