



## Non-Dental Health Professionals Addressing Oral Health Disparities

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- 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](http://ruralhealth.und.edu)

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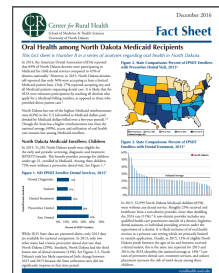
## Background and Funding

- The Pew Charitable Trusts
- North Dakota Department of Health
  - Centers for Disease Control & Prevention
  - DentaQuest Foundation
- North Dakota Oral Health Legislation
  - Dental School Loan Repayment
  - Dental Therapy

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## Oral Health Resources

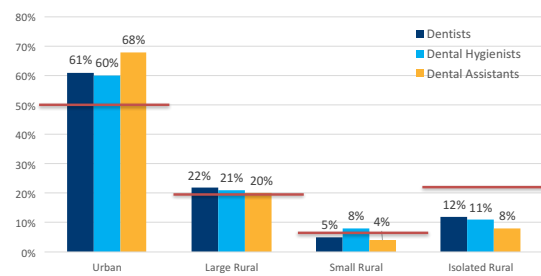
- Policy briefs
- Chartbooks
- Oral health presentations
- 13 topic specific fact sheets
  - Medicaid
  - Workforce
  - Pediatrics
  - More



<https://ruralhealth.und.edu/what-we-do/oral-health>

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## 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

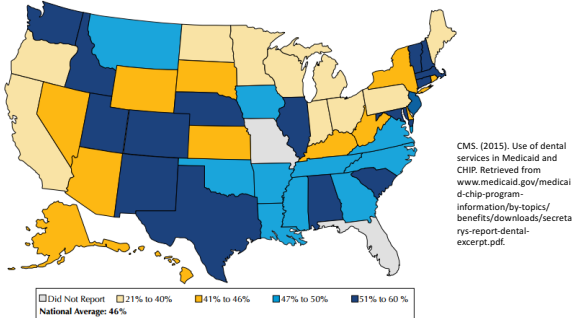
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## Medicaid

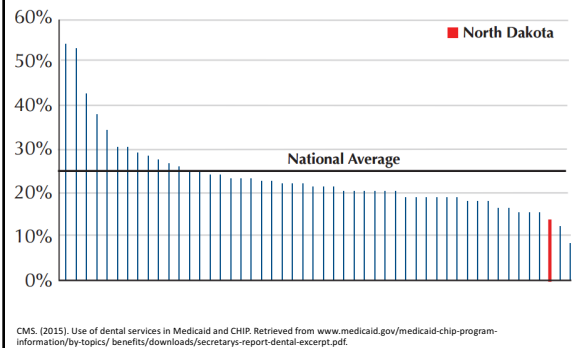
- North Dakota has one of the highest Medicaid reimbursement rates (63%) in the U.S.
  - Identified as Medicaid dollars paid divided by Medicaid dollars billed over a five-year period)
- National Medicaid reimbursement rate: 49%
- In 2015, 72% of North Dakota Medicaid youth eligible for the early and periodic screening, diagnostic and treatment (EPSDT) benefit had no preventive dental visit

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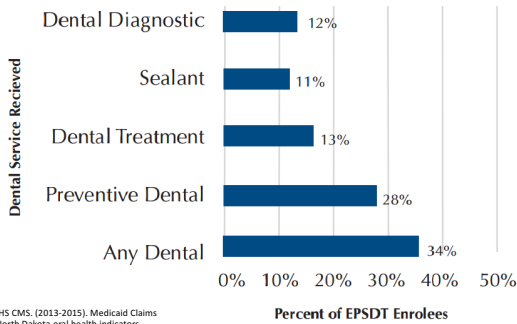
## Percent of Medicaid EPSDT Enrollees with Preventive Dental Visit, 2013



## Percent of EPSDT Enrollees with Dental Treatment, 2013



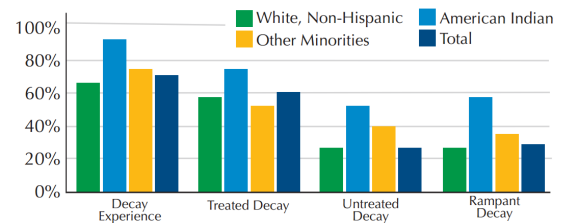
## North Dakota EPSDT Enrollee Dental Services, 2015



US DHHS CMS. (2013-2015). Medicaid Claims data: North Dakota oral health indicators. Provided by the North Dakota DHHS.

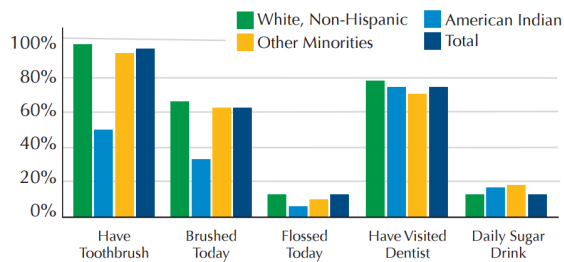
## Racial Disparities

### Rate of Tooth Decay by Race: ND Third Grade Students



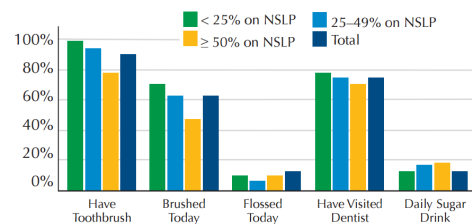
North Dakota Department of Health. (2016). North Dakota basic screening survey of third grade children. Provided by the North Dakota Department of Health.

## Pediatric Oral Health Predictors by Race: ND Third Grade Students



North Dakota Department of Health. (2016). North Dakota basic screening survey of third grade children. Provided by the North Dakota Department of Health.

Children attending lower income schools ( $\geq 50\%$  of children eligible for the National School Lunch Program (NSLP)) are less likely to have access to a toothbrush and subsequently, less likely to have brushed (48%) than students attending schools with  $<50\%$  of children eligible for the NSLP



North Dakota Department of Health. (2016). North Dakota basic screening survey of third grade children. Provided by the North Dakota Department of Health.

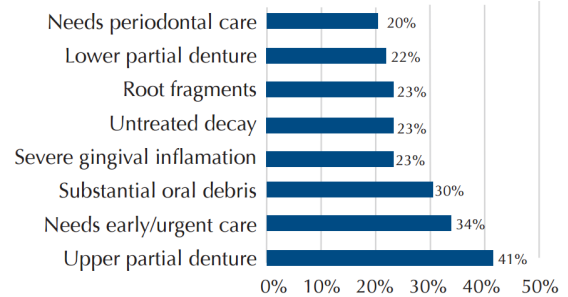
## Oral Health among the Elderly

- The percentage of ND elderly (65 and older) who have visited a dentist in the past year has declined between 2008 (68%) and 2014 (65%)
- As of 2014, only 13% of ND elderly (65+) were edentulous (without any teeth); in 2016, 32% of ND nursing home residents were edentulous
  - 62% were Medicaid enrollees
- Medicaid nursing home residents were more likely than those with Medicare/no insurance, or private/third party insurance to:
  - Be edentulous
  - Have substantial tooth loss
  - Experience untreated decay
  - Have prevalence of root fragments
  - Have severe gingivitis
  - Need periodontal care

North Dakota Department of Health, (2016). North Dakota older adults basic screening survey. Provided by the North Dakota Department of Health.

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## Oral Health Status of ND Nursing Home Residents, 2016



North Dakota Department of Health, (2016). North Dakota older adults basic screening survey. Provided by the North Dakota Department of Health.

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## On Average . . .

- 83% of children (2-17 years old) see a dentist each year
  - 93% have contact with a health care professional
- 62% of adults (18-64) see a dentist each year
  - 83.6% have contact with a health care professional
- 62.4% of adults aged 65 and over see a dentist each year

CDC (2014). National Center for Health Statistics. Oral and dental health data. Retrieved from: <https://www.cdc.gov/nchs/fastats/dental.htm>.

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## Non-Dental Health Professionals

- Varnish Application
- Dental Sealants
- Long Term Care
- Head Start
- Primary Care/Family Practice

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## Long Term Care

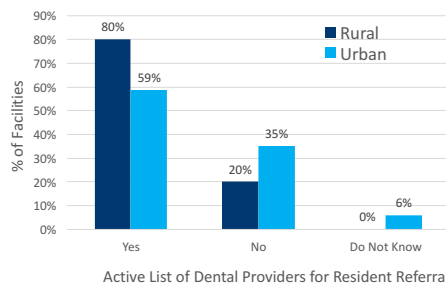
### Rural LTC Facilities Have Better Oral Health System Indicators than Urban

- 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 dentist 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

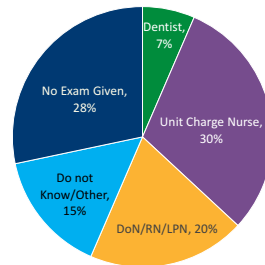
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### Percent of Facilities with List of Dental Providers for Referral by Rural-Urban Status (n = 42)



Data provided by the North Dakota Center for Rural Health, LTC Survey 2015

### Provider Responsible for Initial Oral Health Exam of New LTC Residents



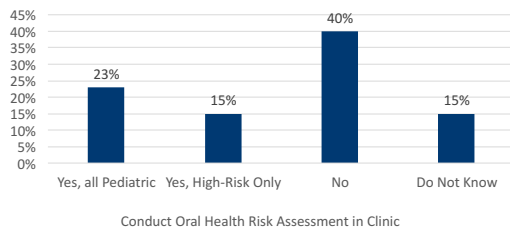
Oral health was a high or essential priority for 72% of LTC facilities. However:

- 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 7% 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

### Varnish Application in Clinical Settings

#### Percent of Practices where Providers Conduct Oral Health Risk Assessments



Conduct Oral Health Risk Assessment in Clinic

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

### Public Health

#### Oral Health is not an APHA Public Health Topic Priority

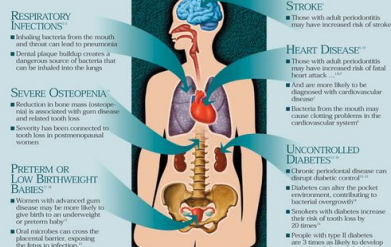
#### HealthyPeople 2020

- Community Water Fluoridation
- School-based dental sealant delivery
- Varnish application
- Screenings and oral health literacy

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### Without Good Periodontal Health, You Can't Have Good General Health.

Periodontal disease (gum disease) can affect your general health and it can be affected by your general health. Here are a few examples.





## Contact us for more information!

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