

Yamhill Community Care
Oral Health Needs Assessment
December 2016



Yamhill Community Care Organization
Your Local Health Partner

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Executive Summary

Due to the implementation of the Federal Patient Protection and Affordable Care Act (ACA), and Oregon's health reform, more Oregonians than ever are eligible for and have medical insurance through the Oregon Health Plan (OHP). Adults in Oregon who are enrolled in certain Medicaid medical plans also receive dental benefits that cover preventive and limited restorative dental care. Oregon's managed care dental benefit plans cover 96% of Oregonians who are enrolled in Medicaid plans.¹

Oregon's unique system of coordinated care organizations (CCOs) was developed to provide innovative and integrated systems of care across all health disciplines, including physical health, behavioral health, and oral health. Yamhill Community Care is the regional CCO providing healthcare services for the majority of the region's Medicaid enrollees. Yamhill Community Care contracts with three of the state's managed care dental care organizations (DCOs) to provide comprehensive dental services for its enrollees.

As good oral health is a vital component of overall health, it is important to understand the oral health needs of the community and the existing barriers in order to improve oral health access and oral health outcomes. A previous Yamhill County Public Health oral health needs assessment was conducted in 2011 prior to adult Medicaid expansion and added dental benefits.

Oral health has recently become a focus and priority for many communities and health organizations in Oregon. In 2014, Yamhill Community Care conducted a community health assessment of its members and identified oral health integration with physical and behavioral health as one of four priority areas to be addressed.² Providence Health Systems-Newberg, one of two hospitals in the county, also identified oral health as a priority area in its 2013 community health needs assessment.³ The 2015 Oregon State Health Improvement Plan includes oral health as one of its top 5 health priority areas to focus on from 2015-2019.⁴

This report provides insight into Yamhill Community Care members' oral health status and their challenges in accessing dental care for themselves and their families. Information collected from members, the community, and local dental providers will inform Yamhill Community Care and the community on methods to support improvements in dental care access and integration among health disciplines.

Background

Oral health is an integral part of overall health throughout the lifespan. Healthy primary teeth are important for good nutrition, speech, and language development, and for the future health, development, and eruption of permanent teeth. Children with healthy teeth are better able to concentrate, and are more likely to be ready and able to learn in school. Good oral health is associated with improved quality of life, higher self-confidence, and improved ability to interview for jobs as adults. Some adults with poorer oral health smile less, experience anxiety, and feel embarrassed about the condition of their teeth.^{5 6}

With adult Medicaid expanded benefits, and improved Medicaid dental coverage available, Oregonian's oral health status has improved.^{7 8} However, dental disease continues to be widespread. Social determinants such as income, race, ethnicity, and geography contribute to disparities in dental disease rates, prevention strategies, and access to care. Neglecting dental disease can contribute to the development of more serious and costly oral and physical health conditions. Preventive oral health is much less costly and less invasive than dental treatment. Increasing access to preventive oral health care diminishes the potential high cost of patients seeking care in emergency departments.⁹

Risk Factors

Oral diseases share risk factors with some preventable and life-style related chronic diseases. In addition to social determinants, risk factors for oral disease include poor nutrition, poor oral hygiene, tobacco use, and alcohol misuse.¹⁰

Poor Nutrition

Increased sugar consumption, particularly accompanying a poor diet, is a well-known contributor to dental caries. Poor diet and nutrition also contribute to obesity, cardiovascular disease, and diabetes.^{11 12}

Poor Oral Hygiene

Cavities, periodontal disease, and oral cancer are most often preventable through good personal oral hygiene habits, regular dental visits, preventive healthcare visits, and fluoride.¹³

Tobacco Use

Tobacco use is associated with oral cancer, periodontal disease, and dental caries. Additionally, tobacco use contributes to cardiovascular disease, and other cancers.^{14 15} Smoking exacerbates diabetes related oral health conditions.¹⁶

Alcohol Misuse

Alcohol misuse, particularly when combined with tobacco use, is a significant predictor of oral cancer.¹⁷ Heavier drinkers brush their teeth less often, and are less likely to access professional dental care without encouragement by social service support.¹⁸

Methodology

Primary data was collected from two surveys and two focus groups. An English version and Spanish version of the Yamhill Community Care and community member survey (N= 390) was distributed through community partners to assess community members' oral health status, oral health knowledge, dental care utilization, and perceived dental care access. This document will refer to this survey as "community survey." The community survey is found in Appendix A, and the complete results of the community survey are located in Appendix B.

County dental providers (N=21) were surveyed to understand their Medicaid participation, or non-participation, as well as knowledge, interest and participation in local and state dental integration and volunteer efforts. This document will refer to this survey as "dental provider survey." The dental provider survey is located in Appendix C, and the complete results of the dental provider survey are located in Appendix D.

Qualitative data was collected in two focus groups consisting of Head Start families and community members in an outlying area of the county. A Bilingual-Spanish interpreter, and English and Bilingual-Spanish note-takers supported the focus groups. The focus group questions are located in Appendix E.

Secondary Data was collected from a variety of Federal, State, and local sources to understand the Yamhill Community Care and Yamhill County demographic profile. Secondary data also informed the current state of Medicaid participation and barriers to dental care access.

Following the Association for State and Territorial Dental Directors (ASTDD) Seven-Step Model¹⁹ and Mobilizing for Action through Planning and Partnerships (MAPP)²⁰ process for determining community health needs, survey and focus group results were shared with and vetted through various community and Yamhill Community Care committees. The Yamhill County Oral Health Coalition (YCOHC), Yamhill Community Care Quality and Clinical Advisory Panel (QCAP), Community Advisory Council (CAC), and DCO integration committee reviewed the aggregate community member and community dental provider survey results and focus group responses. The committees provided input on the overall content and recommendations for this Oral Health Needs Assessment document.

Limitations

The surveys conducted were a convenience sample of Yamhill Community Care members. The survey responses also included community members who were not insured by Yamhill Community Care CCO. Additionally, the dental provider surveys were a convenience sample of Yamhill County Medicaid and non-Medicaid dental providers. Although survey and focus group responses were a convenience sample, the responses are supported by other research and reports from community stakeholders.

The preponderance of data available represents time periods prior to the 2014 adult Medicaid medical and dental expansion and dental care CCO integration. Much of the available data is not stratified by pertinent demographics or social determinants. As additional, more current, relevant data becomes available, it is vital that efforts to understand and address oral health disease disparities continue. As dental integration, dental intervention, and workforce pilot projects are developed and implemented, evaluation of these innovative programs should inform future efforts to improve oral health and overall health outcomes.

Oregon, Yamhill County, and Yamhill Community Care Member's Oral Health Status

Oral Health Status

The majority, 39%, of Oregon adults of all income levels report “good” oral health status. One quarter of adults reported “very good” oral health status, and 24% reported “fair” oral health status. Eleven percent of adult Oregonians reported poor oral health. Oral health is considered important, and is a high priority. Statewide, 94% of adults feel that oral health is valuable, and contributes to overall health.²¹

Community focus group participants reported that oral health was very important, and that they prioritized their children's dental care needs over their own dental

care needs. Additionally, health, including physical health, and oral health, were considered a high priority, just under food and shelter, for family financial resource allocation.

- Almost 45% of community survey respondents reported “good” oral health, and 12.4% reported “very good” oral health status.
- Approximately 30% of community survey respondents reported “fair” oral health, and 13.4% reported “poor” oral health status.

Dental caries

In the United States, dental caries, cavities, or tooth decay is the most common chronic disease of children age 6-11 years and adolescents age 12-19 years.²² The breakdown of the tooth enamel leads to dental caries. Bacteria present in the mouth break down ingested foods and beverages. The bacteria produce acid, which destroys the tooth enamel, leading to dental caries.²³ During 2011-2012, 18% all school aged children had untreated dental caries while 25% of children poverty with untreated caries.²⁴ Dental caries was reported in 22.7% of young children aged 2-5 years.²⁵

One half to almost three-fourths of Oregon’s schoolchildren in grades 1-11 has had cavities.

- 52% of Oregon’s 1st-3rd graders have had a cavity, including 51% of 1st through 3rd graders in the regional area including Yamhill County²⁶
- 68.9% of Yamhill County’s 8th graders have had a cavity.
- 74.9% of Yamhill County’s 11th graders have had a cavity.²⁷
- Community survey respondents, who are parents, reported that 89.4% of their children, of any age, have or have had a cavity.
- Nationally, 25% of non-elder adults reported untreated cavities. 40-50% of adults in poverty reported untreated cavities.²⁸
- 31% of adults who responded to the community survey reported that they have or have previously had a cavity.

Periodontal Diseases

Periodontal disease is an infection and inflammation that affects the gums and bone around the teeth. Gingivitis is the early stage of the disease. The gums may be red, swollen, and may bleed. Periodontitis is the more advanced infection and may lead to bone loss around the teeth, and tooth loss.²⁹

- In the U. S., 15.1% of adults over age 65 years have lost all of their teeth.
- Approximately 43.6% of U. S. adults of any age reported having any number of teeth extracted.
- In Oregon, 13% of those 65 years or older have had all of their teeth extracted.
- Just over 40% of Oregon adults have had some teeth removed.³⁰
- Bleeding gums, which is often associated with gingivitis and periodontal disease were reported by 13.9% of community survey respondents.

Oral Cancers

Early detection is a primary deterrent to reducing the nearly 59% mortality rate for oral cancers.³¹ The incidence of oral cavity and pharynx cancer in Oregon is reported at 11.4%.³²

State, County, and Yamhill Community Care Demographics and Profile

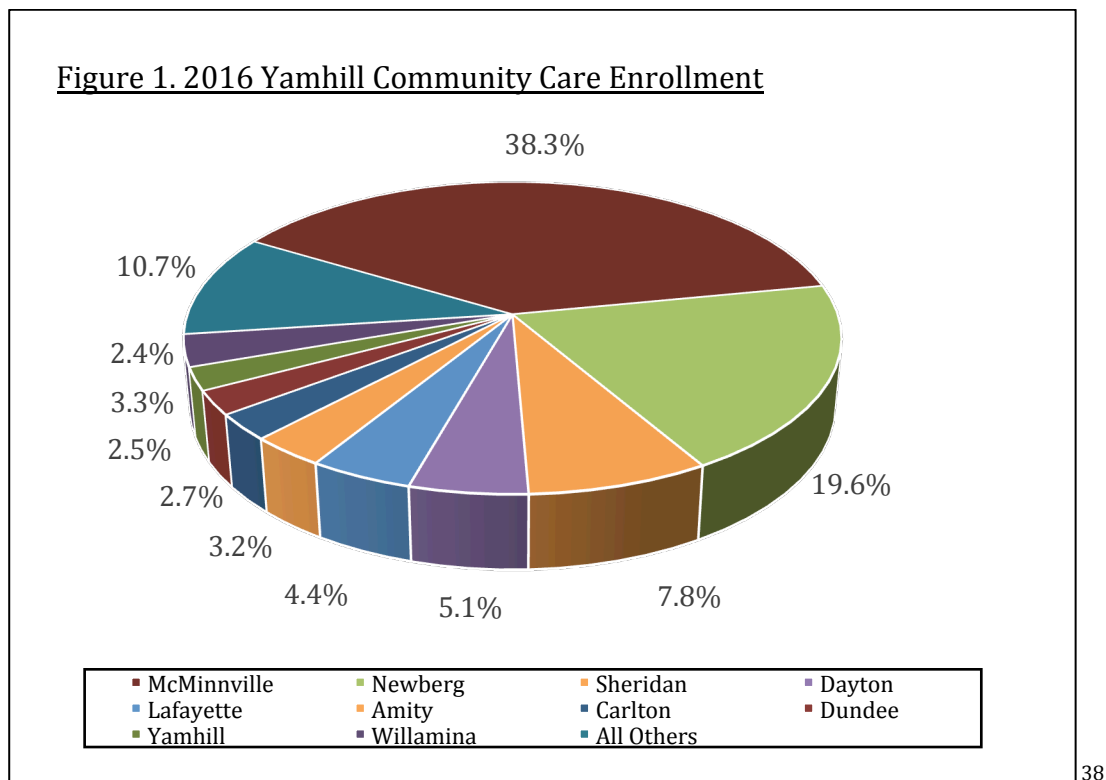
Yamhill County borders Washington County to the north, Polk County to the south, Marion and Clackamas Counties to the east, and Tillamook County to the west. Members of Yamhill Community Care primarily reside in Yamhill County, but some members reside or receive health care services in these adjacent counties. The primary industries in Yamhill County are agriculture including nursery stock and wine grapes, wine production, steel manufacturing, forest products, and dental equipment manufacturing.³³

Population

Yamhill County comprises 10 rural cities across 718 square miles. Yamhill County's 2015 population was 102,659. Children under age five years numbered 5.6%, children under age 18 years 22.8%, and those over age 65 years, 16.2%.³⁴ The county seat and largest city is McMinnville with a population of 33,000. Newberg is the next largest city with a population of 22,000. Eight other towns range in population from 1030 in Yamhill to 6,180 residents in Sheridan.³⁵

Yamhill County is rural, and is designated as a mental health, dental health, and primary care health professional shortage area. The dental designation is based on the presence of a Federal Correctional institute, and a large migrant seasonal farmworker population.³⁶

Yamhill Community Care is one of 16 regional CCOs in Oregon. As of June 2016, Yamhill Community Care’s total membership was 24,753, and dental membership was 24,557.³⁷ Over 50% of enrolled members reside in the more heavily populated McMinnville and Newberg (see figure 1).

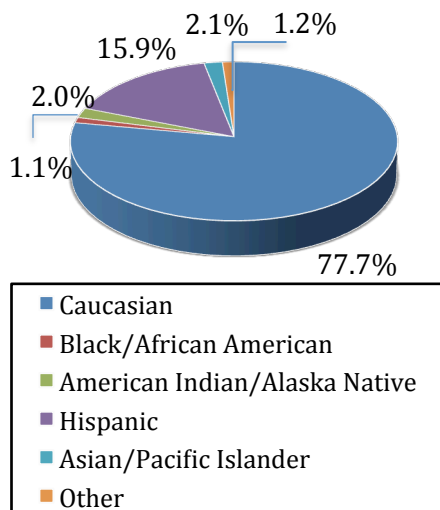


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Race and Ethnicity

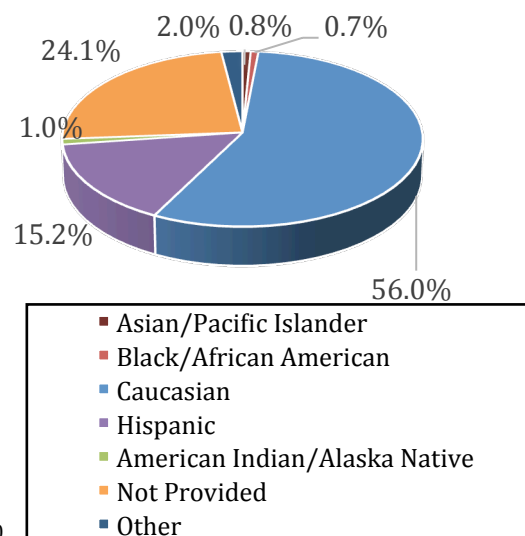
The 2015 U. S. Census reports that county residents are 77.7% Caucasian, 15.9% Hispanic, 2% American Indian/Alaska Native, 2.1% Asian/Pacific Islander, and 1.1% Black/African American (see figure 2.1).³⁹ Although it appears that disproportionately fewer Caucasians may be enrolled as Yamhill Community Care members, 24.1% of members did not report ethnicity (see figure 2.2).

Figure 2.1. Yamhill County Population by Ethnicity



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Figure 2.2. Yamhill Community Care Members by Ethnicity



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Education and Income

Yamhill County reports an 83.7% high school graduation rate compared with Oregon's 83.4%. Those with at least a bachelor's degree number 22.4% in Yamhill County compared with Oregon's 29.3%.⁴²

The mean Yamhill County income for 2014 was \$53,864, which was only slightly higher than Oregon's 2014 mean income of \$53,482. Unemployment in Yamhill County is 6.6% compared to Oregon's unemployment rate of 6.9%.⁴³

Poverty and Homelessness

The 2014 U.S. Census reports that 41.6% of children age 18 years and younger resided in households receiving Supplemental Security Income, cash public assistance income, or Food Stamps/SNAP benefits.⁴⁴ The Oregon Department of Education reports that in the 2015-2016 school year, 51.6% of Yamhill County's school children were eligible for the Federal Free or Reduced Price Lunch Program.⁴⁵

Approximately 15.4% of Yamhill county residents live in poverty. At 16%, Yamhill County is one of the top five Oregon counties for percentage of Hispanics who are homeless.⁴⁶

Transportation Services

Transportation options are limited for Yamhill County residents due to an extended geographic area, and a rural, less-dense population. Oral health needs assessment survey respondents reported that transportation was a barrier to utilizing dental services. Transportation was an issue for 12.1% of adults accessing dental care and for 15% of adults who needed to transport a child to a dental office.

Yamhill County Transit Area (YCTA) provides transportation on main roads within Yamhill County. There are also limited routes extending into larger cities to the north and south and east where riders may connect with larger transit agencies. YCTA also offers limited Dial-a-Ride services to residents.

WellRide offers non-emergent medical transportation to Yamhill Community Care members to access health care services, including dental care, that are covered benefits when other transportation options such as rides from family or friends are not available. WellRide benefits may consist of bus passes, taxi, or other alternatives based on the needs of the member.⁴⁷

Although transportation to covered health services is a Yamhill Community Care Medicaid covered benefit for enrolled members, some members may not be aware of the benefit. The rural geography of the county contributes to fewer transportation options, and 12.1% of the community survey respondents reported lack of transportation as a primary reason for not using dental care.

Hospitals and Emergency Department Use

Two hospitals are located in Yamhill County. McMinnville is home to an independent hospital, Willamette Valley Medical Center. Providence Hospital located in Newberg, is part of a larger regional hospital system.

A 2014, statewide emergency department (ED) study determined that 2% of all ED discharge diagnoses were for non-traumatic dental conditions, and is the 12th most common ED diagnosis. Among men aged 20-34 years, non-traumatic dental visits were the second most common diagnosis. Emergency department dental visits are costly, do not result in dental treatment, and most often require a referral to a dental provider. Often a patient will return to the ED at a later date due to an unresolved dental condition. Statewide mean ED dental costs are estimated at \$294 per visit, which extrapolates to approximately \$8 million annually for all of Oregon's hospitals.⁴⁸

Despite expanded adult dental coverage since the 2014 statewide ED study, Yamhill Community Care reports that from May 2015- May 2016,

- Yamhill Community Care members had 521 visits to ED for non-traumatic dental conditions.
- These visits come at an estimated annual cost of \$153,174.
- From May 2015- May 2016, non-traumatic dental conditions were 2% of all Yamhill Community Care member ED discharge diagnoses.⁴⁹
- The 10th most common ED discharge diagnosis for Yamhill Community Care members.
- The 3rd most common discharge diagnosis among members age 20-39 years.⁵⁰

Only 0.5% of OHNA community survey respondents reported using the ED as a major resource for dental care. However, focus group participants commented that some OHP enrollees did not know where or how to use their OHP benefits. Without a primary care dentist, members might default to the ED if they were in pain. Additionally, focus group attendees thought that there were limited resources for the uninsured that may access the ED for their dental care treatment needs.

Insurance and Access to Dental Care

Due to the recent adult Medicaid expansion, and implementation of the Affordable Care Act (ACA), more adults receive health insurance through private, public or health insurance exchange programs.⁵¹ The National Health Interview Survey reports a decrease in uninsured Americans from 18% in 2015, to 11.5% in 2013.⁵²

The gap in utilization rates between children with Medicaid dental benefits and children with private dental insurance has narrowed, with additional Medicaid enrolled children receiving dental care. Despite receiving dental coverage, only 45% of Oregon's children with Medicaid dental benefits had a dental visit in 2013

compared to 71% of children with private dental benefits.⁵³ In a 2013 report, 39.6% of Oregon's children received a preventive dental service, and 19% of children had received a dental treatment visit.⁵⁴

As previously noted, Yamhill County is considered rural, and a health professional shortage area. In 2015, 59.3% of rural Oregon residents had visited a dentist.⁵⁵

Over 78% of Yamhill Community Care community survey respondents with children enrolled in Medicaid reported that their children had received dental care within the past year compared to 50% of insured or uninsured adult respondents of the community survey.

There are 53 dentists, 54 dental hygienists, and 16 expanded practice dental hygienists providing dental services in Yamhill County.⁵⁶

- Statewide, 39% of dentists provide child Medicaid dental services in 2014, compared to 42% nationwide.⁵⁷
- Yamhill County dental providers surveyed reported 23.8% participation in Medicaid dental plans.
- Over 50% of Yamhill County dentists provide services in a variety of free community dental programs and events such as mobile dental clinics, community events, and reduced fee or pro bono services in offices.



Figure 3.
School-based
dental sealant
program

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Yamhill County Oral Health Resources

Medicaid Dental Care Organizations (DCOs)

Advantage Dental, Capitol Dental Care, and Oregon Dental Service (ODS)/Moda Health contract with Yamhill Community Care to provide comprehensive dental services to the DCOs assigned adult and child members. Ninety six percent of OHP enrollees receive their dental insurance benefits from DCOs.⁵⁹

School-based Dental Sealant Program

School-based dental sealant programs use portable dental equipment in the school setting. (see figure 3). County elementary and middle schools that have a 40% or higher free or reduced price lunch enrollment qualify to participate in the school-based dental sealant program. Currently, 100% of the county's 17 eligible elementary schools and 62.5% of the county's 8 middle schools participate in the school-based dental sealant program. Capitol Dental Care provides an expanded practice dental hygienist and assistant to screen 1st, 2nd, 6th and 7th graders who have parental consent for services. Dental sealants are placed on eligible, erupted

permanent molars. Students who are identified as having urgent dental needs are connected to their DCO for treatment.⁶⁰

Head Start and Title 1 Preschool Program

Utilizing an expanded practice dental hygienist, Capitol Dental Care provides opportunities for oral health assessments and fluoride varnish applications for all of Yamhill County's Head Start and Title 1 preschool programs. Children with urgent dental needs are connected to their DCO for treatment.

The Children's Program

ODS/Moda Health, partnering with Oregon Education Benefits Board (OEBB) provides uninsured school children, ages 0-18 years, preventive and restorative dental services up to an \$800 annual maximum. Students are referred by a school employee, and ODS connects the child with a local partner dentist who provides the dental services.⁶¹

Tooth Taxi

A mobile dental clinic founded by a partnership of Oregon Dental Foundation, Oregon Education Association (OEA) Trust, and Moda Health. Tooth Taxi spends up to a week at a school and provides classroom oral health education, dental screenings, cleanings, dental sealants, X-rays, fillings, and minor oral surgery. Tooth Taxi continues to be funded by individuals, corporations and private foundations.⁶²

Donated Dental Services

A national program which liaises with local dentists to provide free, comprehensive services for those who are medically fragile, elderly (age 65 years or older), or who have a permanent disability.⁶³

Virginia Garcia Memorial Health Center (VGMHC)

The county's lone Federally Qualified Health Center (FQHC) provides comprehensive medical and dental services to adults and children in McMinnville and Newberg. VGMHC offers daily emergency dental appointments along with sliding scale fee options for uninsured patients.⁶⁴

VGMHC offers Baby Days dental visits in McMinnville and Newberg for children under age four years old. Caregivers and children attend the group-centered visit, and receive oral health information through sharing with one another, in a safe environment, facilitated by the dental hygienist.

Parents and caregivers share information with other peer attendees. Infants and toddlers then receive oral health assessments, and fluoride varnish. Children with dental treatment needs are scheduled for treatment at the dental office as soon as possible⁶⁵

Love INC

A faith-based organization partnering with regional dental hygiene schools, and local volunteer dental hygienist and dentists to provide limited dental services for the un- and under-insured in Yamhill County. Providence Health Center-Newberg Community Promotores program partners with Love INC to provide adults, primarily from the county's uninsured Hispanic communities, dental hygiene services, and connection to dental treatment.⁶⁶

Medical Teams International

A faith-based organization that operates a mobile dental clinic, Medical Teams International partners with First Baptist Free Clinic, Love INC, schools, and other local organizations to provide limited dental services, primarily for those unable to afford dental care.⁶⁷

Private Dental Offices

With an estimated patient-to-dentist ratio of 2120:1,⁶⁸ there are an adequate number of dentists for the general population of Yamhill County. However, Yamhill County is considered a designated dental shortage area. Dental providers are generally centric to the more densely populated McMinnville and Newberg. Five of Yamhill County's 10 cities do not have a dentist. This contributes to transportation access barriers for residents in outlying areas. Transportation was noted by survey respondents as one of the top five barriers for parents accessing dental care for their children.

The dental provider survey results show that comprehensive preventive and restorative dental care is available through solo or group dental practices in Yamhill County. Dental Medicaid offices that were interviewed either provided comprehensive care on site or had referral sources for more complicated restorative needs within their network of providers.

According to the dental provider survey, 25% of dentists who responded reported providing services for Medicaid enrollees. An additional 15% reported that they were previously contracted with Medicaid to provide dental services, but are currently not contracted to provide services. Low Medicaid reimbursement rates were cited by 77.3% of non-Medicaid providers as a key-contributing factor against Medicaid participation. The ADA reports that during the 10-year period from 2003-2013, Oregon's Medicaid reimbursement rates for children's dental services decreased 27.8%.⁶⁹

Risk Reduction

Tobacco Use

Slightly more than 50% of the community survey respondents reported avoiding tobacco use as a strategy to maintain good oral health. According to Yamhill County Public Health,⁷⁰

- 17% of Yamhill County's residents smoke cigarettes compared with 19% statewide.
- Cigarette smoking in teens in Yamhill County has decreased and is comparable to state levels.

Fluoride

Although community water fluoridation (CWF) is considered one the greatest public health achievements of the 20th century, CWF is not federally required and not available for all populations.⁷¹ Community water fluoridation is economically feasible for small and large communities, and reduces the cost of dental care.⁷² Oregon ranks 48th in availability of CWF for its population. ⁷³

- In Yamhill County, only two of the ten cities, McMinnville and Sheridan, incorporate CWF in their water systems.
- This provides CWF for 37.7% of Yamhill County residents.

Oregon Health Authority provides fluoride tablets for grades K-6 who reside in non-optimally fluoridated communities. Fluoride rinses are distributed to grades 1-6 for children who may reside in fluoridated areas, but who may have increased risk for dental caries.⁷⁴ There are no schools in Yamhill County that participate in the school fluoride rinse program. Willamina Elementary School is the only school in Yamhill County that participates in the fluoride tablet program.⁷⁵

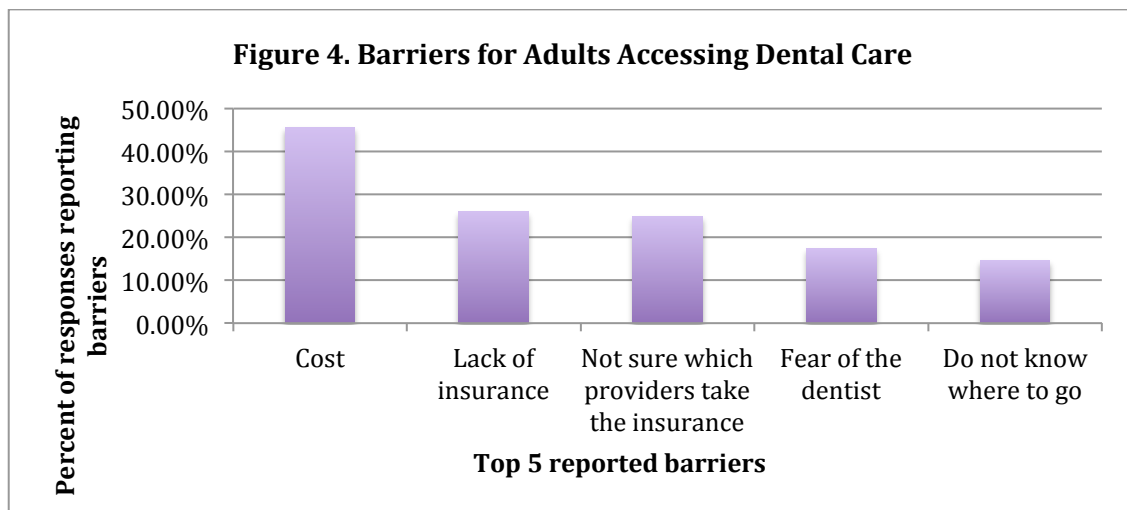
Fluoride varnish applications at consistent intervals have demonstrated caries reduction in young children. Fluoride varnish is recommended for children age 0-5 years, as soon as their teeth have erupted.⁷⁶

Oregon's First Tooth Program trains medical and dental providers, and Head Start, or other childcare providers to incorporate oral health preventive services and educations into their daily work with children and families.⁷⁷ Several Yamhill County medical practices, and some dental providers have received First Tooth training. However, there are continued workflow and administrative issues to address before the program is fully implemented.

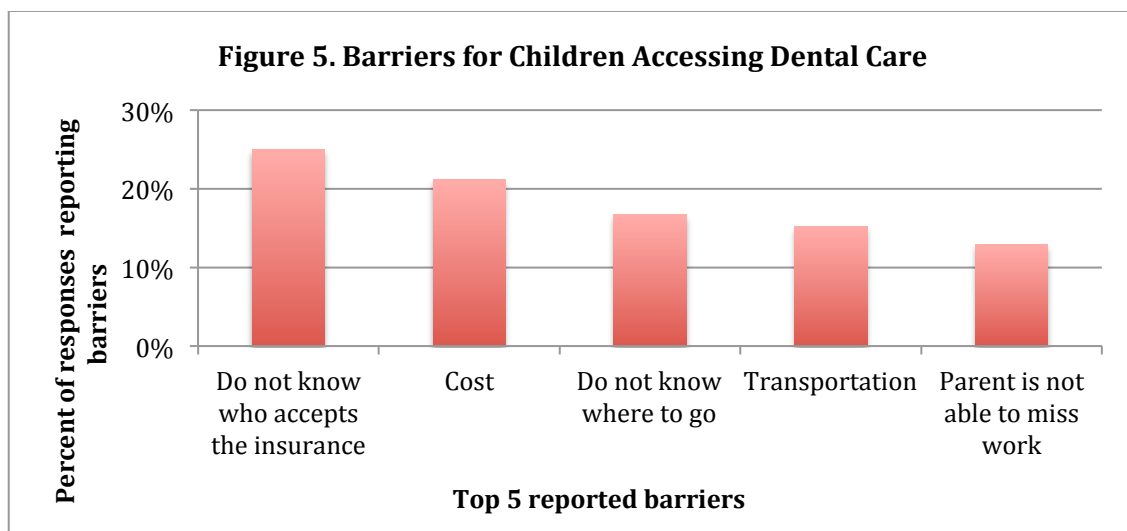
Barriers to Care

Nationally, and locally, cost continues to be the most cited barrier for adults to access dental care.

- Yamhill County community survey respondents reported cost and lack of dental insurance as their most significant barriers to dental care.
- Of the Oregonians who have not visited a dentist in the previous 12 months, 59% report that cost is a barrier.⁷⁸
- In the U. S., 12.6% of adults did not receive dental care due to cost.⁷⁹



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Policy Development and Opportunities for Change

As noted in the 2011 Yamhill County Oral Health Needs Assessment, House Bill 738 created the opportunity for state dental pilot projects to explore alternative workforce models, and the expansion of the scope of practice. Currently, there are two approved dental pilot projects in Oregon.⁸²

A dental therapist expanded workforce model is being piloted in Southern Oregon Native American communities.⁸³

In an effort to explore workforce scope of practice expansion, interim therapeutic restoration placement within a tele-dentistry context is currently being piloted in neighboring Polk and Marion counties.⁸⁴

School-Based Dental Sealant Certification is now mandated as a result of Oregon Senate Bill 660. One of the requirements for state certification is that program administrators attend certification training. Certification is intended to standardize school-based dental sealant programs across the state, and to ensure quality and efficiency. Local school-based dental sealant programs partner with the local CCOs to coordinate efforts to serve eligible schools.⁸⁵

Oregon House Bill 2972 requires that schools collect dental screening information on all students age 7 years old or younger, and entering the school system for the first time. Schools may collect dental screening certificates from parents, or schools may opt to conduct grade-level screenings. Schools are required to provide preventive dental care information to families.⁸⁶

Partnering with Yamhill Community Care, and Yamhill County Health & Human Services, Capitol Dental Care [CDC] DCO is exploring innovative transformation projects in Yamhill County. Up to three elementary schools in Yamhill County will be participating in a tele-dentistry project. A co-location effort serving intellectually and mentally disabled adults has begun at a physical and mental health clinic in McMinnville.

An additional CDC transformation project in development includes providing care to preschool and pre-kindergarten students with special needs.⁸⁷ These innovative projects, using an expanded practice dental hygienist who communicates via email, with an offsite dentist, explore the potential for an expanded workforce, and support the Yamhill Community Care Community Health Improvement Plan strategy to increase preventive services for Yamhill Community Care members.⁸⁸

Recommendations

Dental care navigation is challenging, and just over 6% of community survey respondents noted that they were not sure if they had dental benefits. Almost 25% reported that they did not know which providers accepted their dental insurance plan. Multiple DCOs provide dental services for Yamhill Community Care members. Dentists and clinics may accept all, some, or no Medicaid dental insurance. Focus group participants cite lack of understanding regarding which providers accept which dental insurance plans, and who may also be accepting new patients. The Oregon Health Authority reviewed member materials and found that OHP members, including those in Yamhill County, shared that they do not understand many OHP terms such as CCO, referral, non-emergent transportation, or patient centered-primary care home.⁸⁹

Focus group participants noted that they might contact multiple offices before they reach a dental office that accepts their DCO plan or a new patient. Members would like to easily contact and speak with a member services representative who can direct them to the appropriate DCO and/or dental office.

Medical providers attempting to engage in dental navigation with families also support a single call system to navigate families to the appropriate dental office. This call system should provide the DCO information as well as which dentists are available to see the member. Recommendations from Yamhill Community Care stakeholder groups include to:

- Explore opportunities to improve member education to address dental access and navigation.
- Share dental plan benefits and access information and tips with Yamhill Community Care's CAC members who may then disseminate information to their families, friends and coworkers.
- Develop culturally and health literate user guides for members to mitigate access barriers.

Approximately 7% of community survey respondents noted that their child had received dental care at the child's school. Focus group participants were highly supportive of school-based dental care to alleviate transportation, and work related barriers. School-based programs have the potential to decrease each of the top five survey reported barriers to accessing dental care for children.

Focus group parents and grandparents also noted that children who participated in school-based care would be less fearful of dental care due to observing their peers' participation. Although children were enrolled in eligible schools, some parents were not aware of school-based dental programs.

Additionally, some Yamhill Community Care members, stakeholder groups, and partners were unaware of group dental visit programs such as “Baby Days” provided by VGMHC. Focus group participants and Yamhill Community Care’s CAC recommend that Yamhill Community Care

- Use social media to promote school-based dental sealant programs, and other community based dental care services such as “Baby Days.”
- Develop a social media campaign to help inform members of their eligibility for dental coverage and provide oral health tips.

Dental providers, who are not currently contracted Medicaid providers, cite challenging administrative tasks and low reimbursement rates as primary reasons for non-participation in Medicaid dental plans. According to the ADA, as Medicaid coverage and the demand for Medicaid dental services continue to increase, more dental providers may participate. States that have successfully increased the number of Medicaid providers have developed strategies to engage and support providers, as well as provide networking opportunities for Medicaid and non-Medicaid dental providers.⁹⁰

County dental providers, who responded to the provider survey, are generally not aware of Yamhill Community Care integration efforts and opportunities. Medicaid dental providers who are currently engaging in integration efforts find that electronic medical and dental records are not aligned and do not interface in a manner conducive to integration. Other challenges to integration include the lack of networking opportunities with medical and behavioral health providers to share and make aware of current dental practices and scope of services. The Yamhill Community Care DCO integration committee, QCAP, and YCOHC recommend that Yamhill Community Care and their partners

- Provide networking opportunities for Medicaid participating and non-participating dentists to share information regarding integrating OHP patients into their practices.
- Develop multidisciplinary continuing education or networking opportunities to support interdisciplinary health integration efforts.
- Explore integrative health discipline electronic records.
- Support and evaluate state and local pilot projects such as tele-dentistry, special needs, and expansion of workforce opportunities to potentially expand these programs and the oral health workforce.

Acknowledgments

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Northwest Human Services
River Street Dental
Royal Dental Care-Dr. Marco Gutierrez
Salud McMinnville WIC
Salud Newberg WIC
SmileKeepers-McMinnville
Virginia Garcia Memorial Health Center
Yamhill Community Care
Yamhill County Adult Behavioral Health
Yamhill County Oral Health Coalition
Yamhill County Public Health

References

- ¹ Dental Care Organizations. (2012). Dental Care Organizations. Retrieved from <http://www.oregon.gov/oha/healthplan/tools/DCO-OHP%20101%20-%20How%20to%20work%20with%20OHP%20dental%20care%20organizations.pdf>
- ² Yamhill Community Care. (2014). Yamhill Community Care Organization. Community Health Needs Assessment. June 2014. Retrieved from http://www.yamhillcco.org/docs/default-source/default-document-library/yamhill_cco_cha_2014.pdf?sfvrsn=0
- ³ Providence Health and Services. (2013). Providence Health & Services Oregon Region. 2013 Community Health Needs Assessments. 2014-2016 Community Health Improvement Plan. Retrieved from (<http://oregon.providence.org/~media/Files/Providence%20OR%20PDF/About%20us/2013CHNA.pdf>).
- ⁴ Oregon Health Authority. (2015). Oregon Public Health. State Improvement Plan. Retrieved from (<https://public.health.oregon.gov/About/Documents/ship/oregon-state-health-improvement-plan.pdf>).
- ⁵ American Dental Association. Health Policy Institute. (2015). Oral Health and Well Being in Oregon. Retrieved from <http://www.ada.org/~media/ADA/Science%20and%20Research/HPI/OralHealthWell-Being-StateFacts/Oregon-Oral-Health-Well-Being.pdf>
- ⁶ MacDougall, H. (2016). Dental disparities among low-income American adults: A social work perspective. *Health and Social Work, 41*(3), 208-210. doi: 10.1093/hsw/hlw026
- ⁷ National Center for Chronic Disease Prevention and Health Promotion. (2014). Behavioral Risk Factor Surveillance System. Oregon Topic Teeth Removed. Retrieved from <http://www.cdc.gov/brfss/brfssprevalence/>
- ⁸ Oregon Health Authority. (2012). Oregon Smile Survey. 2012 Report. Retrieved from <https://public.health.oregon.gov/PreventionWellness/oralhealth/Documents/smile-survey2012.pdf>
- ⁹ MacDougall, H. (2016). Dental disparities among low-income American adults: A social work perspective. *Health and Social Work, 41*(3), 208-210. doi: 10.1093/hsw/hlw026
- ¹⁰ World Health Organization. (2012). Oral Health. Retrieved from <http://www.who.int/mediacentre/factsheets/fs318/en/>
- ¹¹ Touger-Decker, R., & van Loveran, C. (2003). Sugars and Dental Caries. *The American Journal of Clinical Nutrition, 78*(4), 881S-882S. Retrieved from <http://ajcn.nutrition.org/content/78/4/881S.full>).
- ¹² World Health Organization. (2012). Oral Health. Retrieved from <http://www.who.int/mediacentre/factsheets/fs318/en/>
- ¹³ World Health Organization. (2012). Oral Health. Retrieved from <http://www.who.int/mediacentre/factsheets/fs318/en/>
- ¹⁴ Centers for Disease Control and Prevention. (2016). Health Effects of Cigarette Smoking. Retrieved from [https://www.cdc.gov/tobacco/data_statistics/fact_sheets/health_effects/effects_cig_smoking/#disparities\(CDC](https://www.cdc.gov/tobacco/data_statistics/fact_sheets/health_effects/effects_cig_smoking/#disparities(CDC)
- ¹⁵ Centers for Disease Control and Prevention. (2015). Smoking, Gum Disease, and Tooth Loss. Retrieved from <http://www.cdc.gov/tobacco/campaign/tips/diseases/periodontal-gum-disease.html>
- ¹⁶ National Institute of Dental and Craniofacial Research. (2014). Diabetes and Oral Health. Retrieved from <http://www.nidcr.nih.gov/oralhealth/Topics/Diabetes/>
- ¹⁷ Centers for Disease Control and Prevention. (2016). Oral Health Conditions. Retrieved from <http://www.cdc.gov/oralhealth/conditions/index.html>
- ¹⁸ Khocht, A., Schleifer, S. J., Janal, M. N., & Keller, S. (2009). Dental Care and Oral Disease in Alcohol Dependent Persons. *Journal of Substance Abuse and Treatment, 37*(2), 214-218. doi: 10.1016/j.jsat.2008.11.009
- ¹⁹ Association of State and Territorial Dental Directors. (n. d.). Assessing Oral Health Needs: ASTDD Seven-Step Model. Retrieved from <http://www.astdd.org/oral-health-assessment-7-step-model/>
- ²⁰ National Association of County and City Health Officials. (2016). MAPP Framework. Retrieved from <http://archived.naccho.org/topics/infrastructure/mapp/framework/index.cfm>

-
- ²¹ American Dental Association. Health Policy Institute. (2015). Oral Health and Well Being in Oregon. Retrieved from [http://www.ada.org/~media/ADA/Science%](http://www.ada.org/~media/ADA/Science%20and%20Policy/OralHealthandWellBeinginOregon.pdf)
- ²² Centers for Disease Control and Prevention. (2015). Dental caries and Sealant Prevalence in Children and Adolescents in the United States, in 2011-2012. Retrieved from <http://www.cdc.gov/nchs/products/databriefs/db191.htm>
- ²³ Centers for Disease Control and Prevention. (2016). Dental Caries (Tooth Decay). Retrieved from http://www.cdc.gov/healthywater/hygiene/disease/dental_caries.html
- ²⁴ Vujicic, M. (2015, September). Mind the Gap. An Analysis of Dental Care Utilization in all States. [Webinar] In *Health Policy Institute Webinar Series*. Retrieved from <http://www.ada.org/en/science-research/health-policy-institute/publications/webinars/mind-the-gap-an-analysis-of-dental-care-utilization-in-all-states>
- ²⁵ Centers for Disease Control and Prevention. (2015). Dental caries and Sealant Prevalence in Children and Adolescents in the United States, in 2011-2012. Retrieved from <http://www.cdc.gov/nchs/products/databriefs/db191.htm>
- ²⁶ Oregon Health Authority. (2012). Oregon Smile Survey. 2012 Report. Retrieved from <https://public.health.oregon.gov/PreventionWellness/oralhealth/Documents/smile-survey2012.pdf>
- ²⁷ Oregon Health Authority. (2015). 2015. Oregon Healthy Teens Survey: Yamhill. Retrieved from https://public.health.oregon.gov/BirthDeathCertificates/Surveys/OregonHealthyTeens/Documents/2015/County/36_Yamhill.pdf
- ²⁸ Vujicic, M. (2015, September). Mind the Gap. An Analysis of Dental Care Utilization in all States. [Webinar] In *Health Policy Institute Webinar Series*. Retrieved from <http://www.ada.org/en/science-research/health-policy-institute/publications/webinars/mind-the-gap-an-analysis-of-dental-care-utilization-in-all-states>
- ²⁹ Centers for Disease Control and Prevention. (2015). Periodontal Disease. Retrieved from http://www.cdc.gov/oralhealth/periodontal_disease/
- ³⁰ National Center for Chronic Disease Prevention and Health Promotion. (2014). Behavioral Risk Factor Surveillance System. Oregon Topic All Teeth Removed. Retrieved from <http://www.cdc.gov/brfss/brfssprevalence/>
- ³¹ Centers for Disease Control and Prevention. (2016). Oral Health Conditions. Retrieved from <http://www.cdc.gov/oralhealth/conditions/index.html>.
- ³² National Cancer Institute. (n. d.). State Cancer Profiles. Retrieved from <https://statecancerprofiles.cancer.gov/quick-profiles/index.php?statename=oregon#t=2>
- ³³ Oregon Secretary of State. (2016). Yamhill County. Retrieved from <http://bluebook.state.or.us/local/counties/counties36.htm>.
- ³⁴ The United States Census Bureau. (n. d.). Quick Facts. Yamhill County. Retrieved from <http://www.census.gov/quickfacts/table/PST045215/41071>
- ³⁵ Oregon Secretary of State. (2016). Yamhill County. Retrieved from <http://bluebook.state.or.us/local/counties/counties36.htm>.
- ³⁶ Health Resources and Services Administration. (n. d.). HPSA Find Results. Retrieved from <https://datawarehouse.hrsa.gov/Topics/ShortageAreas.aspx>
- ³⁷ K. Ferrua, personal communication, August 1, 2016.
- ³⁸ K. Ferrua, personal communication, August 1, 2016.
- ³⁹ The United States Census Bureau. (n. d.). Quick Facts. Yamhill County. Retrieved from <http://www.census.gov/quickfacts/table/PST045215/41071>
- ⁴⁰ The United States Census Bureau. (n. d.). Quick Facts. Yamhill County. Retrieved from <http://www.census.gov/quickfacts/table/PST045215/41071>
- ⁴¹ K. Ferrua, personal communication, December 18, 2015.
- ⁴² The United States Census Bureau. (n. d.). Quick Facts. Yamhill County. Retrieved from <http://www.census.gov/quickfacts/table/PST045215/41071>
- ⁴³ County Health Rankings. (2016). Oregon. Yamhill. Retrieved from <http://www.countyhealthrankings.org/app/oregon/2015/rankings/yamhill/county/factors/overall/snapshot>

-
- ⁴⁴ The United States Census Bureau. (n. d.). Children Characteristics. Retrieved from <http://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?src=CF>
- ⁴⁵ Oregon Department of Education. (2016). Students Eligible for Free and Reduced Price Lunch. 2015-2016. Retrieved from <http://www.ode.state.or.us/sfda/reports/r0061Select2.asp>
- ⁴⁶ Housing and Community Services. (2015). Homelessness in Oregon. 2015 Point in Time Count. Retrieved from <https://www.oregon.gov/ohcs/pdfs/2015-Point-In-Time-Count-Summary.pdf>
- ⁴⁷ Yamhill Community Care. (n. d.). WellRide. Retrieved from <http://www.yamhillcco.org/for-members/transportation>
- ⁴⁸ Sun, B. & Chi, D. L. (2014). Emergency Department Visits for Non-traumatic Dental Problems in Oregon State. Retrieved from http://www.oregoncf.org/Templates/media/files/oral_health_funders_collaborative/dental-report-final.pdf
- ⁴⁹ K. Ferrua, personal communication, July 21, 2016.
- ⁵⁰ K. Ferrua, personal communication, August 5, 2016.
- ⁵¹ Centers for Disease Control and Prevention. (2014). Health, United States. 2014. Retrieved from [http://www.cdc.gov/nchs/data/14.pdf](http://www.cdc.gov/nchs/data/hus/14.pdf)
- ⁵² Cohen, R. A., & Martinez, M. E. (2015). Health Insurance Coverage: Early Release of Estimates from the National Health Interview Survey, January-March 2015. Retrieved from <http://www.cdc.gov/nchs/data/nhis/earlyrelease/insur201508.pdf>
- ⁵³ American Dental Association. Health Policy Institute. (2015). Oral Health Care System. Oregon. Retrieved from <http://www.ada.org/~media/ADA/Science%20and%20Research/HPI/OralHealthCare-StateFacts/Oregon-Oral-Health-Care-System.pdf>
- ⁵⁴ Centers for Medicaid and Medicare Services. (2015). Use of Dental Services in Medicaid and CHIP. Retrieved from <https://www.medicaid.gov/medicaid-chip-program-information/by-topics/benefits/downloads/secretarys-report-dental-excerpt.pdf>
- ⁵⁵ America's Health Rankings. (2015). Oregon. Dental Visit, Annual. Retrieved from <http://www.americashealthrankings.org/explore/2015-annual-report/measure/dental/state/OR>
- ⁵⁶ Oregon Board Of Dentistry, personal communication, 2016.
- ⁵⁷ American Dental Association. Health Policy Institute. (2015). Oral Health Care System. Oregon. Retrieved from <http://www.ada.org/~media/ADA/Science%20and%20Research/HPI/OralHealthCare-StateFacts/Oregon-Oral-Health-Care-System.pdf>
- ⁵⁸ K. Phillips. Personal communication. February 9, 2013.
- ⁵⁹ Dental Care Organizations. (2012). Dental Care Organizations. Retrieved from <http://www.oregon.gov/oha/healthplan/tools/DCO-OHP%20101%20-%20How%20to%20work%20with%20OHP%20dental%20care%20organizations.pdf>
- ⁶⁰ L. Mann, personal communication, October 5, 2016.
- ⁶¹ Moda Health. (2016). The Children's Program. Providing Dental Care to Oregon's uninsured children. Retrieved from https://www.modahealth.com/pdfs/child_prog_faq.pdf
- ⁶² Dental Foundation of Oregon. (n. d.). All Aboard the Tooth Taxi. Retrieved from <http://www.smileonoregon.org/index.asp?N=dental-nonprofit-Wilsonville-OR-TOOTH-TAXI&C=401&P=3494>
- ⁶³ J. Forsyth, personal communication, July 6, 2016.
- ⁶⁴ Virginia Garcia Memorial Health Center. (2016). Locations. Retrieved from <http://viriniagarcia.org/locations/>
- ⁶⁵ K. Johnstone, personal communication, October 10, 2014.
- ⁶⁶ L. Aus, personal communication, June 1, 2016.
- ⁶⁷ M. Stiller, personal communication, October 18, 2016.
- ⁶⁸ County Health Rankings. (2016). Yamhill. County Demographics. Retrieved from <http://www.countyhealthrankings.org/app/oregon/2016/rankings/yamhill/county/outcomes/overall/snapshot>
- ⁶⁹ American Dental Association. Health Policy Institute. (2015). Oral Health Care System. Oregon. Retrieved from <http://www.ada.org/~media/ADA/Science%20and%20Research/HPI/OralHealthCare-StateFacts/Oregon-Oral-Health-Care-System.pdf>
- ⁷⁰ Yamhill County Public Health. (2016). Tobacco Prevention & Education Program. Yamhill County Annual Report.

-
- ⁷¹ Centers For Disease Control and Prevention. (1999). Achievements in Public Health, 1900-1999, Fluoridation of Drinking Water to Prevent Dental Caries. *Morbidity and Mortality Weekly Report*, 48(41), 933-940. Retrieved from <https://www.cdc.gov/mmwr/preview/mmwrhtml/mm4841a1.htm>
- ⁷² Centers for Disease Control and Prevention. (2013). Cost Saving of Community Water Fluoridation. Retrieved from <https://www.cdc.gov/fluoridation/factsheets/cost.htm>
- ⁷³ Centers for Disease Control and Prevention. (2016). Fluoridation Statistics. Retrieved from <http://www.cdc.gov/fluoridation/statistics/2014stats.htm>
- ⁷⁴ Oregon Health Authority. (n. d.). School Fluoride Program. Retrieved from <https://public.health.oregon.gov/PreventionWellness/oralhealth/School/Pages/SchoolFluorideProgram.aspx>
- ⁷⁵ L. Johnson, personal communication, June 20, 2016.
- ⁷⁶ U. S. Preventive Services Task Force. (2014). Dental Caries in children. From Birth to age 5. *Final Recommendation Statement*. Retrieved from <https://www.preventiveservicestaskforce.org/Page/Document/RecommendationStatementFinal/dental-caries-in-children-from-birth-through-age-5-years-screening>.
- ⁷⁷ Oregon Oral Health Coalition. (n. d.). First Tooth Program. Retrieved from <http://www.orohc.org/first-tooth-program/>
- ⁷⁸ American Dental Association. Health Policy Institute. (2015). Oral Health and Well Being in Oregon. Retrieved from [http://www.ada.org/~media/ADA/Science%](http://www.ada.org/~media/ADA/Science%20and%20Policy/OralHealthandWellBeinginOregon.pdf)
- ⁷⁹ U. S. Department of Health and Human Services. (2015). Health, United States. Retrieved from <http://www.cdc.gov/nchs/data/abus/abus15.pdf#078>
- ⁸⁰ Phillips, K. (2016). Yamhill Community Care Oral Health Needs Assessment.
- ⁸¹ Phillips, K. (2016). Yamhill Community Care Oral Health Needs Assessment.
- ⁸² Oregon Health Authority. (n. d.). Dental Pilot Projects. Retrieved from <https://public.health.oregon.gov/PreventionWellness/OralHealth/DentalPilotProjects/Pages/index.aspx>
- ⁸³ Oregon Health Authority. (2016). Dental Pilot Project Program. Retrieved from <https://public.health.oregon.gov/PreventionWellness/oralhealth/DentalPilotProjects/Documents/1000-abstract.pdf>
- ⁸⁴ Oregon Health Authority. (2016). Dental Pilot Project Program. Retrieved from <https://public.health.oregon.gov/PreventionWellness/oralhealth/DentalPilotProjects/Documents/2000-abstract.pdf>
- ⁸⁵ Oregon Health Authority. (2016). Certification for School Dental Sealant Programs. Retrieved from <http://public.health.oregon.gov/PreventionWellness/oralhealth/School/Pages/certification-training.aspx>
- ⁸⁶ Oregon Department of Education, (2016). Dental Screening: Resources and Information. Retrieved from <http://www.ode.state.or.us/search/page/?id=5525>
- ⁸⁷ B. Trujillo, personal communication, October 5, 2016.
- ⁸⁸ Yamhill Community Care Organization. (2014). Yamhill Community Care Organization. Community Health Improvement Plan. July 2014- June 2019. Retrieved from http://www.yamhillcco.org/docs/default-source/default-document-library/yamhill_cco_chip_2014.pdf
- ⁸⁹ Oregon Health Authority. (2016). *Communicating effectively with Oregon Health Plan members*. [PowerPoint slides]. Retrieved from http://www.oregon.gov/oha/healthplan/ContractorWorkgroupsMeetingMaterials/MET%20Group%20OHP%20Stakeholder%20Report_FINAL%204%2029%2016.pdf
- ⁹⁰ Vujicic, M. (2015, September). Mind the Gap. An Analysis of Dental Care Utilization in all States. [Webinar] In *Health Policy Institute Webinar Series*. Retrieved from <http://www.ada.org/en/science-research/health-policy-institute/publications/webinars/mind-the-gap-an-analysis-of-dental-care-utilization-in-all-states>