Oral Health Status & Access in Rural Communities & Proposed Solutions

NOSORH Region E
August, 2016
Established in 1980, at The University of North Dakota (UND) School of Medicine and Health Sciences in Grand Forks, ND

One of the country’s most experienced state rural health offices

UND Center of Excellence in Research, Scholarship, and Creative Activity

Home to seven national programs

Recipient of the UND Award for Departmental Excellence in Research

Focus on

– Educating and Informing
– Policy
– Research and Evaluation
– Working with Communities
– American Indians
– Health Workforce
– Hospitals and Facilities

ruralhealth.und.edu
Background & Funding

- Senate Concurrent Resolution no. 4004
  - Continue to study dental services in the state
- Pew Charitable Trusts
  - Year One – Identify needs and stakeholder solutions
  - Year Two – Update need and disseminate findings
- North Dakota Department of Health, Oral Health Program Subcontracts
  - CDC
  - DentaQuest
Current Resources

- Fact Sheets
  - Varnish application in primary care settings
  - Oral health policies and procedures in long term care
  - Pediatric oral health social determinants
  - Pediatric oral health outcomes
  - Dental workforce
- Policy Brief
  - Oral health services in FQHCs
- Chartbooks

https://ruralhealth.und.edu/what-we-do/oral-health/publications
<table>
<thead>
<tr>
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<td>South Dakota</td>
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<td>67.8</td>
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<td>68</td>
<td>69.1</td>
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<tr>
<td>Colorado*</td>
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<td>Total U.S.</td>
<td>59.33</td>
<td>59.68</td>
<td>60.1</td>
<td>60.5</td>
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Source: American Dental Association, Health Policy Institute analysis of ADA masterfile.
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## Dental HPSAs in Northwest Region

<table>
<thead>
<tr>
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<th>D-HPSA Counties</th>
<th>Total Counties</th>
<th>Percent of D-HPSA Counties</th>
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<tbody>
<tr>
<td>Idaho</td>
<td>42</td>
<td>44</td>
<td>96%</td>
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<tr>
<td>Oregon*</td>
<td>32</td>
<td>36</td>
<td>89%</td>
</tr>
<tr>
<td>Washington*</td>
<td>29</td>
<td>39</td>
<td>75%</td>
</tr>
<tr>
<td>Utah**</td>
<td>19</td>
<td>29</td>
<td>66%</td>
</tr>
<tr>
<td>Colorado*</td>
<td>39</td>
<td>64</td>
<td>61%</td>
</tr>
<tr>
<td>Montana</td>
<td>27</td>
<td>56</td>
<td>48%</td>
</tr>
<tr>
<td>Alaska</td>
<td>14</td>
<td>29</td>
<td>48%</td>
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<tr>
<td>South Dakota</td>
<td>27</td>
<td>66</td>
<td>41%</td>
</tr>
<tr>
<td>Wyoming</td>
<td>8</td>
<td>23</td>
<td>35%</td>
</tr>
<tr>
<td>North Dakota</td>
<td>17</td>
<td>53</td>
<td>32%</td>
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</table>
Number of Dentists in Each County, 2016

Data provided by the North Dakota Board of Dental Examiners
North Dakota Dispersion of Oral Health Workforce, 2016

The red line (—) indicates the percent of the state population within that geographic category.

Data provided by the North Dakota Board of Dental Examiners
Poorer Oral Health Care Access & Status

- Rural
- Elderly
- Medicaid Enrollees
- Low-Income
- American Indian
Oral Health Access for Medicaid Enrollees

- In 2013, 249 dental practices billed for at least one Medicaid patient in the calendar year
  - 65 (26%) of those practices saw more than 100 Medicaid patients
- 58% of Providers seeing Medicaid patients only accounted for 11% of Medicaid patients seen
  - 8% of the dental practices billing Medicaid in 2013 provided care to 52% of the Medicaid enrollees accessing dental services

Data provided by the North Dakota Department of Health & Human Services, State Medicaid
Pediatric Oral Health: Social Determinants

North Dakota Third Grade Students by Race

- **Have Toothbrush**
  - White, Non-Hispanic: 96%
  - American Indian: 49%
  - Other Minorities: 92%

- **Brushed Today**
  - White, Non-Hispanic: 92%
  - American Indian: 66%
  - Other Minorities: 64%

- **Flossed Today**
  - White, Non-Hispanic: 64%
  - American Indian: 32%
  - Other Minorities: 32%

- **Have Visited Dentist**
  - White, Non-Hispanic: 97%
  - American Indian: 90%
  - Other Minorities: 89%

- **Daily Sugar Drink**
  - White, Non-Hispanic: 13%
  - American Indian: 8%
  - Other Minorities: 14%

Data provided by the North Dakota Department of Health, Basic Screening Survey of Third Grade Students
Pediatric Oral Health: Social Determinants

Percent of ND High School Students Drinking 1 or more Cans of Soda/day by Race, 2015

Data were taken from the Youth Risk Behavior Surveillance System, 2007-2015
Pediatric Oral Health Outcomes
Oral Health Status of North Dakota Third Grade Students: Racial Disparities

Data provided by the North Dakota Department of Health, Basic Screening Survey of Third Grade Students
Number of Cavities by Race

Data were taken from the Youth Risk Behavior Surveillance System, 2007-2015
Varnish Application in Clinical Settings

Percent of Practices where Providers Conduct Oral Health Risk Assessments

- Yes, all Pediatric: 23%
- Yes, High-Risk Only: 15%
- No: 40%
- Do Not Know: 15%

Data provided by the North Dakota Center for Rural Health, Varnish Survey 2015
Primary Care Varnish Application

• A majority of pediatricians (60%) and family practice physicians (82%) replied that no one within the clinic provided varnish.
• Only 31% believed that other physicians were aware that it was a reimbursable service.
• 90% of pediatricians and 82% of family practice physicians either agreed or strongly agreed that fluoride varnish was an effective preventative oral health care measure.
• Providers agreed/strongly agreed that well-child visits were an appropriate time for both varnish application (60%) and the oral health risk assessment (86%).
• If required as part of the well-child checklist, many also believed they would be done.

Data provided by the North Dakota Center for Rural Health, Varnish Survey 2015
Long Term Care Oral Health Policies & Procedures
Rural LTC Facilities Have Better Oral Health System Indicators than Urban

- Rural were more likely to have an oral health provider complete the initial oral health screen for new residents (30%) than urban (18%)
- Rural residents had a shorter wait time to see a dentists for non-emergent dental problems
- Rural were more likely to have an active list of dental professionals for referral
- A greater percentage of rural LTC residents were responsible for their own daily oral health care than urban residents

Data provided by the North Dakota Center for Rural Health, LTC Survey 2015
Percent of Facilities with List of Dental Providers for Referral by Rural-Urban Status ($n = 42$)

Data provided by the North Dakota Center for Rural Health, LTC Survey 2015
Oral health was a high or essential priority for 72% of LTC facilities. However:

- Only 50% had a written plan of care for dental needs
- A dental professional reviewed/assisted with the written plan of care among only 3 facilities
- Only 6% of facilities indicated the initial oral health exam was completed by a dental professional

Data provided by the North Dakota Center for Rural Health, LTC Survey 2015
Solutions
Preventative Oral Health Services for Rural Residents

- Sealant programs
- Varnish application and oral health screening in primary care offices
- Public health hygienists
- Mobile oral health care services
- Strong referral networks in rural
- Indirect supervision for dental hygienists for preventative services
- Rural residencies
- Loan repayment programs for rural practice
- Oral health literacy
## North Dakota FQHCs

<table>
<thead>
<tr>
<th>Health Insurance</th>
<th>ND CHC Population</th>
<th>ND Population</th>
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<tbody>
<tr>
<td>Uninsured</td>
<td>34%</td>
<td>9%</td>
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<tr>
<td>Medicaid</td>
<td>23%</td>
<td>9%</td>
</tr>
<tr>
<td>Medicare</td>
<td>10%</td>
<td>13%</td>
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<table>
<thead>
<tr>
<th>Race/Ethnicity</th>
<th>ND CHC Population</th>
<th>ND Population</th>
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<tbody>
<tr>
<td>Hispanic</td>
<td>6%</td>
<td>3%</td>
</tr>
<tr>
<td>African American</td>
<td>10%</td>
<td>2%</td>
</tr>
<tr>
<td>Asian/Pacific Islander</td>
<td>5%</td>
<td>1%</td>
</tr>
<tr>
<td>American Indian/Alaska Native</td>
<td>7%</td>
<td>5%</td>
</tr>
<tr>
<td>White</td>
<td>73%</td>
<td>89%</td>
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<table>
<thead>
<tr>
<th>Income Status</th>
<th>ND CHC Population</th>
<th>ND Population</th>
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<tbody>
<tr>
<td>≤100% FPL</td>
<td>61%</td>
<td>10%</td>
</tr>
<tr>
<td>&lt;200% FPL</td>
<td>91%</td>
<td>24%</td>
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CHCs located in rural areas also served 58% of the total CHC patient population in North Dakota.
Loan Repayment Info

- State Loan Repayment Program
- Public Health and Nonprofit Dental Loan Repayment Program administered by the state
- Federal Student Loan Repayment Program (SLRP) administered by the state
- Nonprofit Clinic Dental Access Project, North Dakota Department of Human Services
- Western Interstate Commission for Higher Education (WICHE) Grant
- New Practices Grants (currently unavailable)
Other North Dakota Programs

- Ronald McDonald Care Mobile
- State Sealant Program (SealND!)
- Long Term Care Oral Health Program
- Mission of Mercy
Dental Therapy

- CODA Accreditation
- State Participation
  - Alaska
  - Minnesota
  - Maine
  - Vermont
  - Kansas
  - New Mexico
  - Washington
Types of New Provider Types

• Dental Health Aide Therapist (DHATs)
• Advanced Dental Therapist
• Dental Therapists

How do we incentivize practice in rural communities?
Contact us for more information!

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