Population Focused Nursing Program Planning Project - Oral Health

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Abstract?

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Public health nurses design and implement programs within their communities to provide health services to target populations. Programs promote optimal health in populations by making available a multitude of healthcare services. Our group chose the topic oral health of the elderly population.

To better understand the scope of this issue, our initial search focused on oral health of the elderly population in North Dakota (ND). The ND Department of Health's report, *Oral Health in North Dakota; Burden of Disease and Plan for the Future*, outlines current dental disease prevalent in ND (Reed, G., Rathge, R., & Yineman, 2012). In a 2010 Behavior Risk Factor Surveillance Survey, 28.9% of adults in ND reported not visiting the dentist in the past year (Reed et al., 2012, p. 36). 18.8% of older adults (65+ years) were edentulous, having lost all their teeth as the result of tooth decay or gum disease, compared to the national average in 2010 being 17% (Reed et al., 2012, p. 38). Although tooth loss is not uncommon among the elderly, most people can keep their teeth with proper preventative measures.

The Background Report of Oral Health in ND explores contributing factors of the burden of oral disease in ND (The Center for Health Workforce Studies [CHWS], 2012). North Dakota is one of the most rural states in the US, which can create a barrier in access to dental care. In 2012, there were roughly 680,000 people living and 360 dentists practicing in ND, which puts the ratio at 5.4 dentists per 10,000 people (CHWS, 2012, p. 9). 31 regions in ND are defined by the federal government as dental health professional shortage areas (DHPSA) and 16 counties have no dental provider serving their area (CHWS, 2012, p. 6). The majority of oral health workforce is located in main cities, making travel necessary for many rural residents to obtain services. The elderly are a special population at risk for not receiving optimal dental care due to

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their "decreased mobility or declining mental status, lack of financial resources to pay for care, and the lack of portable dental series programs in the state" (CHWS, 2012, p. 8).

A major factor in obtaining dental care is lack of financial means. The economic burden of dental services is heavy. The second largest out-of-pocket expense is dental services, secondary only to pharmaceuticals (Reed et al., 2012). In 2003, 44% of dental care was paid for out-of-pocket, 49% by private dental insurance, and 7% by federal or state government sources (Reed et al., 2012, p. 55). Older adults, after retirement, may lose health insurance benefits provided by their employer and rely on a fixed income. The federally funded health insurance program for people who are 65, Medicare, does not cover most dental services or dentures as part of their A (hospital insurance) and B (medical insurance) plans (Center for Medicare & Medicaid Services, n.d.). North Dakota is one of the few states where Medicaid provides comprehensive dental plans to eligible residents (e.g. low-income Medicare beneficiaries and individuals with disabilities) (North Dakota Department of Human Services, 2010). However, access still remains an issue for these individuals, as many dentists in ND won't accept Medicaid patients due to the low reimbursement rates and high cost of treatment (CHWS, 2012).

In order to address the problem of poor oral health among the elderly, our project will include: health teaching on ways to maintain oral health and prevent disease; screening for oral disease; bringing awareness of available resources in the community; and referring clients with oral health issues to the Community Health Center (Northland).

Planning Process

To begin the project, our group met up to discuss the planning process. Appendix B and Chapter 25 of *Public Health Nursing: Population Centered Healthcare in the Community* was utilized as a guide for our entire project (Stanhope & Lancaster, 2012). The four group members

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decided to equally be in charge of the project, constructing a GANTT chart to organize and guide our process of planning (see Appendix H). Our project includes the four group members, our instructor, Nikki Medalen, and clients from the AHMC and its surroundings. It is our hope that in the future this program will be integrated into the AHMC and carried on by public health nurses and nursing students. It was decided early on that the best time to plan was weekly after class on Mondays and additional days as needed. As a group we did not foresee any resistance towards our program from the community.

Our instructor, Nikki Medalen, chose Henry Towers in Minot, North Dakota, to be the implementation site due to it being the present site of the Adult Health Maintenance Clinic (AHMC). Henry Towers is an apartment complex for low income elderly adults (55+ years) and some adults with mental or physical disabilities. The AHMC provides foot care and other health services to individuals living at Henry Towers and others within the community. The AHMC's location is optimal due public transportation availability at Henry Towers and residents living there being the targeted population for our project.

People Planning

The clients who will be served by the oral health program at the AHMC will be the older adults aged 55+ living in Minot. In order to involve these individuals, Caress Reyes and Allie Staples visited Henry Towers and spoke with eight residents each. They visited with the residents to better understand what was needed at the AHMC and how our program could best benefit the clients of the clinic. We wanted to hear directly from the clients that we intend to serve about oral health issues they are facing and how they would like us to help them. By involving the clients in this planning portion of the project, it is our hope that the clients develop a sense of ownership and commitment to the program. In addition, we hope to build on the

relationship between the AHMC clients and the Minot State nursing students. We want the clients to know that we are doing this project for them and that our goal is that they would benefit from it as much as possible so we truly value their input and opinion of the program. After asking clients questions, our group was able to brainstorm more ideas on how we can meet the needs of potential clients.

The questions asked during the Henry Towers visit included the following: Do you participate in the current foot clinic? Do you have dental health insurance? Do you have any concerns about your teeth or oral health? Do you wear dentures? When was the last time you visited the dentist and why? What do you do for transportation? Do you think an oral health program would be beneficial to the residents here at Henry Towers? Approximately half of the residents answered that they currently participate or have participated in the AHMC. Every individual we spoke with said they have Medicare and/or Medicaid with one resident stating that they are eligible to receive care from the Indian Health Services. Most of the residents rely on public transportation including the city bus, taxi, or rides from Souris Basin Transportation, which is a dial-a-ride type service. Three of the residents have family members nearby who are able to provide them with transportation and a few of them drive themselves. More than half of those we spoke to wear dentures or have partial dentures. The last time any individual visited a dentist ranged from 2-40 years. When asked why they have not visited the dentist more recently every single resident responded that they could not afford to see a dentist, although they know that they need to see a dentist. All 16 agreed that an oral health program being a part of the AHMC would be beneficial to them and the other residents of Henry Towers. Besides the set of questions we asked every resident we spoke to, we were able to have informal conversations with many of the residents. These conversations continued to build our relationship with the

residents and gave us more information and a greater insight to the population we will be working with. Through our casual conversations we learned that a large number of the residents do not take proper care of their natural teeth or dentures. We also learned that the residents are unaware of a way to obtain affordable dental health care. Many of the residents expressed that they are looking forward to our program and will participate when it is implemented into the AHMC.

Brooklyn Bender conducted an interview with Laurie Dimer, an MSU nursing faculty member with previous research in fluoride, to address the implementation of fluoride varnish on the older population (personal communication, April 19, 2015). Laurie mentioned that fluoride would be of great benefit to this population as it would protect tooth enamel and prevent dental carries, even as older adults. She explained due to time, certain training to apply the fluoride varnish, and ordering of supplies, it may be difficult (not impossible) to add it to the project. Her advice was to assess the population first and see what kind of oral conditions our clientele were facing, before implementing the fluoride varnish, as it would be a great recommendation in the future.

Caress Reyes spoke with Minot Commission on Aging to ask about obtaining oral health supplies such as toothbrushes, floss, or denture cups. They said they did not have any supplies available, however, if we needed food they had food available. Due to time constraints, I was unable to obtain oral health supplies for the implementation of our project.

Data Planning

During the planning phase, we brainstormed information needed for our program and sought out reliable sources of data. Rebekah Parker and Brooklyn Bender were assigned data collecting. Client demographics were assessed by collecting secondary data from client charts at

the AHMC. Rebekah Parker and another nursing student, from a different group, went to the AHMC on February 16th, 2015 to gather data. Data obtained included: total number of participants, gender, age group, chronic diseases, tobacco/alcohol use, living situation, denture use, and medications. The total number of charts assessed was 56, keeping in mind that not all clients attend the clinic regularly. It was also noted that some charts were incomplete, which limited the information attainable. The gender of the clientele was more female than male, with 32 females and 24 males. The ethnicity of clients was entirely white. The age ranges assessed were 55+ years or less than 55 years, which tallied to 52 clients older than 55 years, and only 4 less than. The chronic diseases clients experienced included: 24 clients with diabetes; 11 clients with circulatory problems; 1 client with pernicious anemia; 5 clients with a history of a stroke; 19 clients with heart conditions; 29 clients with hypertension; 2 clients with osteoporosis; 4 clients with various types of cancer; 1 client with glaucoma; 1 client with emphysema; 3 clients with mental health conditions (depression/schizophrenia); 2 clients with arthritis; and 1 client with epilepsy. The tobacco and alcohol use sections were infrequently filled out; less than half of them were completed. Number of clients with a history of tobacco use was 5. Current number of clients using tobacco totaled 11. Clients reporting no tobacco use came to 8. Number of clients with a history of alcohol use was 1. Current number of clients drinking alcohol, occasionally, was 12. Clients reporting no alcohol use came to 7. The number of clients living alone totaled 43. The number of clients with dentures came to 27. The most common medications listed in charts were for hypertension, high cholesterol, thyroid conditions, and diabetes. The data collected allowed us to focus our research on contributing factors of oral health among the elderly with chronic diseases and why it is important.

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Brooklyn Bender and Rebekah Parker were assigned research questions relating to our topic to influence the quality of our program. The group decided the following questions needed to be addressed to substantiate our program services: What is the importance of oral health? What can happen with poor oral health? How does diabetes/hypertension affect oral health? How do nurses assess oral health and how can they intervene? We chose to research diabetes and hypertension specifically due the high numbers of clients with these conditions seen at the AHMC. By researching the key term "oral health", the CINAHL database provided 5,715 articles. Articles were filtered by availability online due to time constraints. The large majority of articles focused on prevention and intervention during childhood. Three articles were found relevant because their information related to the research questions. The article titles include: *A concept analysis of oral hygiene care in dependent older adults* (Coker, Ploeg, Kaasalainen, & Fisher, 2013)*; Elders Oral Health Crisis (*Yellowitz & Schneiderman, 2014)**;** and *Adverse drug events in the oral cavity* ~~(Coker, Ploeg, Kaasalainen, & Fisher, 2013; Yellowitz & Schneiderman, 2014~~; (Yuan & Woo, 2015). The North Dakota Department of Health (ND DOH) oral health website played a major role in providing key information (North Dakota Department of Health, 2009). Information was gleaned from oral health fact sheets, oral health and diabetes brochures, and current oral health programs and services listed on their website. *Healthy People 2020* (2015) provides 17 objectives on the topic of oral health. Only objectives 3 and 4 relate to our target population specifically. Again the majority of the information pertained to children and adolescents. The screening tool the Kayser-Jones Brief Oral Health Status Examination (BOHSE) was found during the research phase and chosen as our assessment tool (Taub, 2012).

The importance of oral health was affirmed throughout our research. The World Health Organization defines "health" as "a state of complete physical, mental, and social well-being and

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not merely the absence of disease or infirmity" (Reed et al., 2012, p. 3). Oral health refers to the welfare of the lips, teeth (natural or artificial), gums, tongue, and oral cavity. Good oral health is an important part of overall health, whereas poor oral health can lead to systemic disease.

The effects of poor oral health are not limited to the oral cavity and can affect the whole body. Conditions such as sores within the mouth, gum disease, tooth decay, and tooth loss can cause pain and progress to serious systemic health conditions (Coker et al., 2013). Chronic poor oral hygiene can promote inflammation and infection leading to systemic conditions such as diabetes, rheumatoid arthritis, respiratory diseases, coronary artery disease, stroke, osteoporosis, and osteoarthritis (Coker et al., 2013). If left untreated, tooth decay and tooth loss can result in the inability to chew and even speak (North Dakota Department of Health, 2009). This stage of poor oral health can negatively affect a person's nutritional status, self-esteem, and social patterns.

Chronic health conditions, including diabetes and hypertension, can negatively impact oral health. Uncontrolled diabetes can lead to elevated blood sugar levels which promotes infection (Yellowitz & Schneiderman, 2014). These individuals are at greater risk for periodontal disease, bone loss, and increased healing time. Other problems that can occur are dry mouth which can lead to thrush, a painful fungal infection of the mouth (National Institutes of Health, 2014). Hypertension can require individuals to take antihypertensive medications. These medications produce xerostomia and hyposalivation, conditions that create an optimal environment for dental caries, infection, and irritation of the oral tissue (Yuan & Woo, 2015). Therefore, clients with hypertension are more at risk for oral health complications.

The assessment of oral health allows for the nurses to detect oral disparities and intervene. A thorough assessment includes inspection of the oral cavity, including "lips, tongue,

gums and tissues, saliva, natural teeth, denture and oral cleanliness" (Coker et al., 2013, p. 2365). Our screening tool, the BOHSE, is claimed "the most comprehensive, validated, and reliable screening tool" (Taub, 2012, p.1). It measures 10 items of these categories on a 0 to 2 scale (0 being normal and 2 being problematic) to determine the level of severity of the patient's oral condition. There are 12 assessments that are asterisked and underlined that indicate prompt referral to a dentist. Our referral criteria includes: clients with any of the 12 asterisked and underlined conditions are immediately referred to the dentist; clients having not been to the dentist greater than one year's time will be referred to the dentist for an annual exam. All participants will be provided a brochure on the importance of oral health. Education on community recourses, specifically Northland Community Health Center's Dental Clinic ~~center~~, will be available.

The brochure on the importance of oral health was the social media part of our project. The target audiences of our project are: persons 55+ residing in Minot, North Dakota (Primary), clients of the AHMC (Primary), Public Health Nurses (Secondary), and student nurses presiding over the AHMC (Secondary). Rebekah Parker researched information to be presented on the brochure. All group members contributed to the objectives, goals, and SMART objectives of the social marketing project. Allie Staples was in charge of brochure design.

Our first objective was to provide information about gum disease and the chronic conditions related to it; diabetes and the effects it can have on oral health; medications and treatment regimens that may compromise oral health; and ways to combat threats to achieving and/or maintaining good oral health. Our second objective was to encourage healthy behavior by stressing the importance of routine dental care, good hygiene practices, and the sharing the benefits of good oral health. The SMART objectives created are as follows:

I. By the next AHMC in Minot, ND (projected Spring, 2016), there will be a 10% increase in the number of older adults screened as part of the oral health project who identify ways to improve their oral health.

II. By the next AHMC in Minot, ND (projected Spring, 2016), there will be a 10% increase in the number of older adults screened as part of the oral health project who have sought dental treatment in the past year.

Clients of the AHMC, aged 55+, are the primary audience for our oral health campaign. The majority, but not all, of the target audience resides in the Henry Towers building. These residents have numerous ways of receiving information: radio, television, peer communication, email/internet sources, bulletin boards that are placed in various spots around the building, newspaper articles, and material that may be present in the common areas (such as the dining area or recreation room). Residents are out and about throughout Minot as well, so they receive information at any place they may visit throughout their daily routines.

The public health nurses and the Minot State nursing students are also exposed to tremendous amounts of information throughout their days. Some information is gained much the same way as the primary audience: radio, television, newspapers, bulletin boards, etc. However, along with those, the secondary audience has various other methods, including textbooks, daily updates from medical related websites and/or emails, seminars that the nursing students/staff may attend, and many up to date evidence-based journal articles or readings we do for class and fieldwork preparation.

Through our social marketing campaign we are not only providing health teaching on the basics of oral health and how one can maintain such health, but we are also providing referral information, specifically to the Northland clinic, to the target audience. Our campaign is a

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brochure; which is small, lightweight, and easily accessible. Information on the brochure is presented using language at a 6th grade level. The design is simple, and clean with easy to read font. Clients will be able to refer back to this brochure if they so choose and will be able to keep it in their possession without having it get in their way.

The social marketing objectives are directly related to the *Healthy People 2020* objectives. Through this campaign, we hope to improve many of the goals listed on the *Healthy People 2020* website. Some of these include:

OH-3 - Reduce the proportion of adults with untreated dental decay

OH-4.2 - Reduce the proportion of adults aged (55+) years who have lost all of their natural teeth

OH-6 - Increase the proportion of oral and pharyngeal cancers detected at the earliest stage (By increasing the amount of adults who receive routine oral care)

OH-7 - Increase the proportion of children, adolescents, and adults who used the oral health care system in the past year (our campaign is marketed to adults)

OH-11 - Increase the proportion of patients who receive oral health services at Federally Qualified Health Centers (FQHCs) each year

OH-14(Developmental) Increase the proportion of adults who receive preventive interventions in dental offices (Healthy People 2020, 2015).

Our message "Two minutes, twice a day" helps encourage older adults to remember a guideline to maintain adequate oral health. Because our target audience may not have access to internet sources, or have the physical capabilities of making it to the library or other facilities that could provide hard copy information about oral health, we have designed a brochure that is

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lightweight, small, and easily accessible. We plan on distributing this brochure to persons at Henry Towers and those who attend the AHMC.

The success of our social marketing project will be evaluated based on all clients seen during the AHMC receiving our brochure, being educated on the material, and showing interest by asking questions and interacting during the teaching. Also, success will be measured by the number of clients who seek dental care as a result of their AHMC oral health referral.

Northland Community Health Center (2013) is a federally qualified health center. They qualify for increased reimbursement from Medicaid and Medicare for serving an underserved population (U.S. Department of Health and Human Services, n.d.). They provide services on a sliding scale fee and even provide services to the uninsured. The sliding fee scale discounts services based on family size and income (see Appendix E). The Northland Dental office is located in downtown Minot, only half a mile from Henry Towers and it is accessible to residents by bus route. Rebekah Parker contacted Northland Dental by phone and in person. Northland provided informational postcards about their services as well as sliding fee applications to be distributed at our oral health screening at Henry Towers (see Appendix C & E).

Implementation

We implemented our project on April 9th, 2015 at the AHMC located in Henry Towers. We set up a station for oral screening in the community room where the foot care took place. This allowed us to be accessible not only to the clients specifically attending foot care, but also to other members of this community. Creating a separate station helped to maintain client privacy and minimize distractions. Resources utilized throughout included: the oral health screening questionnaire (located in Appendix A); the BOHSE (Appendix B); Northland Dental informational postcards (Appendix C); referral packets that included a release of information

form, letter of referral, eligibility requirements, and a sliding fee scale application (Appendix D); and our social media brochures on oral health (Appendix E). A policy and procedure for oral health screening was developed and integrated into the AHMC guidelines (see Appendix G).

During the AHMC the four group members screened a total of 12 clients. Along with the BOHSE screening, we also asked 8 survey questions to every client (see Appendix A). We based these screening questions to determine the need for referral and health teaching. In response to question one, 10 individuals answered that they did not have dental insurance. Question two and three resulted in: 3 individuals answered that they visit the dentist annually; 2 individuals go every 2 years; 7 clients answered that they do not visit the dentist regularly; 4 clients said they have gone to see a dentist within the last year; 6 said it has been between 2-5 years since they last saw a dentist; 1 client has not been in 10 years; and 1 said they do not go to the dentist at all. Cost was the number one barrier keeping the individuals screened from seeing a dentist regularly. Some other barriers included the lack of transportation, bad experiences in the past, the lack of teeth and believing that there is no need to see a dentist because there is nothing wrong with the individuals' teeth. Question four revealed: 7 of the 13 brush their teeth once a day, 2 clients brush twice daily, 2 clients soak and brush their dentures daily, and 1 client does not brush at all due to the lack of teeth. Question five showed: 2 clients floss daily; 2 floss after meals and throughout the day; 1 client flosses once a week; 1 client flosses when they remember to; and the other clients do not floss. Question six revealed: 1 client screened has multiple sclerosis; 1 has thyroid problems; 1 has diabetes, hypertension and high cholesterol; 1 client answered that they are borderline diabetic and that they have hypertension; 1 client has diabetes, arthritis, and glaucoma; while the rest of the clients said they do not have any chronic conditions. Question seven showed: 2 clients have issues eating due to their dentures - they have a difficult

time chewing hard foods; 1 client has pain on the left side of their mouth while eating; and the other eight clients do not have issues chewing or eating. Question 8 showed: 10 clients claimed they did not have any concerns at the moment about their oral health; 1 client said they know they just need a checkup while the twelfth client had concerns about their "rotting teeth".

Each client was screened using the BOHSE (located in Appendix B). The BOHSE screening tool scores range from 0-20; the higher the score, the greater the referral need of the client was. Of the 12 individuals screened: 4 participants received scores of zero; 2 received a score of one; 2 received a score of six; 1 participant each with a score of two, three, four, and eleven. Our referrals were made based on two criteria: whether the client had received dental care within the last year and/or if their score included any of the underlined conditions on the BOHSE tool. Referrals were made to 7 of the 12 individuals seen. All clients referred were assisted in completing the referral packet (see Appendix D) to Northland Dental.

While only 12 clients were assessed, Rebekah and Allie completed the outreach intervention by going to the Henry Towers dining area and hallways in an attempt to draw awareness of the oral health screening. In doing this, information on Northland Dental was left in common areas.

Evaluation

Overall, the implementation of the Oral Health project was successful. Clients showed an interest in their oral health, were willing to participate in the screening process, and were receptive of education given and resources provided. The setting was appropriate and conducive to adequately screening individuals. The hours of operation provided for the oral health project allowed for clients with varying schedules an opportunity to visit the oral health screening station. The screenings were time sensitive, taking no more than ten minutes per client.

Questions were easily understood by clients seen and required minimal explanation by clients. Areas for improvement were discussed by group members. Due to Rebekah, Brooklyn, and Caress also providing foot care to other clients, ~~we were left with~~ Allie ~~being~~ was the sole group member designated to oral health screening. This resulted in fewer potential clients that were able to be screened. If implementation of this project were to occur again, more than 1 group member would be needed in order to see more clients for oral screening. While advertisement of the oral health screening date was present throughout Henry Towers, in order to reach more individuals, our group decided that information on the oral health project could have been placed in other areas of the community (i.e. places where individuals 55+ might frequent). We also decided that it would have been beneficial to include a sign on our table to allow for clients to have a visual of why our station was there. Due to time constraints throughout the development of the project, we were unable to implement the use of fluoride varnish. We feel that this would be a beneficial addition to the implementation of the oral health project for the future. In addition to the use of fluoride varnish, we feel that other supplies such as toothbrushes, dental cups, and floss would be beneficial to the population seen. Follow up is needed for the 7 clients referred. Evaluation needs to be a continuous process in order to assess areas in need of improvement.

As a group, we feel the goal of our project was met. Clients in our target population were screened for oral health issues, provided with information about ways to maintain oral health and given information on resources in the community. We feel that continuation of this program will encourage healthy dental hygiene practices, reduce oral disease, and increase overall wellbeing among this population.

References

Center for Health Workforce Studies (CHWS). (2012). *Oral health in North Dakota: A background report*. Retrieved from http://www.ndhealth.gov/oralhealth/Publications/Oral_Health_In_ND_A_Background_Report.pdf

Center for Medicare & Medicaid Services. (n.d.). *What's not covered by part a & part* b? Retrieved from http://www.medicare.gov/what-medicare-covers/not-covered/item-and-services-not-covered-by-part-a-and-b.html

Coker, E., Ploeg, J., Kaasalainen, S., & Fisher, A. (2013). A concept analysis of oral hygiene care in dependent older adults. *Journal of Advanced Nursing, 69*(10), 2360-2371. doi:10.1111/jan.12107

Healthy People 2020. (2015). *Oral health*. Retrieved from http://www.healthypeople.gov/2020/topics-objectives/topic/oral-health/objectives

National Institutes of Health. (2014). *Diabetes: Dental tips*. Retrieved from http://www.nidcr.nih.gov/oralhealth/Topics/Diabetes/DiabetesDentalTips.htm

North Dakota Department of Health. (2009). *Oral health facts summary*. Retrieved from http://www.ndhealth.gov/oralhealth/Publications/Oral%20Health%20Facts%20Summary.pdf

North Dakota Department of Human Services. (2010). *Who is eligible?* Retrieved from http://www.nd.gov/dhs/services/medicalserv/medicaid/eligible.html

Northland Community Health Center. (2013). *Patient guide: Becoming a patient*. Retrieved from http://www.northlandchc.org/becoming-a-patient.html

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Reed, G., Rathge, R., & Yineman. (2012). *Oral health in North Dakota: Burden of the disease and plan for the future 2012-2017*. Retrieved from http://www.ndhealth.gov/oralhealth/Publications/2012-2017_Oral_Health_State_Plan.pdf

Stanhope, M., & Lancaster, J. (2012). *Public health nursing: Population-centered health care in the community* (8thed.). Maryland Heights, MO: Elsevier Mosby.

Taub, L. M. (2012). *Oral health assessment of older adults: The kayser-jones brief oral health status examination (BOHSE).* Retrieved from http://consultgerirn.org/uploads/File/trythis/try_this_18.pdf

U.S. Department of Health and Human Services. (n.d.). *What are federally qualified health centers (FQHCs)?* Retrieved from http://www.hrsa.gov/healthit/toolbox/RuralHealthITtoolbox/Introduction/qualified.html

Washington Dental Service Foundation. (2014). *Seniors oral health: Tips and information.* Retrieved from http://seniorsoralhealth.org/general-oral-health/tips-and information/?doing_wp_cron=1427063264.1323630809783935546875.

Washington Dental Service Foundation. (2014). *Seniors oral health: Diabetes and oral health*. Retrieved from http://seniorsoralhealth.org/general-oral-health/tips-and-information/?doing_wp_cron=1427063264.1323630809783935546875.

Yellowitz, J. A., & Schneiderman, M. T. (2014). Elder's oral health crisis. *Journal of Evidence-Based Dental Practice, 14*(Supplement), 191-200

Yuan, A., & Woo, S. (2015). Adverse drug events in the oral cavity. *Oral Surgery, Oral Medicine, Oral Pathology and Oral Radiology, 119*(1), 35-47

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Appendix A

AHMC Oral Health Questions

- Do you have dental insurance?
- How often do you visit the dentist?
- When was your last dental visit? If greater than 1 year, what barriers keep you from seeing a dentist?
- How often do you brush your teeth/ dentures?
- Do you floss? How often?
- Do you have any chronic conditions that can affect your oral health such as diabetes?
- Do you have any issues eating or chewing food?
- Do you have any concerns or issues about your oral health?

Appendix B

The Kayser-Jones Brief Oral Health Status Examination (BOHSE)

Resident's Name _____ Date _____

Examiner's name _____ TOTAL SCORE_____

CATEGORY	MEASUREMENT	0	1	2
LYMPH NODES	Observe and feel nodes	No enlargement	Enlarged, not tender	Enlarged and tender*
LIPS	Observe, feel tissue and ask resident, family or staff (e.g. primary caregiver)	Smooth, pink, moist	Dry, chapped, or red at corners*	White or red patch, bleeding or ulcer for 2 weeks*
TONGUE	Observe, feel tissue and ask resident, family or staff (e.g. primary caregiver)	Normal roughness, pink and moist	Coated, smooth, patchy, severely fissured or some redness	Red, smooth, white or red patch; ulcer for 2 weeks*
TISSUE INSIDE CHEEK, FLOOR AND ROOF OF MOUTH	Observe, feel tissue and ask resident, family or staff (e.g. primary caregiver)	Pink and Moist	Dry, shiny, rough red, or swollen*	White or red patch, bleeding, hardness; ulcer for 2 weeks*
GUMS BETWEEN TEETH AND/OR UNDER ARTIFICIAL TEETH	Gently press gums with tip of tongue blade	Pink, small indentations; firm, smooth and pink under artificial teeth	Redness at border around 1-6 teeth; one red area or sore spot under artificial teeth*	Swollen or bleeding gums, redness at border around 7 or more teeth, loose teeth; generalized redness or sores under artificial teeth*
SALIVA (EFFECT ON TISSUE)	Touch tongue blade to center of tongue and floor of mouth	Tissues moist, saliva free flowing and watery	Tissues dry and sticky	Tissues parched and red, no saliva*
CONDITION OF NATURAL TEETH	Observe and count number of decayed or broken teeth	No decayed or broken teeth/roots	1-3 decayed or broken teeth/roots*	4 or more decayed or broken teeth/roots; fewer than 4 teeth in either jaw*
CONDITION OF ARTIFICIAL TEETH	Observe and ask patient, family or staff (e.g. primary caregiver)	Unbroken teeth, worn most of the time	1 broken/missing tooth, or worn for eating or cosmetics only	More than 1 broken or missing tooth, or either denture missing or never worn*
PAIRS OF TEETH IN CHEWING POSITION (NATURAL OR ARTIFICIAL)	Observe and count pairs of teeth in chewing position	12 or more pairs of teeth in chewing position	8-11 pairs of teeth in chewing position	0-7 pairs of teeth in chewing position*
ORAL CLEANLINESS	Observe appearance of teeth or dentures	Clean, no food particles/ tartar in the mouth or on artificial teeth	Food particles/tartar in one or two places in the mouth or on artificial teeth	Food particles.tartar in most places in the mouth or on artificial teeth

Upper dentures labeled: Yes _____ No _____ None_____ Lower dentures labeled: Yes _____ No _____ None _____

Is your mouth comfortable? Yes _____ No _____ If no, explain: _____

Additional comments: _____

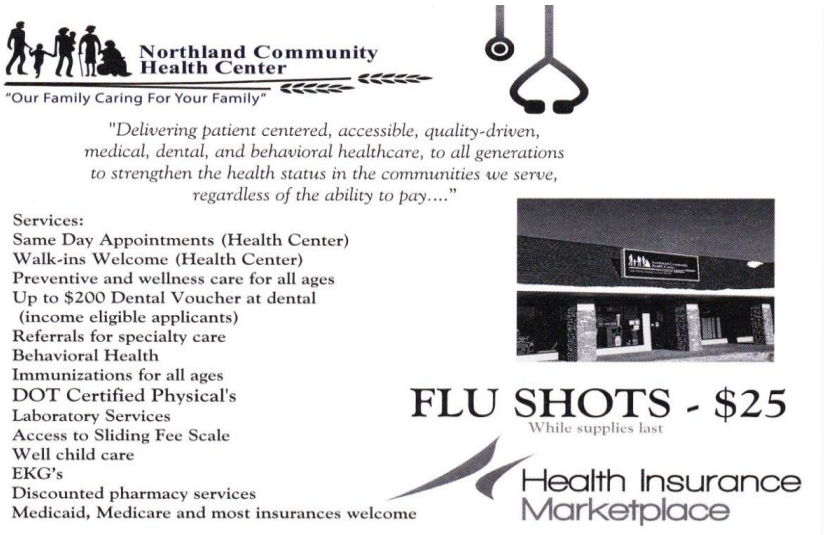
Underlined* -refer to dentist immediately

Kayser-Jones, J., Bird, W.F., Paul, S.M., Long, L., & Schell, E.S. (1995). An instrument to assess the oral health status of nursing home residents. *The Gerontologist, 35*(6), 814-824. Figure 2, p. 823.

The Hartford Institute for Geriatric Nursing would like to acknowledge the original author of this issue: Cheryl Chia-Hui Chen, DNSc, APRN, GNP, National Taiwan University School of Nursing, Taipei, Taiwan.

Appendix C

"Retrieved 04/2015"



Appendix D

Adult Health Maintenance Clinic – Oral Health Screening Letter of Referral

_____ was screened at the Adult Health Maintenance Clinic at Henry Towers, by NURS 456 Nursing Students, on _____.

They were referred to Northland Dental clinic for the following reasons:

- Have not seen a dentist in the past year.
- Issues with oral health (please see attached BOHSE)

Upon the clients first visit, we ask that the Northland Dental Office would please sign, date, and return this letter to NURS 456 Instructor Nikki Medalen, MSN, BSN, APHN-BC to ensure proper follow-up.

Nikki Medalen, MSN, BSN, APHN-BC
500 University Ave. W
Minot, ND 58707

I, _____ (print name), give Northland Community Center permission to release referral information back to the Adult Health Maintenance Clinic

_____ (client signature).

Appendix E

“Retrieved 04/2015”

Northland Community Health Center
"Our Family Caring For Your Family"

Sliding Fee Scale Application

Mail completed form and proof of income to:
Eligibility Coordinator, NCHC Administration, PO Box 535,
Turtle Lake, ND 58575-0535. Phone: 701-448-2054; Fax: 701-448-2056

Because we are a Federally Qualified Health Center, we have the opportunity to offer a discount on your services based on your annual income. If you feel this may be a benefit to you and your family, please complete this Sliding Fee Scale Application and attach income verification as defined below.

1. Head of Household Information:

Name: (First, middle initial, Last):	Social Security Number:	Date of birth:	County:
Address (Both Physical and Mailing if different)	City/State/Zip:	Home Phone:	Work Phone:
# of people responsible for in home:	Marital Status: ☐ Single ☐ Married ☐ Widowed ☐ Divorced ☐ Separated		

2. Household Information: List ALL individuals in household, including the head of household.

Name	Date of Birth	Primary Insurance	Co-pay	Secondary Ins.
1.				
2.				
3.				
4.				
5.				
6.				

3. Income Verification: Verification of income is required for each income source. Acceptable forms of income include one or more of the following:

- Current Income Tax Document (Page 1 of Form 1040)
- Two or more current consecutive paystubs
- Social Security benefit letter (available through the local Social Security office)
- Two or more current consecutive bank statements verifying SSA or SSI direct deposit details
- Form 4506-T listing Northland Community Health Center as the third party (available through www.irs.gov)
- Unemployment benefit letter or statement (available through the local Job Service office)
- Letter denying unemployment benefits
- Two or more current consecutive bank statements (if living on savings only)

SFS eligibility will be determined based on household size and gross annual household income (see Sliding Fee Schedule – reverse side). I agree to inform NCHC if there are changes to my household size or income. I hereby certify that the information provided above and attached is accurate and complete. Incomplete applications will be considered "void" after 30 days. Recertification will be required annually. By signing below, I hereby certify that I have received a copy of NCHC's Sliding Fee Scale Program Eligibility Requirements and will adhere to said requirements.

Applicant's Signature: _____ Date: _____

Guardian or Power of Attorney Signature: _____ Date: _____

Internal Use Only:	
Guarantor #	
Total Income	
Effect Date	
Exp. Date	
Discount %	
Notes	Letter
SFS Log	Card
DV Log	R#

Appendix E (continued)

NORTHLAND COMMUNITY HEALTH CENTER SLIDING FEE SCHEDULE
BASED ON POVERTY GUIDELINES PUBLISHED 04/01/2015

2015 YEARLY - EFF. 04/01/2015

SFS CODE	A		B		C		D		E	
DISCOUNT PERCENTAGE	SFS DISCOUNT 100%		SFS DISCOUNT 80%		SFS DISCOUNT 60%		SFS DISCOUNT 40%		SFS DISCOUNT 20%	
DENTAL VOUCHER	$200		$160		$120		$80		$40	
FAMILY SIZE	FROM	TO	FROM	TO	FROM	TO	FROM	TO	FROM	TO
1	$0	$11,770	$11,771	$14,713	$14,714	$17,655	$17,656	$20,958	$20,959	$23,540
2	$0	$15,930	$15,931	$19,913	$19,914	$23,895	$23,896	$27,878	$27,879	$31,860
3	$0	$20,090	$20,091	$25,113	$25,114	$30,135	$30,136	$35,158	$35,159	$40,180
4	$0	$24,250	$24,251	$30,313	$30,314	$36,375	$36,376	$42,438	$42,439	$45,800
5	$0	$28,410	$28,411	$35,513	$35,514	$42,615	$42,616	$49,718	$49,719	$56,820
6	$0	$32,570	$32,571	$40,713	$40,714	$48,555	$48,556	$56,998	$56,999	$65,140
7	$0	$36,730	$36,731	$45,913	$45,914	$55,095	$55,096	$64,278	$64,279	$73,460
8	$0	$40,890	$40,891	$51,113	$51,114	$61,335	$61,336	$71,558	$71,559	$81,780
9	$0	$45,050	$45,051	$56,513	$56,514	$67,575	$67,576	$78,838	$78,839	$90,100
10	$0	$49,210	$49,211	$61,513	$61,514	$73,815	$73,816	$86,118	$86,119	$98,420
% OF POVERTY LEVEL	100%		125%		150%		175%		200%	

Appendix E (continued)

Northland Community Health Center

"Our Family Caring For Your Family"

Sliding Fee Scale Eligibility Requirements

1. SFS eligibility will be based on household size and gross annual household income. Household income must be within established federal income guidelines.
2. The application form must be completed in its entirety and the applicant must sign and date the form.
   A. Verification of income is required for each income source. Acceptable forms of verification include one or more of the following:
      a. Current income tax document (Page 1 of Form 1040)
      b. Current annual W-2 Forms
      c. Two or more current consecutive paystubs
      d. Social Security Benefit Letter (available through the local Social Security office)
      e. Two or more current consecutive bank statements verifying SSA or SSI direct deposit details
      f. Unemployment benefit letter (Available at Job Service)
   B. Acceptable forms of verification of non-income include:
      a. Form 4506-T listing Northland Community Health Center as the third party (available through www.irs.gov)
      b. Letter denying unemployment benefits
      c. Two or more current consecutive bank statements (if living on savings only)
3. SFS Applicants have 30 days to provide all the required verification information to NCHC. Copies of original documents will be made and retained on file with the original documents returned to the applicant. SFS Applications without the required information will be considered "void" after 30 days.
4. The SFS Application Form and income verification must be resubmitted annually.
5. It is the SFS patient's responsibility to report any changes in household size or income level. SFS patients are notified that failure to do so may be considered fraud.
6. NCHC empowers staff to make a presumptive eligibility determination based on the signed statement declaring the applicant is within the established federal income guideline.
7. A Medicare recipient may qualify for the SFS. The balance remaining after insurance is applied will be eligible for the discount.
8. A patient may qualify for the SFS if he/she is on medical assistance but has a recipient liability or spend-down. SFS discounts will apply only to those procedures not covered by Medicaid. This does not apply to prescriptions. Please note that sliding fee discounts cannot be applied to ND Medicaid recipient liability. Discounts can be applied only to Medicaid non-covered services.
9. A non-citizen living in the United States may qualify for the SFS with the same eligibility requirements as citizens.
10. If the SFS patient has insurance, the applicable insurance copayment must be collected at the time of visit, prior to seeing a medical provider.

1

Appendix E (continued)

11. After applying the nominal fee, the copayment, insurance payments (when applicable) and the SFS discount, the difference will be the responsibility of the patient and will be billed on the patient's monthly statement.

12. The billed difference must be paid in full or payment arrangements made within 135 days from the date of statement or the account may be turned over to a collection agency.

Guidelines for the Sliding Fee Scale Eligible Patient

	Commercial Insurance	Medicare	Medicare Advantage Plans	Medicaid	Self-Pay (no insurance)
Co-Pay	Policy Dependent – Typically $25*	$0.00	Policy Dependent – Typically $25*	$3.00*	$0.00
Nominal Fee	$20	$20*	$20	$20	$20*

(*) Must be paid at time of service at a minimum

Sliding Fee Scale Service Exemption List:

1. Radiograph Interpretation
2. Advanced radiology procedures such as CT scan or MRI

Dental Voucher Eligibility Requirements

1. All eligibility requirements as stated in the Sliding Fee Scale Policy must be satisfied prior to obtaining a dental voucher.

2. Each approved patient will be required to read and sign the Financial Responsibility Acknowledgment for dental services rendered.

3. All dental bills must be submitted to third party payers, when applicable, prior to utilization of the dental voucher.

4. The voucher does not always cover the full amount of the dental visit. The patient may owe a portion of the bill. Fees are based on the established charges of the dental provider.

5. Patients who visit a dental provider without applying for NCHC's SFS Program may be responsible for the entire bill.

6. Negligence to pay the remaining dental bill and/or failing to present themselves at dental appointments (1 time limit) may result in participating dentist's refusal to schedule future visits.

7. The Dental Provider's Business Office will forward any outstanding balance due to NCHC's Business Office. Submissions must include the following:

    - Patient name
    - Date of birth
    - Date of service
    - Description of services provided
    - Itemization of fees
    - All Third party payments must be noted (photo copies must be provided)

Appendix F

Good oral health is a key part of good overall health! Keeping your teeth and gums healthy will help keep YOU healthy!

Want to know more?
Check it out!
Visit seniororalhealth.org

Oral Health

References

Washington Dental Service Foundation. (2014). Seniors oral health: Tips and information. Retrieved from http://seniorsoralhealth.org/general-oral-health/tips-and-information/?doing_wp_cron=1427063264.1336080978393554687 5.

Washington Dental Service Foundation. (2014). Seniors oral health: Diabetes and oral health. Retrieved from http://seniorsoralhealth.org/general-oral-health/tips-and-information/?doing_wp_cron=1427063264.1336080978393554687 5.

Created by: Allie Staples, Brooklyn Bender, Caress Reyes, & Rebekah Parker, N456 Public Health Nursing. April 2015.

Appendix F (continued)

Tips for Oral Health

1. **"Two minutes, twice a day"** Brushing regularly helps remove nasty plaques that can build up in your mouth
2. **Floss once a day**
3. **Remove and clean your dentures daily**
4. **Get regular dental check-ups**
5. **Eat less sugar!** We know this can be tricky, but if you do eat sugary snacks, remember to brush right after
6. **Pay extra attention to your gums if you have Diabetes** – gum disease can make it harder to control blood sugar
7. **Manage dry mouth** Lots of medications can cause dry mouth – make sure to drink lots of water. You can even chew sugar free gum!
8. **Ask your provider about extra fluoride products**
9. **Check your mouth regularly for sores!**
10. **Just say no to tobacco!**

Diabetic?

Pay special attention to oral health if you have **Diabetes!**

- Uncontrolled blood sugar can affect your gums and teeth. It can cause an increase in plaque bacteria.
- People with diabetes are 3 to 4 times as likely to get a gum infection.
- Diabetes makes it harder to fight off infections, including gum disease.
- Gum disease can make it harder to control diabetes.

Fun Facts

- Gum Disease lead to conditions such as *diabetes, heart disease, stroke, and pneumonia*
- Poor nutrition can make it easier to develop gum disease

Appendix G

Policy and Procedure – Oral Health Screening

The nurse or student nurse will complete the oral health assessment questionnaire with each client. Then the nurse or student nurse will assess the client following the Brief Oral Health Status Examination (BOHSE) screening tool.

Education will be given about the importance of oral health, tips to maintain oral health and prevent oral disease, and community resources in verbal form and via our brochure (Oral Health, April 2015).

Referrals will be made based on the following criteria:

- Clients exhibiting any of the 13 asterisked and underlined conditions on the BOHSE are immediately referred to see a dentist.
- Clients reporting not visiting a dentist in greater than one year's time will be referred to the dentist for an annual exam.

Clients reporting no insurance coverage, insurance that doesn't cover dental, or anyone interested will be referred to Northland Community Health Center Dental. An application for Northland's sliding-fee-scale will be provided and explained to them.

A letter of referral will also be given to clients referred to a dentist. The letters will be addressed to the dental agency and it is requested they be sent to Nikki Medalen, BSN, MSN, APHN-BC, when the client is seen. This will allow for proper follow-up after the referral.

Appendix H

Commented [NM10]: This is the best GANTT chart ever submitted. Well done!

Appendix H (continued)


Rebekah Parker - Research North Dakota Department of Health website and Health People 2020.
Brooklyn Bender - Meet with Laurie Dimler to discuss floride varnish.
Caress Reyes - Contact Minot Commission on Aging Services and the ND Dental Association for resource information.
Allie Staples - Work on Social Media Project.
Group meeting to discuss progress; Assigned tasks
Rebekah Parker - Complete initial draft on work completed.
Brooklyn Bender - Complete initial draft on work completed.
Caress Reyes - Complete initial draft on work completed.
Allie Staples - Complete initial draft on work completed.
Group implemeted oral health screenings at AHMC
Group meeting to discuss overall project - results, improvements, and reflection
Key
Rebekah Parker
Brooklyn Bender
Caress Reyes
Allie Staples
Rebekah Parker, Brooklyn Bender, Caress Reyes - Group Meeting
All group members present