

DENTAL SERVICES STUDY - BACKGROUND MEMORANDUM

The Legislative Assembly approved 2013 House Bill No. 1454. Section 1 of the bill ([Appendix A](#)) provides the Legislative Management study how to improve access to dental services and ways to address dental service provider shortages, including the feasibility of utilizing midlevel providers, whether the use of incentives for dental service providers to locate in underserved areas in the state may improve access, and whether the state's medical assistance reimbursement rates impact access to dental services.

PREVIOUS STUDIES

The 2005-06 Higher Education Committee received information from the North Dakota University System regarding a professional student exchange program study conducted by the State Board of Higher Education. The board directed the Chancellor to conduct a study regarding access options and other solutions to help meet the needs of the state in dentistry, optometry, and veterinary medicine; the admissions selection process; and long-term funding for the professional student exchange program and a program at Kansas State University. The board adopted the following recommendations related to the professional programs, including dental professionals:

- Meeting North Dakota's workforce needs be the primary factor in making annual allocations and biennium funding decisions between the three professional programs. Student demand and interest in each of the three professional programs should be the secondary factor.
- Maintain the current allocation of slots between the three professional programs. Allocate new slots based on the factors outlined above.
- Maintain all current professional program options available through the Western Interstate Commission for Higher Education, Minnesota, Kansas, and Iowa. Review all program options every three years to five years to explore other ways to improve the partnership and communication to provide expanded opportunities for North Dakota and North Dakota students.
- Pursue conversations and negotiations with Kansas and Iowa in an attempt to establish fixed price contracts and other additional benefits for North Dakota students, such as internship and externship opportunities.
- Create a new state-funded community matching loan forgiveness program, primarily targeted at rural or underserved communities, to provide an incentive to encourage graduates to return to North Dakota to practice. If a community loan forgiveness program is not implemented and funded, a repayment program provision should be implemented in each of the three professional programs as a means of encouraging students to return to North Dakota to practice following graduation.
- Any funds collected as a result of a repayment provision be used to provide funding for additional slots according to the guidelines previously outlined.

The 2007-08 Human Services Committee received a report on the status of medical assistance recipients' access to dental services. The committee learned under the Medicaid program dental-related expenditures totaled \$12.3 million for the 2005-07 biennium and \$14.5 million for the 2007-09 biennium. During the 2009-11 biennium, dental expenditures under Medicaid totaled \$23.5 million--a 62 percent increase from 2007-09 biennium expenditures. Dental providers expressed concerns regarding patients who fail to appear for the appointment and the level of reimbursement for services provided.

During the 2011-13 biennium and 2013-15 biennium, funding appropriated for Medicaid dental services totaled \$24 million and \$28.7 million, respectively.

DENTAL SERVICES PROGRAMS

Programs available in the state to provide free or low-cost dental care include Medicaid, Healthy Steps, Caring for Children, Health Tracks, and mobile dental care services.

Medicaid

Medicaid was authorized in 1966 for the purpose of strengthening and extending the provision of medical care and services to people whose resources are insufficient to meet their medical-related costs. Corrective, preventative, and rehabilitative medical services are provided with the objective of retaining or attaining capability for independence, self-care, and support. For those that qualify, Medicaid may provide aid to those without health insurance or for those whose health insurance does not cover all of their needs. Medicaid pays for health services for qualifying families with children and individuals who are pregnant, elderly, or disabled. Funding is

shared by federal, state, and county governments with eligibility determined at the county level. Medicaid provides limited dental care services, and copayments may apply for certain recipients.

Healthy Steps

The state children's health insurance program, also known as Healthy Steps, provides premium-free health coverage to uninsured children in qualifying families. It is intended to help meet the health care needs of children from working families that earn too much to qualify for full Medicaid coverage but not enough to afford private insurance. There are no monthly premiums in the Healthy Steps program, but most families are required to pay copayments for emergency room visits, hospitalization, and prescriptions. Copayments are not required for American Indian children. Healthy Steps-covered services include inpatient hospital stay; medical and surgical services; outpatient hospital and clinic services; mental health and substance abuse services; prescription medications; routine preventative services, such as well baby checkups and immunizations; dental and vision services; and prenatal services. To qualify, a family's net income (after deducting child care costs and payroll taxes, such as Social Security tax, Medicare tax, and income tax) must be greater than the Medicaid level but cannot exceed 160 percent of the federal poverty level.

Caring for Children

Caring for Children is a benefit program for eligible North Dakota children up to age 19 who do not qualify for Medicaid or Healthy Steps and have no other insurance. Benefits include primary and preventative medical and dental care. Caring for Children is a program of the North Dakota Caring Foundation, Inc.--a nonprofit 501(c)(3) foundation established by Blue Cross Blue Shield of North Dakota in 1989. Blue Cross Blue Shield provides Caring for Children administrative services as an in-kind donation.

Children are eligible for Caring for Children if they are:

1. A resident of the state of North Dakota;
2. A United States citizen or legal permanent resident;
3. Under age 19;
4. Unmarried and whose guardians have an annual income between 161 and 200 percent of the federal poverty level;
5. Without comprehensive medical coverage through Medicaid, Healthy Steps, or a private insurance carrier; and
6. Within household income guidelines of the North Dakota Caring Foundation, Inc.

Health Tracks

Health Tracks (formerly early periodic screening diagnosis and treatment) is a preventative health program that is free for children aged 0 to 21 who are eligible for Medicaid. Health Tracks pays for screenings, diagnosis, and treatment services to help prevent health problems from occurring or help keep health problems from becoming worse. Health Tracks also pays for orthodontics (teeth braces), glasses, hearing aids, vaccinations, counseling, and other important health services.

Mobile Dental Care Services

The Legislative Assembly in 2009 House Bill No. 1231 provided \$196,000 of one-time funding from the general fund to the State Department of Health for a mobile dental care service grant. The grant was to be used to help establish mobile dental care services. An area foundation is responsible for ongoing costs estimated at \$400,000 per year. The Legislative Assembly in 2013 House Bill No. 1135 provided an additional one-time appropriation of \$100,000 from the general fund to the State Department of Health for a grant to the organization to provide mobile dental care services, including dental treatment, prevention, and education services to low-income and underserved children in areas of the state with limited or unavailable dental services.

DENTAL SERVICE PROVIDER PROGRAMS

Dentists' Loan Repayment Program

The dentists' loan repayment program, which is administered by the Health Council, was established in 2001 Senate Bill No. 2276 in North Dakota Century Code Chapter 43-28.1 ([Appendix B](#)). Each year the Health Council is to select up to three dentists who agree to provide dental services in the state. The dentists are eligible to receive funds, not to exceed a total of \$80,000 per applicant, for the repayment of their educational loans. The funds are payable over a four-year period (\$20,000 per year). The dentists' loan repayment program is to provide

the highest priority for acceptance into the program to dentists willing to serve the smallest and most underserved communities in North Dakota. Senate Bill No. 2152 (2007) provided a dentist practicing in Bismarck, Fargo, or Grand Forks must have received dental medical payments of at least \$20,000 in the form of medical assistance reimbursement or practiced at least two full workdays per week at a public health clinic or nonprofit dental clinic in order to qualify for the dentists' loan repayment program. The 2011 Legislative Assembly appropriated \$440,000, of which \$180,000 is from the general fund and \$260,000 is from the community health trust fund, for the dentists' loan repayment program. The 2013 Legislative Assembly appropriated \$520,000, of which \$180,000 is from the general fund and \$340,000 is from the community health trust fund, for the dentists' loan repayment program, \$80,000 more than the 2011-13 biennium legislative appropriation. Dentists accepted into the program per biennium include:

Biennium (Number of Dentists Accepted Into Program)	Communities Served
2001-03 biennium (3)	Minot (2) Larimore
2003-05 biennium (6)	Fargo Community Health Center New Rockford Grand Forks Fargo Bismarck West Fargo
2005-07 biennium (4)	Fargo Community Health Center Bismarck (serving special populations) Mott Minot
2007-09 biennium (6)	Park River Bismarck Grand Forks Cando/Devils Lake Rugby Wishek
2009-11 biennium (6)	Bismarck Fargo Jamestown Larimore Valley City Williston
2011-13 biennium (6)	Bowman Hazen Langdon/Walhalla Carrington Cavalier Williston

Public Health Dentists' Loan Repayment Program

The Legislative Assembly in 2009 Senate Bill No. 2358 provided an appropriation of \$180,000 from the general fund for a loan repayment program for dentists in public health and nonprofit dental clinics. The bill also created Section 43-28.1-01.1 which allows, if funds are appropriated, the Health Council to select up to three dentists who provide or will provide dental services for three years in a public health clinic or nonprofit dental clinic that uses a sliding fee schedule to bill patients for loan repayment grants. The grant award is \$60,000 per recipient and is paid over a two-year period. The 2011 Legislative Assembly did not provide funding for this loan repayment program. The Legislative Assembly in 2013 Senate Bill No. 2354 provided \$180,000 from the general fund to fund the public health dentists' loan repayment program for three dentists who practice in a public health setting or a nonprofit dental clinic that uses a sliding fee schedule to bill patients.

Dental Practice Grant Program

Senate Bill No. 2152 (2007) provided for a dental practice grant program. A dentist who has graduated from an accredited dental school within the previous five years and is licensed to practice in North Dakota may submit an application to the Health Council for a grant for the purpose of establishing a dental practice in North Dakota cities with populations of 7,500 or less. The council may award a maximum of two grants per year with a maximum grant award of \$50,000 per applicant to be used for buildings, equipment, and operating expenses. The community in which the dentist is located must provide a 50 percent match. The grant must be distributed in equal amounts over a five-year period, and the dentist must commit to practice in the community for five years. The 2011 Legislative Assembly appropriated \$30,000, of which \$20,000 is from the general fund and \$10,000 is

from the community health trust fund, for the dental practice grant program during the 2011-13 biennium. The State Department of Health continues to make payments related to one grant awarded to a dentist in Larimore during the 2009-11 biennium and has not had any applicants during the 2011-13 biennium. The 2013 Legislative Assembly appropriated \$25,000 from the community health trust fund for the dental practice grant program, \$5,000 less than the legislative appropriation for the 2011-13 biennium.

ASSESSMENT OF ORAL HEALTH IN NORTH DAKOTA

In 2012 the Center for Health Workforce Studies at the School of Public Health, University at Albany, performed an environmental scan and contextual assessment of the oral health of North Dakota's residents. The research, done with support from the Otto Bremer Foundation and the Pew Center on the States Children's Dental Campaign--involved a literature review, analysis of available secondary data, and interviews with 48 stakeholders in oral health. The executive summary of the report ([Appendix C](#)), published in August 2012, indicated 360 licensed dentists had practice addresses in North Dakota and another 24 dentists were licensed in North Dakota but had principal practice addresses in a contiguous state. A total of 518 licensed dental hygienists have practice addresses in North Dakota, and another 82 dental hygienists are licensed to practice in North Dakota but have practice addresses in contiguous states. The report also indicated 83 dental hygienists maintain a North Dakota license, but have no current practice address, suggesting there is more capacity within the profession than jobs.

To fully function as a registered dental assistant in North Dakota, a dental assistant must be a graduate of an accredited program or be certified by the Dental Assisting National Board as a certified dental assistant. Chairside-trained dental assistants--known as qualified dental assistants--exist, but the scope of their work is more restrictive than that performed by a registered dental assistant. Some dental hygienists, with either formal or chairside training, are working as dental assistants in dental practices. The scope of the work performed by these dually trained dental hygienists is more restrictive, but they may provide flexibility in a dental practice since they can function in a number of roles allowing the practice to respond to changing demands.

As is true in the rest of the country, oral health professionals are located mostly in urban areas of the state. Sixteen counties are without a practicing dentist. The federal government has designated 31 dental health professional shortage areas in the state which lack sufficient providers to meet the dental needs of the population. The report indicates, while the state has made progress in increasing access to oral health services, some populations still have limited access to these services, including children, especially the very young and those Medicaid-eligible; rural populations; low-income adults; the elderly; and American Indians.

A shortage of dentists willing to accept Medicaid patients has resulted in a small number of dentists in the state treating the majority of children on Medicaid and limiting the availability of oral health services even in areas of the state where there is an adequate supply of dental professionals.

STUDY PLAN

The committee may wish to proceed with this study as follows:

1. Gather and review information regarding dental service needs in the state, options to improve access to dental services in the state--especially in rural areas, whether the use of incentives for dental service providers to locate in underserved areas in the state may improve access, whether the state's medical assistance reimbursement rates impact access to dental services, and ways to address dental service provider shortages in the state, including the role of midlevel providers in providing dental services in the state. Organizations to request information from include the North Dakota Dental Association, North Dakota Dental Hygienists' Association, North Dakota Dental Assistants' Association, Department of Human Services, State Department of Health, and University of North Dakota Center for Rural Health.
2. Receive information regarding the environmental scan and contextual assessment of the oral health of North Dakota's residents performed in 2012 by the Center for Health Workforce Studies at the School of Public Health, University at Albany, with support from the Otto Bremer Foundation and Pew Center on the States Children's Dental Campaign.
3. Receive information from the Department of Human Services and the State Department of Health regarding programs and services available to provide dental services in rural areas of the state.
4. Receive information from the University System regarding shortages of dental service professionals in the state and how University System programs address dental service provider shortages in the state.

5. Gather and review information on federal health care initiatives, including how they will affect access to dental services in the state.
6. Develop committee recommendations and prepare any legislation necessary to implement the committee recommendations.
7. Prepare a final report for submission to the Legislative Management.

ATTACH:3

**Sixty-third Legislative Assembly of North Dakota
In Regular Session Commencing Tuesday, January 8, 2013**

HOUSE BILL NO. 1454
(Representatives M. Nelson, Holman)

AN ACT to provide for a legislative management study of access to dental services.

BE IT ENACTED BY THE LEGISLATIVE ASSEMBLY OF NORTH DAKOTA:

SECTION 1. LEGISLATIVE MANAGEMENT STUDY - ACCESS TO DENTAL SERVICES. During the 2013-14 interim, the legislative management shall consider studying how to improve access to dental services and ways to address dental service provider shortages, including the feasibility of utilizing mid-level providers, whether the use of incentives for dental service providers to locate in underserved areas in the state may improve access, and whether the state's medical assistance reimbursement rates impact access to dental services. The legislative management shall report its findings and recommendations, together with any legislation required to implement the recommendations, to the sixty-fourth legislative assembly.

CHAPTER 43-28.1
DENTISTS' LOAN REPAYMENT PROGRAM

43-28.1-01. Loan repayment program - Dentists - Maximum amount of funds.

Each year the state health council shall select from a pool of applicants no more than three dentists who shall provide dental services to communities in this state. The dentists are eligible to receive funds for the repayment of their education loans. The funds, which are payable over a four-year period, may not exceed eighty thousand dollars per applicant. If the state health council accepts any gifts, grants, or donations under this chapter, the council may select additional dentists for participation in the loan repayment program under this chapter.

43-28.1-01.1. Loan repayment program for dentists in public health and nonprofit dental clinics.

1. If funds have been appropriated specifically for loan repayment to dentists who practice in a public health setting or a nonprofit dental clinic that uses a sliding fee schedule to bill patients, during the first year of each biennium the health council shall select from a pool of applicants no more than three dentists who provide or will provide dental services in a public health clinic or nonprofit dental clinic that uses a sliding fee schedule to bill patients. A dentist who receives a grant under this section shall use the grant funds to repay the dentist's educational loans. The maximum grant award is sixty thousand dollars per recipient which is paid to the recipient over a two-year period.
2. Unless otherwise provided under this section, sections 43-28.1-02 and 43-28.1-04, subsections 1, 2, and 3 of section 43-28.1-03, and sections 43-28.1-05, 43-28.1-06, 43-28.1-07, 43-28.1-08, and 43-28.1-09 apply to this grant.
3. A recipient who receives a grant under this section shall serve three years as a full-time practicing dentist in the public health setting or a nonprofit clinic that uses a sliding fee schedule to bill patients and must be paid the grant funds during the first two years of this service.

43-28.1-02. Loan repayment program - Dentists - Powers of state health council.

The state health council may:

1. Determine the eligibility and qualifications of an applicant for loan repayment funds under this chapter.
2. Identify communities that are in need of a dentist and establish a priority ranking for participation in the program by the selected communities.
3. Create and distribute a loan repayment application.
4. Determine the amount of the loan repayment funds for which a dentist is eligible under this chapter and, in making this determination, examine any outstanding education loans incurred by the applicant.
5. Establish conditions regarding the use of the loan repayment funds.
6. Enter a four-year nonrenewable contract with the dentist and the selected community to provide to the dentist funds for the repayment of education loans in exchange for the dentist agreeing to practice in the selected community.
7. Receive and use funds appropriated for the program.
8. Enforce any contract under the program.
9. Cancel a contract for reasonable cause.
10. Participate in federal programs that support the repayment of education loans incurred by dentists and agree to the conditions of the federal programs.
11. Accept property from an entity.
12. Cooperate with the state department of health to effectuate this chapter.

43-28.1-03. Dentist selection criteria - Eligibility for loan repayment.

1. In establishing the criteria regarding a dentist's eligibility for loan repayment funds under this chapter, the state health council shall include consideration of:

- a. The dentist's training in general dentistry or in a dental specialty and the extent to which such services are needed in a selected community.
 - b. The dentist's commitment to serve in a community that is in need of a dentist.
 - c. The compatibility of the dentist with a selected community.
 - d. The date by which the dentist would be available for service to the selected community.
 - e. The dentist's competence and professional conduct.
 - f. The dentist's willingness to accept medicare and medicaid patients.
2. A dentist who is selected to receive loan repayment funds under this chapter:
 - a. (1) May not have practiced dentistry full time in this state during the three years immediately preceding the application;
 - (2) Must have graduated from an accredited graduate specialty training program in dentistry during the year immediately preceding the application or within one year after the date of the application; or
 - (3) Must be enrolled in an accredited graduate specialty training program in dentistry; and
 - b. Must be licensed to practice dentistry in this state.
 3. Dentists selected shall contract to provide full-time dental services for a minimum of four years in one or more selected communities.
 4. For the purposes of a dentist selected for loan payment who practices within fifteen miles [24.14 kilometers] of the city limits of Bismarck, Fargo, or Grand Forks, to qualify to receive a yearly disbursement under this chapter during that year of obligated service, the dentist must have:
 - a. Received dental medical payments of at least twenty thousand dollars in the form of medical assistance reimbursement; or
 - b. Practiced at least two full workdays per week at a public health clinic or at a nonprofit dental clinic that uses a sliding fee schedule to bill the nonprofit dental clinic's patients.

43-28.1-04. Community selection criteria.

1. The state health council shall apply the following criteria in selecting a community with a defined need for the services of a dentist:
 - a. The size of the community, with rural communities with a population under two thousand five hundred given highest priority, communities with a population between two thousand five hundred and ten thousand given the next highest priority, and communities with a population greater than ten thousand given the lowest priority. In cities with a population greater than ten thousand, first priority must be given to dentists who commit to satellite to underserved areas and then to dental specialists in cities with an identified need for a specialist.
 - b. The number of dentists practicing in the community and the surrounding area.
 - c. The access by residents to dentists practicing in the community and the surrounding area.
 - d. The mix of dental specialties in the community and surrounding area.
 - e. The degree to which residents support the addition of a dentist within the community.
2. The state health council shall give priority for participation to a community that demonstrates a need for a dentist or for an individual who is trained in a dental specialty.
3. In evaluating communities for participation in this program, the state health council may consult with public and private entities and visit the communities.

43-28.1-05. Eligible loans.

The state health council may provide for loan repayment funds to a dentist who has received an education loan. The council may not provide funds for the repayment of any loan that is in default at the time of the application. The amount of repayment must be related to the dentist's outstanding education loans. A dentist is eligible to receive loan repayment funds in an

amount equal to the outstanding balance of the dentist's education loans with applicable interest, or eighty thousand dollars, whichever is less. Loan repayment funds may not be used to satisfy other service obligations under similar programs.

43-28.1-06. Breach of loan repayment contract.

If a dentist who receives loan repayment funds under this chapter breaches the loan repayment program contract by failing to begin or failing to complete the obligated service, the dentist is liable for the total amount of any loan repayment funds received. Any damages the state is entitled to recover under this chapter must be paid to the state health council, within one year from the date of the breach. Any amounts not paid within one year from the date of the breach are subject to the collection process and may be recovered through deductions in medicaid payments. Damages recoverable for a breach of the contract include all interest, costs, and expenses incurred in collection, including attorney's fees. Damages collected under this section by the state health council must be deposited in the state general fund. The state health council may agree to accept a lesser measure of damages for breach of a loan repayment program contract if compelling reasons are demonstrated.

43-28.1-07. Release from contract obligation.

1. The state health council shall release a dentist from the dentist's loan repayment contract, without penalty, if:
 - a. The dentist has completed the service requirements of the contract;
 - b. The dentist is unable to complete the service requirement of the contract because of a permanent physical disability;
 - c. The dentist demonstrates to the state health council extreme hardship or shows other good cause justifying the release; or
 - d. The dentist dies.
2. A decision by the state health council not to release a dentist from the dentist's loan repayment contract without penalty is reviewable by district court.

43-28.1-08. Payment.

The state health council may not provide any loan repayment funds to a dentist under this chapter until the dentist has practiced at least six months on a full-time basis in the selected community. Loan repayment funds for a year of obligated service are payable by the state health council no later than the end of the fiscal year in which the dentist completes the year of obligated service.

43-28.1-09. Gifts, grants, and donations - Continuing appropriation.

The state health council may accept any conditional or unconditional gift, grant, or donation for the purpose of providing funds for the repayment of dentists' educational loans. If any entity desires to provide funds to the council to allow an expansion of the program beyond the three dentists contemplated by this chapter, the entity shall commit to fund fully the expansion for a period of four years. The council may contract with any public or private entity and may expend any moneys available to the council to obtain matching funds for the purposes of this chapter. All money received as gifts, grants, or donations under this section is appropriated as a continuing appropriation to the state health council for the purpose of providing funds for the repayment of additional dentists' educational loans.

43-28.1-10. New practices - Grants.

1. A dentist who graduated from an accredited dental school within the previous five years and is licensed to practice in North Dakota may submit an application to the state health council for a grant for the purpose of establishing a dental practice in a city in the state which has a population that does not exceed seven thousand five hundred.
2. The state health council may award a maximum of two grants per year and shall establish the criteria for the grant program under subsection 1 which must include:
 - a. A maximum grant award of fifty thousand dollars per applicant;

- b. A requirement that the community must provide a fifty percent dollar or in-kind match for a grant;
- c. A requirement that a dentist who receives a grant under this section must use the funds for buildings, equipment, and operating expenses;
- d. A provision that the grant must be distributed in equal amounts over a five-year period; and
- e. A requirement that a dentist selected for a grant under this section must commit to practice in the community for a minimum of five years.

Oral Health in North Dakota

Executive Summary

August 2012

Prepared for:

The Otto Bremer Foundation and the Pew Center on the States

Project Completed by:

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Better Information for Better Outcomes

The Center for Health Workforce Studies is a not-for-profit research organization whose mission is to provide timely, accurate data and conduct policy-relevant research about the health workforce. The Center's work assists health, professional, and education organizations; policy makers and planners; and other stakeholders to understand issues related to the supply, demand, distribution, and use of health workers.

Preface

In the spring and summer of 2012, the Center for Health Workforce Studies at the School of Public Health, University at Albany, with support from the Otto Bremer Foundation and the Pew Center on the States Children's' Dental Campaign performed an environmental scan and contextual assessment of the oral health of North Dakota's residents. The research involved a literature review, analysis of available secondary data, and interviews with 48 stakeholders in oral health. This report is a summary of the literature review and data analysis which were part of the study process. A separate report describes the results of the personal telephone interviews which were conducted between April and July, 2012.

This executive summary was prepared by Margaret Langelier at the Center for Health Workforce Studies at the School of Public Health, University at Albany. The author can be contacted with any questions regarding its content at (518) 402-0250. The author acknowledges the contributions of oral health stakeholders in North Dakota who provided data and information to inform the content.

Summary

In the spring and summer of 2012, the Center for Health Workforce Studies at the School of Public Health, University at Albany with support from the Otto Bremer Foundation and the Pew Center on the States Children's Dental Campaign performed an environmental scan and contextual assessment of the oral health of North Dakota's residents. The research involved a literature review, analysis of available secondary data, and interviews with 48 stakeholders in oral health. This report is a summary of the literature review and data analysis which were part of the study process. A separate report describes the results of the personal telephone interviews which were conducted between April and July 2012.

North Dakota is a sparsely populated state with large geographic areas classified as rural or frontier based on low population density. The state is mainly agricultural. Parts of the state are being drilled for oil due to large natural gas and oil reserves. The state's people are mainly non-Hispanic White with American Indians constituting the largest minority group.

Approximately 680,000 people reside in the state. The most populous city is Fargo with a population of about 107,000 people. Currently, there are 360 licensed dentists with practice addresses in North Dakota and an additional 24 dentists licensed in North Dakota who are principally practicing in contiguous states. There are 518 licensed dental hygienists (DHs) with practice addresses in North Dakota. There are also DHs licensed in North Dakota who are principally practicing in contiguous states including 74 DHs with primary practice addresses in Minnesota, four with practice addresses in South Dakota, and four with practice addresses in Montana. In addition, 83 DHs maintain a DH license in North Dakota but have no current practice address. This suggests that there is more capacity within the profession than jobs to accommodate the trained and credentialed supply of DHs.

As is common throughout the U.S, the oral health workforce in North Dakota is mainly distributed in the metropolitan areas of the state and in service centers where rural residents travel to purchase commodities and commercial and health services. There are 16 counties in the state with no dentist in practice. There are 31 dental health professional shortage areas (DHPSAs) in North Dakota designated by the federal government as lacking sufficient providers to meet the dental needs of the population. Ten counties are designated as whole county geographic DHPSAs while 17 counties hold partial designations as geographic (three), population (three), facility (nine), or both geographic and facility (two) DHPSAs (HRSA, 2012). The remaining DHPSAs in the state are facility designations which are automatically granted to all federally qualified health centers and other qualifying institutions.

While North Dakota has a per capita income that places it among the top 20 of all states, 9.7% of the population qualifies for North Dakota Medicaid because they live at or below the federal poverty level (FPL) (in the case of very young children or pregnant women, at 133% FPL or below). Only children and their parents who meet the poverty criteria can qualify for Medicaid. There are childless adults living at or below poverty who do not qualify for public insurance programs. An additional 4,000 children are eligible for the state Children's Health Insurance Program because their families live at or below 140% FPL. North Dakota provides a dental

benefit to both children and adults. The adult benefit is relatively comprehensive but is more limited than the benefit available to children on North Dakota Medicaid.

North Dakota is fourth in the nation in the percentage of people (96.4%) in the state on community water supplies who receive fluoridated water (CDC, 2011). However, there are people in the state, particularly in rural areas on private wells, without fluoride supplementation. Fluoridation is an important public health intervention that reduces the risk of developing dental caries over a lifetime and especially in children.

The following statements summarize the findings from the literature review and data analyses which benchmarked North Dakota with other states and the U.S. overall to describe similarities and differences in the oral health status of the population.

For many years, North Dakota stakeholders have been concerned about the oral health of the state's population. There have been some successful initiatives to improve oral health and to increase access to services.

- In 2008, North Dakota was fourth among states in the percent of the population on community water supplies who were receiving fluoridated water (96.4%).
- The dental safety net in North Dakota has grown in recent years. Safety net providers offer important preventive and restorative dental services to patients in their catchment areas. There are three safety net dental clinics sponsored by federally qualified health centers (FQHCs) and two non-profit dental clinics operating in the safety net with no federal subsidies. In addition, there is now a mobile dental van traveling in western North Dakota serving children without a dental home who are in need of dental care.
- In 2010, 72.6% of the population in North Dakota visited either a dentist or a dental clinic in the prior year comparing favorably with national data showing that 70.1% of the U.S. population visited a dentist or a clinic in the year prior to the survey (BRFSS, 2010). North Dakota has increased the percent of the population visiting a dentist or clinic annually by 5.5% since 1999 (BRFSS, 2012).
- North Dakota is one of only a few states in the U.S. that still provides an adult dental benefit for Medicaid insured people.

Despite efforts to improve the availability of oral health care, there are still access barriers. North Dakota stakeholders continue to be challenged by the state's geography and the needs of special population groups to improve access to oral health services.

- North Dakota is one of the most rural states in the nation. Thirty-six of the 53 counties in the state are designated as frontier with less than six persons per square mile (McDonald's Charities, 2011). National population density is 79.6 persons per square mile in the U.S (Rural, 2006).
- The American Indian population is the largest minority population in North Dakota, constituting 5.4% of the state's population. Nationally, American Indians constitute about 0.8% of the U.S. population (U.S. Census Quick Facts, 2012).
- Almost half (48%) of the state's American Indian population is younger than 20 years of age. The median age of the overall North Dakota population is about 38.8 years (U.S. Census, ACS, 2012). The relatively young age of the American Indian population, the cultural expectations about oral health, a lack of oral health literacy among tribal elders,

and the remote locations of the reservations where many American Indians reside constitute special challenges to the delivery of oral health services to this population group. Although people living on the reservations benefit from the presence of the Indian Health Service (IHS) and their dental programs, IHS resources are not sufficient to address the need for oral health services in the population.

- There are remote counties in the state with high numbers of Medicaid eligible children with no dentist to serve their oral health needs. For example, there are 3,000 children enrolled in Medicaid in Rolette County with no dentist in the county to serve them. There are some dental services available to children on the American Indian reservation but generally families must travel to get services. The closest pediatric dentist to Rolette County is in Minot, North Dakota which is about a two-hour drive.
- The elderly, particularly those living in nursing homes in North Dakota, are at risk for not receiving oral health care because of their decreased mobility or declining mental status, a lack of financial resources to pay for care, and the lack of portable dental service programs in the state. The rural areas of the state are disproportionately elderly so geography also complicates access for many older people. There is a successful demonstration project in two nursing homes in Bismarck using portable dental equipment. However, due to limited grant monies allotted for the project, expansion of the initiative to other nursing homes is not likely at this time.
- Low income adults without dental insurance in North Dakota have few options when seeking oral health services. While there are safety net programs that provide preventive and restorative dental services on a sliding fee scale, these programs are not widely available.

While there has been improvement in measures of oral health overall for state residents during the decade, there are difficulties with improving the oral health status of certain population groups in the state.

- While North Dakota has achieved the Healthy People 2010 and 2020 goals for the percentage of third graders with dental sealants on permanent molars (50% goal, 60% of children in North Dakota), the percentage of children in third grade who have ever experienced dental caries (55% in North Dakota) remains higher than the Healthy People objectives (41% for HP 2010 and 49% for HP 2020) (CDC, Healthy People 2020, 2012).
- The needs of minority children are higher than the needs of other children in the state. In an oral health survey of third-grade school children in North Dakota during the 2004 to 2005 school year, minority children were more likely than their non-Hispanic White peers to have decay experience, untreated caries, or urgent dental needs with 5% of minority children demonstrating decay at examination that was significant enough to cause pain or infection (NDDoH, Survey, 2005).
- In 2010, North Dakota ranked in the lowest quartile of states for the percentage of Medicaid eligible children that received any dental service (32.2%). In that year, 25.4% of Medicaid eligible children in the state received a preventive dental service and 13.1% of eligible children received a restorative service (CMS, 2011).
- North Dakota's rate of edentulism in the population was higher in 2010 (18.8%) than the national average (16.9%) and the percent of adults that had any permanent teeth extracted (45.2%) was also higher than the national average (43.6%) (BRFSS, 2010). In states such as North Dakota, where public insurance limits coverage for adult restorative services or

there is no dental benefit for adult beneficiaries, extraction may be selected as the treatment of choice when a tooth is decayed and in need of expensive endodontic treatment and restoration.

- The safety net clinics are mainly located in more populous areas of the state including Fargo, Grand Forks, and Bismarck although there are safety net services in parts of rural northern North Dakota. While some safety net providers treat patients who live quite far from the clinic site, other safety net providers limit their geographic service area due to high demand for dental services and limited capacity. Many areas in the state do not have access to a safety net provider that offers oral health services. In addition, the financial sustainability of the existing network of providers is threatened by low reimbursement rates and the high cost of providing dental care.

There has been an increase in the number of dentists licensed in North Dakota in recent years due in part to concerted efforts to build a pipeline of potential professionals by increasing the awareness of young people about the opportunities in dentistry. There has also been emphasis on recruitment of graduating dentists to the state.

- There are 5.4 dentists per 10,000 population in North Dakota in 2012. However, there is significant variation in the ratio of dentists to population by county in the state. There are 16 counties in the state with no dentist and eight counties with a single dentist. Thirty percent of the licensed dentists in the state are practicing in Cass County.
- In Cass County, there are 1,374 people per dentist which is 7.28 dentists per 10,000 population. In McLean County, there are 8,962 people per dentist which is 1.12 dentists per 10,000 population.

Despite increases in the number of dentists in North Dakota, not all dentists will treat Medicaid insured patients. Many dental providers assert that reimbursement for services to Medicaid does not cover the cost of providing dental services.

- While the North Dakota legislature has approved increases to the Medicaid reimbursement rates for dental care during recent and concurrent legislative sessions, the increases have been incremental. The cost of treating patients on Medicaid is typically higher than the reimbursement for services rendered. For that reason, some dentists in the state choose not see any Medicaid insured patients, some limit the number of new Medicaid patients in their caseload, and others treat only established Medicaid patients.
- In 2009, only 20% of dentists in North Dakota indicated that they were accepting any new Medicaid patient (Dental Fact Sheet, 2009). In contrast, 49% of dentists in North Dakota in 1992 indicated they were accepting any Medicaid patient seeking care (Dental Fact Sheet, 2009). Currently, 20% of dentists in the state provide the majority of dental services for Medicaid eligible patients.

There is a surplus of DHs in the state. For many years DHs in the state were required to work under the direct or indirect supervision of a dentist limiting their ability to provide services in places where dentists were not generally found. A recent legislative change has created new opportunities for DHs in public health settings.

- There are 83 DHs licensed in North Dakota who list no practice address, indicating that they are not working in dental hygiene. There appears to be more DHs in the state than jobs available in the field. Some DHs report working as dental assistants (DAs) while

others report working in non-oral health jobs because of the lack of opportunities in dental hygiene.

- North Dakota has one CODA-accredited DH education program which graduates about 25 students annually, while neighboring Minnesota has 10 CODA-accredited DH programs graduating approximately 212 students annually (ADA, 2012). There is a flow of graduates between states.
- Until 2011, DHs were required to work under the direct or indirect supervision of a dentist. After recent statutory and regulatory change, DHs are now permitted to provide some DH services under general supervision status in compliance with standing orders from a supervising dentist. Currently four DHs employed by the state are working under general supervision in school-based sealant programs with standing orders from a government contracted dentist.

There is a shortage of registered DAs in the state.

- North Dakota has for many years required that a DA be a graduate of a CODA-accredited program or be certified by the Dental Assisting National Board (DANB) as a certified dental assistant (CDA) to be permitted to fully function as a registered dental assistant (RDA) in the state. While there are chairside trained DAs in North Dakota who are called qualified dental assistants (QDAs), their scope of work is more restrictive than the scope allowed for RDAs. Dentists in North Dakota appear to prefer hiring RDAs because of the flexibility in tasks permitted.
- The shortage of DAs is partly attributed to the lack of educational programs in the state. There is a single CODA-accredited DA education program that graduates approximately 15 students annually. Upon graduation, some dental assisting graduates pursue immediate acceptance to the dental hygiene program which is offered on the same college campus. DAs recognize that the earning potential as a DH is greater than that for a DA, which encourages them to pursue further education. As a result, there are fewer new graduates available for employment as DAs.
- Neighboring Minnesota has 13 CODA-accredited DA education programs that graduate a total of about 420 DAs annually. These programs are likely a source of some new DAs in North Dakota (ADA, 2012).
- As previously mentioned, some DHs who are unable to find jobs as DHs are working as DAs in dental practices. This requires either formal or chairside training as the functions of DAs vary considerably from that of DHs. Dually trained DHs, however, provide flexibility in a dental practice since they can function in a number of roles and be responsive to changing demands within a practice.

Discussion

While North Dakota has made strides in increasing access to oral health services over recent years, some populations in the state still have limited access to oral health services. Children, particularly the very young and those who are Medicaid eligible, rural populations, low-income adults, the elderly, and American Indians are populations of specific concern.

North Dakota has made progress in the percent of children receiving a dental service annually yet many children on Medicaid still do not see a dentist or receive a preventive oral health

service annually. Not all dentists in North Dakota participate in Medicaid and only a few dentists are willing to accept any Medicaid patient seeking a dental service. As a result, a small number of dentists in North Dakota see the majority of children on Medicaid. The lack of participation in Medicaid by dentists further limits availability of oral health services even in areas where there may be abundant dental workforce.

There is a limited safety net for oral health services located mainly in the largest cities (Fargo, Bismarck, and Grand Forks) and in a few rural areas. As with many safety net providers throughout the U.S., long-term financial sustainability of community dental clinics and FQHCs is a concern for many of the community organizations operating dental programs. Safety net providers of oral health services are constrained from expanding by their physical infrastructures and their limited financial and human resources. Some safety net providers in North Dakota experience significant demand for the dental services they provide and must limit the catchment area from which patients are drawn because they do not have the capacity to meet need. In the past, it was difficult for not-for-profit clinics that were not FQHCs to offer dental services. North Dakota required that any entity providing dental services have a dentist as a majority owner (51%). Recent legislation exempted not-for-profit dental clinics from this requirement to now permit expansion of community clinics within the safety net.

The safety net in North Dakota is composed of four FQHCS, two not-for-profit dental clinics, and a mobile dental van serving children. There are areas of the state where there is no safety net dental provider within a reasonable driving distance of much of the population. While it is common in the rural and frontier areas of the state to drive great distances for any services, dental services seem particularly scarce even in commercial service centers in the west and south of North Dakota and in some of the northern areas of the state. There are areas in rural North Dakota with high numbers of children insured by Medicaid but no dentist to provide care or no dentist willing to accept Medicaid.

School-based oral health programs in many states have been key to addressing limited access to oral health services for children from low-income families in both urban and rural areas. School-based oral health programs are not as developed in North Dakota as they are in other states. This is likely due to the historical levels of required supervision for DHs. Recent statutory change now permits DHs to practice more autonomously in public health settings.

While DHs may now work under general supervision with the standing orders of a dentist, this type of practice has not been widely adopted. The state government operates the only school-based sealant program in North Dakota with a small number of regionally based DHs traveling to designated schools. The Ronald McDonald's Care Mobile will augment these school-based programs but van services are limited to western North Dakota where current need exceeds the capacity of the dental van to provide services. In addition, the services offered in school-based programs are oral health education and application of dental sealants and fluoride varnish. In other states, DHs working in schools are able to also provide prophylaxis and even temporary restorations for children. As previously noted, there is currently excess capacity in the dental hygiene workforce that might be used to expand school-based services across North Dakota. This expansion would require dentists to provide standing orders to DHs and might also require that DHs be permitted to seek Medicaid reimbursement for services provided in schools.

A recent demonstration project in which portable dental services were provided to residents of two nursing homes in Bismarck by dental providers from Bridging the Dental Gap was quite successful. Although there is emerging demand for such programs, there is limited grant funding to support and sustain dental services for those in institutional care. Such programs could be replicated in other areas of North Dakota using the model employed in Bismarck if funding were available. Again, the excess capacity of DHs in the state could be engaged to provide oral health services for the elderly living in nursing homes.

The oral health of the American Indian population in North Dakota is a particular concern for a number of reasons. The mean age of American Indians is considerably younger than the mean age for the state as a whole. While the population is served by both Tribal Health Services (THS) and IHS, it appears that these programs may be underfunded or under resourced to serve the needs of the growing population on the reservations (Health Action, 2012, Pine Ridge, 2012). In addition, American Indians living off the reservations do not have access to the federal programs managed by IHS. Efforts to bridge cultural differences, educate the population, especially the tribal elders and the young about the importance of oral health, and engage community dentists and other oral health workforce in areas surrounding the reservations might be helpful in addressing some of the unmet need for oral health services on Indian lands and improve the oral health literacy of the population.