STRATEGIC PLAN FOR ORAL HEALTH

in Benton, Lincoln & Linn Counties: 2015-2020

PROGRESS REPORT & UPDATE 2017

Benton, Lincoln, Linn Regional
Oral Health Coalition of Oregon

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This report was reviewed and approved on October 11, 2017, by the Coast to Cascades Community Wellness Network Steering Committee: Marty Cahill, Sherlyn Dahl, Linda Mann, Julie Manning and Louise Muscato.

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PLAN OVERVIEW: OBJECTIVES, STRATEGIES & OUTCOME MEASURES

Priority Area 1: Infrastructure

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OBJECTIVE 1	OBJECTIVE 2	Selected Outcome Measures
The tri-county region's oral health infrastructure delivers better care, better health and lower costs. 1. Coast to Cascades Community Wellness Network (CCCWN) prioritizes oral health and provides leadership in regional policy, funding and regulatory discussions and decisions. 2. Seek opportunities to expand and improve the region's oral health surveillance system. 3. Collaborate with partners to build capacity and community engagement.	***The region's oral health infrastructure facilitates equitable, appropriate and timely access to oral health prevention, education and care for all.*** 1. Develop and promote alternatives to the costly use of hospital emergency departments and urgent care clinics for nontraumatic dental pain. 2. Expand transportation options for low-income, uninsured and disadvantaged residents.	• The Coalition's oral health coordinator and a consultant complete a directory of regional oral health data. *Target date: 2016.* • All IHN-CCO boards and advisory bodies include at least one dental professional. *Target date: 2016.* • Oral health is comprehensively integrated into IHN-CCO activities. *Target date: 2017.* • Oral health coordinators serve each county through public health departments, nonprofits and other entities. *Target date: 2017.* • All school-based health centers (SBHCs) and federally qualified health centers (FQHCs) integrate oral health promotion and education. *Target date: 2018.*

Priority Area 2: Prevention and Systems of Care

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OBJECTIVE 1	OBJECTIVE 2	Selected Outcome Measures
Evidence-based preventive strategies are implemented across the lifespan of every tri-county resident. 1. Support optimally fluoridated community water systems. 2. Include oral disease prevention in prenatal and pediatric programs. 3. Expand evidence-based, best-practice oral health programs for children and teens. 4. Integrate oral health with chronic disease prevention and management. 5. Expand community-based prevention, outreach and intervention to underserved and disadvantaged adults and seniors.	***Tri-county residents achieve oral health literacy and understand that oral health is inseparable from overall health.*** 1. Develop a culturally appropriate communications plan to educate all residents on oral health. 2. Integrate oral health education into general health education. 3. Collaborate with traditional health workers and allied professionals to provide basic preventive care and to connect community members with oral health providers. 4. Integrate oral health education into the training for all care providers.	• Maintain or expand community access to optimally fluoridated water. • Children 0 to 5 on OHP/Medicaid with a dental visit in the last year: *Data for target increase pending.* • Children 6 to 9 with decay experience: *10-percent decrease.* • Children 6 to 9 on OHP/Medicaid with sealants on at least one permanent molar: *Increase by 10 percentage points.* • Eighth graders with decay experience: *10-percent decrease.* • 11th graders with a dental visit in the previous year: *10-percent increase.* • Emergency department and urgent care utilizations for nontraumatic dental pain: *10-percent decrease.*

EXECUTIVE SUMMARY

Optimal oral health is fundamental to our well-being, happiness, productivity and quality of life. To reduce the social and economic costs of oral disease, all tri-county residents must receive timely, appropriate and equitable dental care at every stage of life, including the prenatal stage.

In 2015, the *Strategic Plan for Oral Health in Benton, Lincoln and Linn Counties* recommended strategies for optimizing oral health in the tri-county region. It identified three priority areas: *Infrastructure*, *Prevention and Systems of Care* and *Workforce Capacity*. Two years later, this report assesses the region's remarkable record of success and innovation as well as the work that still needs to be done.

Based on these findings, this report also recommends updated goals that focus more narrowly on the roles, responsibilities and available resources of the Benton, Lincoln, Linn Regional Oral Health Coalition of Oregon and the Coast to Cascades Community Wellness Network.

Since 2015, oral health coalitions, government leaders, policy experts, dental professionals, activists and volunteers have done much to increase access to oral health care and education in the tri-county region. Innovative projects are improving the timeliness, quality, affordability and accessibility of oral health care.

Nevertheless, a stakeholder survey found that better coordination, communication and collaboration are needed. The inherent difficulty of working across agencies, fields and disciplines is part of the problem. Further obstacles arise from an ongoing lack of relevant data. In 2015, the *Strategic Plan* identified data collection and sharing as crucial to regional oral health improvement efforts. Although much progress has been made, stakeholders in each county identified improving access to accurate data as the most important step that still needs to be taken.

More generally, the tri-county region still faces major disparities and inequities in access and outcomes, especially with regard to race/ethnicity, age, income, insurance, geographic isolation and English language skills. There is an urgent and growing need to expand care to seniors, the homeless, undocumented residents, people with special needs, and people living in foster homes and in long-term care facilities. Expanding care necessarily includes maintaining and expanding community water fluoridation, which is a safe, evidence-based and cost-effective method for improving oral health equity and outcomes.

The accomplishments cited here should be a source of pride to everyone who is striving to improve oral health in the tri-county region. We hope the *Strategic Plan* will continue to inspire and guide these efforts.

The *Strategic Plan* will periodically be revised and updated by the Benton, Lincoln, Linn Regional Oral Health Coalition of Oregon. We welcome your comments and suggestions for improvement.

ABOUT THE COALITION

The Benton, Lincoln, Linn Regional Oral Health Coalition of Oregon provides leadership through partnerships to build community resources that will sustain and integrate oral health as an essential component of overall health across the lifespan.

In 2009, Samaritan Lebanon Community Hospital saw an increase in the number of adults visiting the emergency department for nontraumatic dental pain. The CEO convened community members and staff to discuss this problem, resulting in the formation of the Linn County Oral Health Coalition. Working with the well-established Benton County Oral Health Coalition, they developed a plan to meet the dental needs of uninsured and underinsured adults, which included the coordination of dental vans and a voucher program.

Subsequently, the Coast to Cascades Community Wellness Network — comprising executives from Samaritan hospitals, health plans, health departments, nonprofits, education institutions and health care practitioners in Benton, Lincoln and Linn counties — identified oral health as a regional priority, which led to the formation of the Benton, Lincoln, Linn Regional Oral Health Coalition of Oregon.

ABOUT COAST TO CASCADES COMMUNITY WELLNESS NETWORK

Coast to Cascades Community Wellness Network (CCCWN) is the coalition that resulted from the Coast to Cascades Childhood Obesity Project and the Rural Health Network Development planning grant. Its mission is to improve community health in Benton, Lincoln and Linn counties by providing leadership and support for regional partnerships. Its membership comprises leaders from health care, schools, government, nonprofits and tribal councils.

CCCWN is responsible for supporting and monitoring the Health Resources and Services Administration's *Healthy Smiles for All* grant, in addition to addressing community health improvement recommendations from regional and local oral health coalitions.

ORAL HEALTH IN THE TRI-COUNTY REGION

Oral health has improved significantly in the tri-county region since 2015. However, too many tri-county residents of all ages, regions and backgrounds still lack access to timely, affordable and appropriate dental care and preventive services.

In 2015, the Benton, Lincoln, Linn Regional Oral Health Coalition of Oregon (the Coalition) produced a strategic plan for oral health in the tri-county region. This plan identified three priority areas: *Infrastructure*, *Prevention and Systems of Care* and *Workforce Capacity*.

Since that time, the oral health landscape has changed and the Coalition's strategies, options and goals have evolved. In response, the Coalition recognizes the need to adapt to these changes while focusing more narrowly on its own roles, responsibilities and resources. Accordingly, this document has eliminated the *Workforce Capacity* priority and shifted all relevant strategies to *Prevention and Systems of Care*.

In 2017, an oral health status survey was conducted among roughly 20 expert stakeholders working on oral health issues in Benton, Lincoln and Linn counties. This survey was followed by a CCCWN meeting that assessed the progress of regional oral health strategies and activities since 2015. Findings for each priority area appear below. A full report appears in the appendix.

INFRASTRUCTURE

Stakeholders cited the growth and energy of the region's oral health coalitions as a major success. Local coalitions are diverse and engaged, and they are seeking and working with a wide variety of new partners.

However, communication and coordination between oral health coalitions and their partners has not necessarily kept pace with this growth. The exceptional vision, knowledge and passion of tri-county coalitions must be harnessed and guided to avoid confusion and duplication of effort. In particular, there is a strong need for clear and consistent oral health messaging between local and regional partners. There is also an ongoing need for dental professionals to share their expertise with local coalitions.

A majority of stakeholders in each county identified data collection and sharing as the region's most important need, not just to allocate resources and improve outcomes, but also to demonstrate the success of specific interventions. Major data gaps include an inventory of services and providers, a survey of cultural attitudes toward oral health, and follow-up tracking of emergency department (ED) and urgent care (UC) visits for oral health problems.

Medical/dental integration is another major focus of this priority area. Stakeholders noted that the tri-county region has made important strides toward medical-dental integration since 2015.

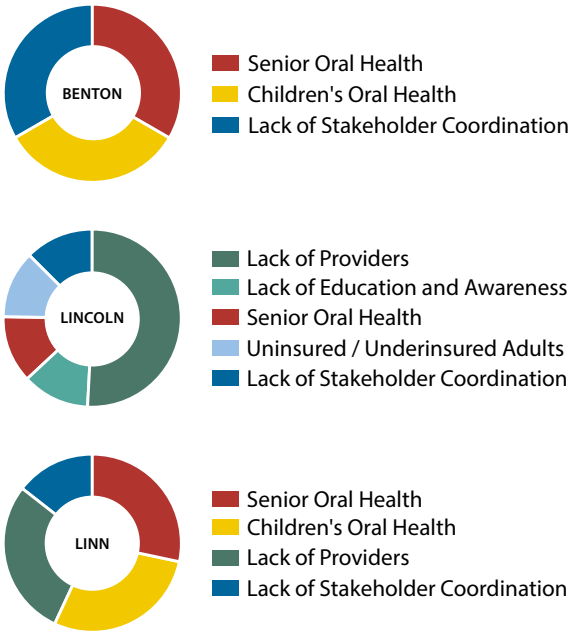
PREVENTION & SYSTEMS OF CARE

Since 2015, oral health efforts in the tri-county region have focused primarily on prevention and systems of care, especially for pregnant women and children. Many innovative and effective efforts have targeted this population, including:

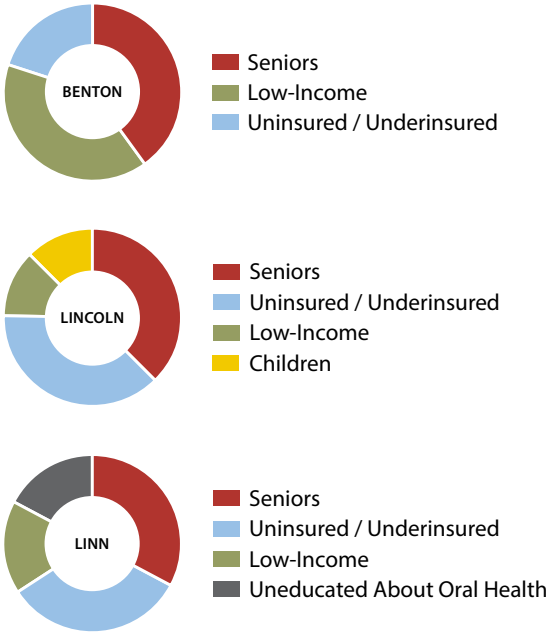
- Expanded services through Head Start, WIC and Boys & Girls Clubs
- Health navigators at OB/GYN clinics
- Expanded school sealant program, which reached all schools in Benton and Linn counties that were listed as a priority by Oregon Health Authority (OHA)
- Dental screenings with school vision and hearing tests

Unfortunately, many children still lack access to adequate care. This is typically due to transportation barriers, lack of parental consent, or lack of knowledge or navigation skills on the part of parents or guardians.

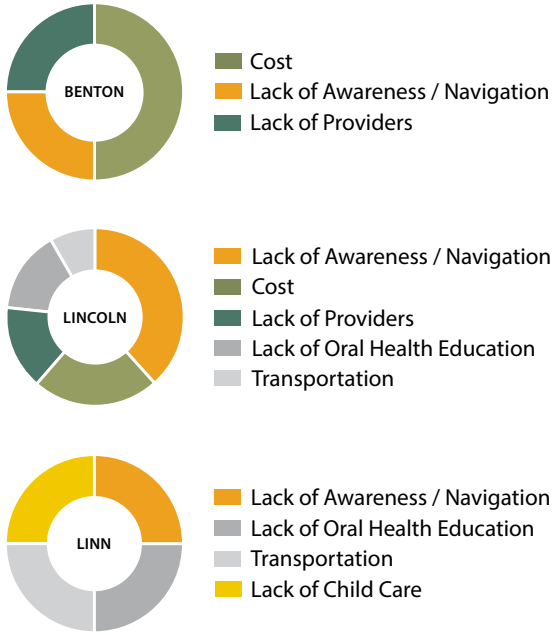
Most important oral health problem as of 2017?



Who is most likely to have oral health problems as of 2017?



What prevents people from getting oral health care?



To date, efforts relating to adult oral health — including integrative care management for people living with chronic diseases — have been relatively limited. Oregon is one of only 13 states that offer comprehensive oral health care benefits for the adult Medicaid population.

Nonetheless, oral health care for underserved adults remains inadequate in many areas, as does care for people with special needs or low socioeconomic status. Especially in Lincoln County, capacity has been swamped by demand. Very long wait times are common and serve as a disincentive to seeking routine preventive care.

The adult service gap is especially problematic for seniors. In all three counties, seniors topped the list of people most likely to have oral health problems. Stakeholders expressed serious concern about the high cost of dentures and the loss of dental benefits as seniors move from Medicaid to Medicare.

Stakeholders also reported a growing concern about migrant populations, particularly in Spanish-speaking communities. Historically, these community members have shown a certain degree of anxiety about accessing programs. Since January 2017, this anxiety has increased to the point where many Spanish-speaking community members will no longer seek care at community sites.

Other vulnerable adult populations include the homeless, people with disabilities — including developmental disabilities — and people in assisted living facilities.

In areas where services are more widely available, the difficulty of navigating the health care system often creates a barrier to access for adults and children. Further, many adults do not understand the need or the appropriate timeline for regular preventive care. They see dentistry as *reactive* rather than *preventive*; unless their teeth are hurting, they are unlikely to seek care.

Cost, lack of transportation and lack of child care also pose persistent barriers to access. Due to these barriers, even patients who have access to care through dental vouchers and other programs targeting low-income or disadvantaged communities frequently fail to show up for appointments.

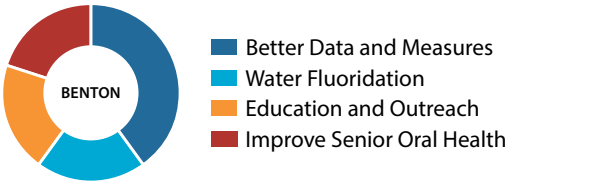
Mobile dentistry is an effective option for residents facing transportation or mobility barriers. Dental van services have expanded since 2015, especially in Lincoln and Linn counties. However, a lack of dental van volunteers in these counties currently poses an obstacle to expanding mobile services further.

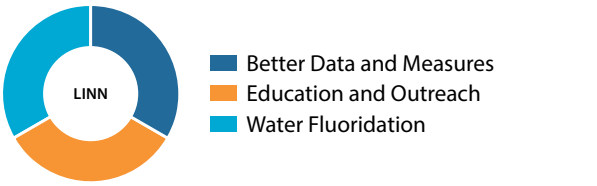
Last, the lack of community water fluoridation effectively constitutes a lack of public access to preventive care. Typically, it affects our most vulnerable community members, who may not be able to afford fluoride toothpaste or supplements. When asked what action was most important to take in the coming year to improve oral health, multiple stakeholders in all three counties recommended bringing the benefits of water fluoridation to unfluoridated communities.

REGIONAL STAKEHOLDER RECOMMENDATIONS

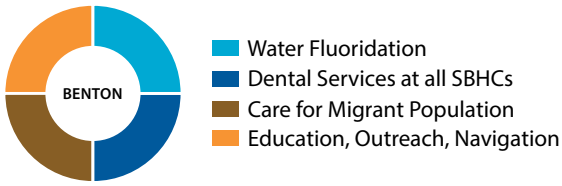
- Consistent communication and coordination between local and regional partners
- Continue educating the population on water fluoridation
- More services for underserved adults and seniors to reduce wait times and make preventive visits easier
- Better parenting education
- More collaboration with schools and parent volunteers
- Targeted oral health messaging for all communities
- Help people to navigate the health care system
- Targeted outreach and care for migrant populations
- More dental professionals in oral health coalitions
- Expanded services for homebound seniors, people with disabilities and people in assisted living facilities
- Dental services in all school-based health centers (SBHCs)
- Continue working with Boys & Girls Clubs to establish an onsite hygienist during afterschool programs
- Work with local schools to eliminate school vending machines that sell sugary drinks and snacks
- Better local data collection and clearer outcome measures

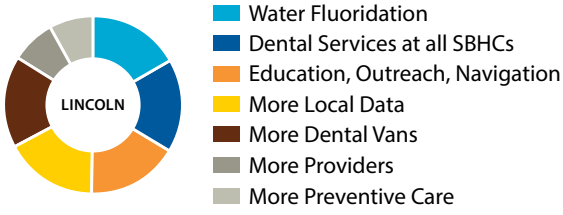
What are the most important steps that still need to be taken?

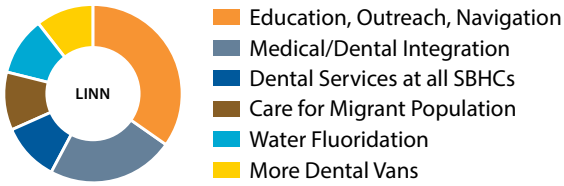




If you could do just two things to improve oral health over the next year, what would they be?







PRIORITY AREA 1: INFRASTRUCTURE

Integrating, strengthening and coordinating the interconnected elements of our region's oral health delivery system is critical to achieving and maintaining optimal oral health for all residents.

LOCAL INFRASTRUCTURE & COALITIONS

Oral health coalitions are vital to regional infrastructure because they broaden the base of stakeholders who are engaged in oral health while also serving as a common voice for evidence-based advocacy.

Local oral health coalitions in the tri-county region are diverse, energized and effective. Stakeholders singled out the reformed and reinvigorated Lincoln County Oral Health Coalition for special commendation. Currently, it includes three oral health professionals who volunteer at local schools. It is also pursuing nonprofit status as a means of increasing funding and maintaining staff support once the *Healthy Smiles for All* grant runs out.

To build on this success, the regional Coalition should continue to provide leadership, coordination and information to local coalitions while also engaging public health organizations and advocates as allies. Specific recommendations include:

- Request regular reports on how local coalitions are moving toward self-sustainability and what can be done to help them.
- Mobilize low-income, disabled, rural, ethnic and racially diverse populations and other disadvantaged residents — along with their advocates and health care providers — to ensure inclusive input into CCOs, DCOs, public health policy, and regional health transformation efforts.
- Create one or more regional subgroups to provide local, community-focused expertise on evidence-based dental care.

MEDICAL/DENTAL INTEGRATION

As the *Strategic Plan* noted, "the understanding that oral health is inseparable from overall health must drive medical/dental integration at every level of our health care system." First Tooth training and medical/dental co-location projects are vital elements of this strategy.

Since 2015, InterCommunity Health Network CCO (IHN-CCO) has made important strides toward medical/dental integration, and it is currently encouraging dental professionals to sit on all boards. IHN-CCO's Dental/Medical Integration for Diabetics pilot program is also noteworthy. The data from this pilot will be available in July 2017.

COLLECTING & USING ORAL HEALTH DATA

The *Strategic Plan* emphasized the need to develop a common methodology for collecting, validating, sharing and reporting oral health data. In response, the Coalition has made plans to collect and disseminate data on Samaritan ED/UC visits, WIC and Head Start visits, dental van and voucher usage, school-based sealant programs, community water fluoridation, and the dental health status of regional OHP members.

SELECTED OUTCOME MEASURES FOR 2020

- The Coalition's oral health coordinator and a consultant complete a directory of regional oral health data. *Target date: 2016. Status: Completed.*
- All IHN-CCO boards and advisory bodies include at least one dental professional. *Target date: 2016. Status: Completed.*
- Oral health is comprehensively integrated into IHN-CCO activities. *Target date: 2017. Status: In process.*
- All school-based health centers (SBHCs) and federally qualified health centers (FQHCs) integrate oral health promotion and education. *Target date: 2018. Status: In process.*

Please see page 14 for a complete list of outcome measures.

Once compiled, the data will be distributed to local coalitions so that they can identify problems, design evidence-based interventions, and address disparities in access and outcomes. This will simplify the process of monitoring and using data, facilitate communication between partners, and build a more robust and accessible data network.

Improved data collection will also support the goal of expanding oral health services through federally qualified health centers (FQHCs), school-based health centers (SBHCs), provider clinics and public/private partnerships.

Last, better data collection will help the Coalition to quantify progress and manage limited resources. Stakeholders recommend addressing the following data gaps:

- **Service and provider inventory.** What services are available in which communities? Where are the gaps? Are services being duplicated?
- **Survey of cultural attitudes.** What services do people think they need, versus what they actually need?
- **ED/UC follow-up data.** Where are ED/UC patients being referred for dental care? Did they go? If so, did the care they got resolve their condition?
- **OHP providers and patients.** How many youths and adults are served under OHP, and by which provider?
- **Transient populations.** How many transients live in each county, and what are their oral health needs?

IMPROVING TRANSPORTATION OPTIONS

Lack of transportation is a major barrier for tri-county residents seeking dental care. Because most of the region's oral health providers operate in urban areas, rural residents may need to travel 40 miles or more to see a dentist. Other residents may have health or disability issues that make driving impossible. To address this issue, the Coalition should strive to expand the availability and use of transportation vouchers and volunteer services for low-income and uninsured patients, including children.

There is also an urgent need to find ways of bringing dental services directly to Spanish-speaking communities, as the current political climate has made many community members fearful of seeking outside health services.

ALTERNATIVES TO EMERGENCY CARE

Reducing the use of EDs and UCs for nontraumatic dental pain has three major benefits. First, it reduces costs. Second, it improves outcomes by treating underlying dental conditions instead of offering palliative care. Third, it helps to connect high-risk patients with a dental home.

Interventions of this type are particularly necessary in Linn County, which currently has the region's highest rate of ED/UC visits for nontraumatic dental pain. To reduce this costly behavior, the dental voucher program should be expanded to direct ED/UC users to dental clinics in Albany.

Since 2014, ED/UC visits for dental pain have declined by roughly 12 percent. Although it is not currently possible to attribute this decline to the dental voucher program, this is an important area for continued monitoring.

In addition to monitoring costs, tracking ED use can facilitate stronger partnerships between EDs and DCOs on emergent needs. In 2017, improved statewide and regional reporting will track the total number of patients seeking ED care for nontraumatic dental pain, which will provide in-depth data to guide improvement efforts.

INFRASTRUCTURE: MAJOR SUCCESSES SINCE 2015

- Increased diversity and engagement of oral health coalitions
- More involvement of dental professionals in local coalitions
- Coalition plan for data monitoring and dissemination
- IHN-CCO has encouraged dental professionals to participate on all CCO boards
- Dental/Medical Integration for Diabetics pilot program
- Access to IHN-CCO patient data
- Tracking ED/UC visits for dental pain allows DCOs to guide high-risk patients toward a dental home
- ED/UC visits declined from 3,635 in 2014 to 3,204 in 2016

Priority Area 1: Infrastructure
Objectives and Strategies

Integrating, strengthening and coordinating the interconnected elements of our region's oral health delivery system is critical to achieving and maintaining optimal oral health for all residents.

OBJECTIVE 1

The tri-county region's oral health infrastructure delivers better care, better health and lower costs.

Strategy 1 **Coast to Cascades Community Wellness Network (CCCWN) prioritizes oral health and provides leadership in regional policy, funding and regulatory discussions and decisions.**

a. Engage and sustain the CCCWN steering committee.

b. Support one or more regional coalitions and local subgroups to provide local, community-focused expertise on evidence-based dental care.

Strategy 2 **Seek opportunities to expand and improve the region's oral health surveillance system.**

a. Track fluoride varnish (age 6 months to 18 years), sealants and other school-based preventive services.

b. Monitor, use and share oral health access and utilization data from the Division of Medical Assistance Programs (DMAP), the Oregon Insurance Division, WIC, Head Start, dental vans, emergency departments, urgent cares, and other public and private sources.

c. Identify and promote best practices for the timely sharing of oral health data between regional and local coalitions.

Strategy 3 **Collaborate with partners to build capacity and community engagement.**

a. Use oral health coordinators to support local coalitions and programs.

OBJECTIVE 2

The region's oral health infrastructure facilitates equitable, appropriate and timely access to oral health prevention, education and care for all.

Strategy 1 **Develop and promote alternatives to the costly use of hospital emergency departments and urgent care clinics for nontraumatic dental pain.**

a. Expand the dental voucher program to redirect ED/UC users to dental clinics, especially in the Albany area.

b. Promote the siting of after-hours safety net clinics and related resources in communities with high dental ED/UC use.

Strategy 2 **Expand transportation options for low-income, uninsured and disadvantaged residents.**

a. Expand the use of vouchers and volunteer transportation services for children and adults in need, especially in Spanish-speaking communities.

b. Explore ways to bring services directly to underserved communities, especially for Hispanic/Latino and migrant populations.

PRIORITY AREA 2: PREVENTION & SYSTEMS OF CARE

Evidence-based behavioral and policy interventions will reduce the toll of oral diseases and achieve a high lifelong standard of oral health for all tri-county residents, regardless of income, background or location.

As used in the *Strategic Plan*, the term *prevention* generally refers to community-level strategies as opposed to clinical prevention activities. Although one-on-one clinical interventions are essential to personal oral health, lasting change requires a community-wide approach that addresses the social determinants of health, dismantles barriers to access, and delivers equitable and culturally appropriate education, prevention and treatment across the lifespan of every resident.

COMMUNITY WATER FLUORIDATION

Community water fluoridation is the most cost-effective method of improving public oral health and achieving oral health equity. Despite its proven safety and efficacy, it remains politically contentious. Since 2015, the tri-county region's major success in regard to water fluoridation was defending Lebanon's existing system.

The Coalition can work to advance water fluoridation in two important ways. First, it can map areas that currently lack water fluoridation because they either have no water fluoridation system or no public water system (e.g., areas of Lincoln County that rely on wells or private water sources). Having identified these underserved areas, the Coalition can choose resources, messaging and strategies for making fluoride available to these communities.

Second, the Coalition can help to normalize the public conversation about water fluoridation by reinforcing the message that it is safe and beneficial for all community members. All messaging from medical and dental providers and from public health personnel should be clear and consistent, so that community members regularly hear the same facts from a variety of credible sources.

The goal should be to educate residents positively and routinely instead of trying to counter negative messaging during a highly politicized anti-fluoride campaign. In short, communication should be *preventive* rather than *reactive*. The Coalition can facilitate these efforts by choosing and coordinating proven messaging and educational materials for use by local coalitions and other advocates.

This effort will entail cultivating health care professionals and other experts as local fluoridation advocates, while also connecting with state and regional health advocacy groups to advance the conversation about the proven benefits of community water fluoridation.

PREVENTIVE CARE IN NON-DENTAL SETTINGS

The *Strategic Plan* identified primary care settings as a logical access point for preventive oral health services, especially for infants and children ages 0 to 5, who tend to visit primary care providers earlier and more frequently than they visit dental care providers.

All Samaritan Health Services clinics have implemented First Tooth training since 2010. Since 2015, this training has expanded to all family and pediatric health care providers in the tri-county region, as well as to Head Start

SELECTED OUTCOME MEASURES FOR 2020

- Maintain or expand community access to optimally fluoridated water. *Data source: Oregon Drinking Water Services.*
- Children 6 to 9 with decay experience: 45.9 percent. *Tri-county baseline: 51 percent, 2013.*
- Children 6 to 9 on OHP/Medicaid with sealants on at least one permanent molar: 28.6 percent. *Tri-county baseline: 18.6 percent, 2015.*
- Emergency department and urgent care utilizations for nontraumatic dental pain: 3,272. *Current (2016) tri-county data: 3,204.*

Please see page 14 for a complete list of outcome measures.

and WIC staff. As training efforts continue, they should be guided by the Coalition's data surveys, which will indicate where to focus outreach efforts.

In 2017, IHN-CCO providers will receive online education on First Tooth and other preventive services. To broaden this effort, the Coalition could produce audiovisual aids (e.g., YouTube videos) for providers. Not only would this benefit providers, but it could also educate parents on the importance of oral health screening in early childhood.

In addition, basic oral health literacy and preventive services should be promoted at every facility serving children and their parents, including schools, child care centers and social service agencies.

School-based prevention programs have expanded dramatically since 2015. Perhaps most notably, the school sealant program has added 17 schools in Benton and Linn counties, including all schools identified as a priority by Oregon Health Authority (OHA). However, children with special needs and behavioral issues are still less likely than their peers to receive sealants. Additional challenges include cultural and language barriers and the difficulty of obtaining parental consent for treatment.

In Lebanon schools, dental screening rules allow information to be shared between the school and the Johnson Dental Clinic in Corvallis, thereby streamlining the referral process and boosting the clinic's volume. The potential for adopting a similar approach in other school districts should be investigated.

One of the most impressive indicators of the effectiveness of school-based services is the dramatic increase in patient retention at Johnson Dental Clinic. In 2015, the Clinic had only 37 hygiene charts for patients in Benton and Linn counties. As of spring 2017, it has approximately 350 charts.

UNDERSERVED & HIGH-RISK ADULTS

The *Strategic Plan* emphasized the need to provide underserved adults with community outreach, prevention, intervention, and education. The Coalition's *Healthy Smiles for All* initiative is addressing this need with three key strategies:

- Identify areas with a significant number of uninsured adults who have dental needs (e.g., east Linn and Lincoln counties) and partner with Medical Teams International (MTI) to deliver treatment through mobile dental vans. Since 2015, this program has provided care for roughly 300 tri-county residents.
- Locate extended practice dental hygienists (EPDHs) in clinics through a partnership of Samaritan Health Services and Capitol Dental. This program launched in Sweet Home, where an EPDH provides screenings, x-rays and preventive services five days a week. A dental van is available one day a week for emergency needs. This program has since expanded to clinics in Lebanon and Brownsville. As of spring 2017, it has served more than 1,600 people. The expansion of this program to Lincoln County has been delayed by local regulations but is still planned for 2017.

- Make dental vouchers available to uninsured adults who are screened and referred to a private practice dentist, through a partnership with River Center in Lebanon and EPDHs in various clinics. In Lebanon, use of the voucher program has increased significantly due in part to ads on Pandora radio. Although it's too early to establish a causal connection, total dental ED/UC visits have declined by roughly 12 percent since the voucher program was introduced.

Healthy Smiles for All received three-year grant funding from the Health Resources and Services Administration (HRSA). The grant is supported and monitored by CCCWN.

Seniors & Their Caregivers

The population of tri-county residents 65 and older is growing rapidly. Between 2000 and 2040, the fastest growth will be seen among adults 75 years and older. This will result in an even greater need for accessible dental resources, especially for low-income and mobility-challenged patients.

In all three counties, a majority of stakeholders identified seniors as the people most likely to suffer from poor oral health. They expressed serious concern about the high cost of dentures and the loss of dental benefits as seniors move from Medicaid to Medicare. This underserved population also faces distinctive oral health risks, which include medication side effects as well as conditions related to chronic diseases such as osteoporosis and diabetes.

To meet this growing need, monthly or quarterly teledentistry and mobile services should be extended to homebound seniors as well as to long-term care and nursing home facilities, senior centers, veterans homes, and other focal points for senior care. In addition, all care providers for seniors should be educated on oral disease risk factors, symptoms and prevention. Ideally, this training effort would follow the proven First Tooth methodology.

Patients With Special Needs

People with special needs often have an elevated risk of dental disease, especially when sensory or behavioral issues make traditional dental appointments difficult. A few dentists offer services for this population, as do some larger providers such as Exceptional Needs Dental Services (ENDS), but access is often limited. Further, dental insurance plans do not cover behavioral interventions that help children to tolerate dental procedures without sedation or mechanical restraint. Once these children become adults, there are even fewer options for care. As with seniors, there is a growing need for specialized on-site services and for basic oral health training for caregivers.

Communities of Color

The diversity of our region's population is increasing, but culturally and linguistically appropriate dental care for communities of color and non-English-speaking families is not keeping pace with this demographic shift.

Addressing this problem requires systemic engagement, inclusion and relationship-building with community groups and advocates who serve specific communities of color and who understand their cultural attitudes, oral disease risk factors, and trusted knowledge sources.

This is especially important for Spanish-speaking communities, as many stakeholders report that they have been avoiding community health services due to fear of arrest and deportation. To continue providing timely care, it will be necessary to bring services directly to these communities in concert with trusted advocates or organizations.

OVERCOMING BARRIERS TO ACCESS

Benton, Lincoln and Linn counties are federally designated as dental health professional shortage areas (HPSAs) for low-income residents, migrant farm workers and the homeless. Each county also has a large medically underserved population, most of whom are either geographically isolated or concentrated in a handful of urban high-poverty hotspots. The availability of free time, transportation and affordable child care plays a major role in determining accessibility for these patients.

In the wake of the Affordable Care Act, more Oregonians than ever are eligible for oral health care. However, the system currently lacks the capacity to meet their needs, especially in Lincoln County. This has resulted in long wait times, making people less likely to seek care.

Teledentristry & Mobile Services

Dental vans have proven to be one of the most effective ways of reaching disadvantaged and geographically isolated populations. Since 2015, dental van service has expanded in all three counties, with more than 300 patients receiving care. This expansion has been especially effective in Lincoln County. However, dental van coverage remains poor south of Newport, and Lincoln and Linn counties face an ongoing shortage of volunteers.

Based on the success of this model, mobile services are now expanding to reach residents with special needs or limited mobility, including those in assisted living facilities, long-term care facilities and shelters. For maximum effectiveness, this approach should be combined with oral health education for all caregivers and facility staff.

Navigation & Awareness of Resources

Despite education and outreach efforts, many tri-county residents remain unaware of local oral health resources, making it difficult for them to understand and weigh their options. Often, the complexity of determining eligibility, completing paperwork, finding a provider, and arranging transportation is unmanageable for the high-risk patients who need care most.

To address both issues, age-appropriate information should be disseminated to specific populations. It should be targeted culturally and linguistically so that recipients will see it, understand it and act on it. The goal should be to facilitate access to oral health services and dental home referrals through every point of contact with high-risk populations, including low-income residents, seniors, communities of color, migrant workers, people with physical and mental disabilities, and the homeless.

Ongoing oral health training is also important for community health workers, traditional health workers, health navigators, pharmacists and allied professionals who work directly with underserved and disadvantaged clients. This training should provide competence in basic oral hygiene and oral disease prevention, as well as in navigating the system and connecting clients with a dental home.

ORAL HEALTH LITERACY & RISK AWARENESS

Underserved communities often lack basic oral health knowledge. As a result, their approach to care tends to be *reactive* rather than *preventive*: Unless they are in pain, they will postpone or avoid dental visits. This tendency is exacerbated by the difficulty of receiving preventive care.

To solve this problem, it's crucial to educate high-risk residents on the value of preventive care, healthy habits and risk avoidance while also making preventive visits and daily self-care easier and more affordable. Oral health care should be an integral part of health education from prenatal and early childhood programs to chronic disease education for adults and seniors. Targeted oral health messaging for all communities should help people to understand their options and to connect with care providers within a reasonable timeframe.

Two ongoing regional projects exemplify the value of this approach:

- CCCWN's *Smiles for Life* campaign promotes good oral health through an HRSA-funded grant.
- MTI is surveying adults about barriers to dental care in order to create an adult information program.

Efforts to educate the public should include more and better parenting education, as well as better collaboration with school districts and parent volunteers. This collaboration should include education on healthy diet and nutrition. Because sugary drinks and snacks are a leading cause of childhood tooth decay, schools and other child-oriented facilities should restrict the marketing of these products on their grounds and educate students and parents about the risks of junk foods.

Discouraging the consumption of junk foods, while also making a greater effort to target teens (whose utilization of dental services falls off after age 12), has the potential to prevent a variety of serious dental problems that most commonly affect 20- to 39-year-olds, including those that lead to the majority of costly ED/UC visits.

PREVENTION AND SYSTEMS OF CARE: MAJOR SUCCESSES SINCE 2015

- Community water fluoridation maintained in Lebanon
- Expanded oral health services through WIC and Head Start
- Health navigators at Benton and Linn OB/GYN clinics
- Dental screenings given with school hearing and vision tests
- Sealant program reaches all OHA priority schools in Benton and Linn counties
- *Healthy Smiles for All* project treated 1,600 patients
- Expanded dental van service reached more than 300 patients
- Increased use of dental voucher program
- *Smiles for Life* and *Clean Smiles = Healthy Bodies* campaigns
- Increased patient retention at Johnson Dental Clinic

Priority Area 2: Prevention and Systems of Care
Objectives and Strategies

Evidence-based behavioral and policy interventions will reduce the toll of oral diseases and achieve a high lifelong standard of oral health for all tri-county residents, regardless of income, background or location.

OBJECTIVE 1 **Evidence-based preventive strategies are implemented across the lifespan of every resident.**

Strategy 1 **Support optimally fluoridated community water systems.**

a. Monitor water fluoridation in fluoridated communities.

b. Educate the public and policymakers on the benefits and safety of water fluoridation.

Strategy 2 **Include oral disease prevention in prenatal and pediatric programs.**

a. Continue expanding First Tooth training to all family and pediatric health care providers, including through online media.

b. Expand prevention programs in sites serving low-income children and their parents, such as Head Start, WIC, Boys & Girls Clubs, day care centers, and social service agencies.

c. Train laypersons to screen for basic oral health problems and to provide referrals as needed.

Strategy 3 **Expand evidence-based, best-practice oral health programs for children and teens.**

a. Encourage development of school-based oral health access points for high school students.

Strategy 4 **Integrate oral health with chronic disease prevention and management.**

a. Expand and encourage dental screenings and risk assessments in chronic disease programs in clinical settings.

b. Include oral health info in diabetes, heart disease, HPV and stroke prevention materials.

c. Develop an oral health voucher program for cancer patients.

Strategy 5 **Expand community-based prevention, outreach and intervention to underserved and disadvantaged adults and seniors.**

a. Educate and encourage primary care providers, emergency department staff, and urgent care clinic staff to guide underserved patients toward access points for oral health services.

b. Integrate oral screenings, fluoride treatments and oral hygiene supplies into community settings for underserved adults.

c. Expand oral health education, oral disease prevention, in-service training and mobile outreach for staff at long-term care and nursing home facilities, senior centers, veterans homes, and other focal points for senior care.

d. Expand mobile outreach models to reach isolated and underserved patients.

e. Ensure that 211info.org has current information on regional oral health resources.

f. Identify and engage culturally competent volunteers and professional staff to act as navigators for oral health resources.

g. Provide dental care and education at community events and outreach fairs.

Priority Area 2: Prevention and Systems of Care
Objectives and Strategies – *continued*

OBJECTIVE 2 **Tri-county residents achieve oral health literacy and understand that oral health is inseparable from overall health.**

Strategy 1 **Develop a culturally appropriate communications plan to educate all residents on oral health.**

a. Identify and engage culturally and linguistically diverse providers, educators and health system navigators.

b. Tailor appropriate and actionable prevention messages to pregnant women, new parents, teens, adults, and seniors and their caregivers.

c. Promote culturally and linguistically appropriate nutrition and wellness education focusing on the impact of nutrition on oral health, the effects of oral disease on the body, and general oral health literacy.

Strategy 2 **Integrate oral health education into general health education.**

a. Advocate for the inclusion of age-appropriate oral health education in general health education curricula from early childhood programs through high school.

Strategy 3 **Collaborate with traditional health workers and allied professionals to provide basic preventive care and to connect community members with oral health providers.**

a. Create culturally appropriate First Tooth trainings for these workers.

b. Encourage the inclusion of culturally appropriate oral health education in the training for traditional health workers.

Strategy 4 **Integrate oral health education into the training for all care providers.**

a. Promote activities that foster interdisciplinary collaboration between the primary care team and oral health care providers.

b. Encourage collaboration and communication between oral health education institutions and community partners.

c. Support the development of culturally appropriate oral health curricula for all providers.

d. Educate all providers on the cultural and socioeconomic risk factors for oral disease.

e. Engage pharmacists and other health professionals in guiding community members toward access points for acute oral care and in providing information on the oral health component of chronic disease prevention and management.

STRATEGIC PLAN OUTCOME MEASURES, 2015–2020

The scope of this plan is limited by a lack of key data, especially at the county level. As we continue to work together to improve oral health in our region, we will need to gather new data, identify new problems, and assess the effectiveness of our interventions.

Priority Area 1: Infrastructure

	Target Date	Status
The Benton, Lincoln, Linn Regional Oral Health Coalition's oral health coordinator and a consultant complete a directory of regional oral health data	2016	Completed
All IHN-CCO boards and advisory bodies include at least one dental professional	2016	Completed
Oral health is comprehensively integrated into IHN-CCO activities	2017	In Process
Oral health coordinators serve residents in each county through public health departments, nonprofits and other entities	2017	In Process
All school-based health centers (SBHCs) integrate oral health promotion and education	2018	In Process
All federally qualified health centers (FQHCs) integrate oral health promotion and education	2018	In Process

Priority Area 2: Prevention & Systems Of Care

	Baseline	Current	2020 Target	Change %	Data Source
Maintain or expand community access to optimally fluoridated water	—	—	—	—	ODWS [1]
Children 0 to 5 on OHP/Medicaid with a dental visit in the last year	—	—	—	—	IHN-CCO
Children 6 to 9 with decay experience	51.0% [2]	—	45.9%	10% ↓	OHA
Children 6 to 9 on OHP/Medicaid with sealants on at least one permanent molar	18.6% [3]	24.1% [4]	28.6%	10 pp ↑	IHN-CCO
Eighth graders with decay experience					
Benton County	63.6% [5]	65.3% [6]	57.2%	10% ↓	OHA
Lincoln County	73.2% [5]	74.9% [6]	65.9%	10% ↓	OHA
Linn County	72.6% [6]	72.6% [6]	65.3%	10% ↓	OHA
11th graders with a dental visit in the previous year					
Benton County	79.4% [5]	83.6% [6]	71.5%	10% ↑	OHA
Lincoln County	75.3% [5]	72.3% [6]	67.8%	10% ↑	OHA
Linn County	72.1% [6]	72.1% [6]	64.9%	10% ↑	OHA
Emergency department / urgent care utilizations for nontraumatic dental pain	3,635 [7]	3,204 [8]	3,272	10% ↓	Samaritan

Data Sources

Some statistics were not available by the time of publication. This information will be included in future reports.

1. Oregon Drinking Water Services.
2. Oregon Health Authority, *Oregon Smile Survey,* 2013.
3. InterCommunity Health Network CCO, 2015.
4. InterCommunity Health Network CCO, 2016.
5. Oregon Health Authority, *Oregon Healthy Teens Survey,* 2013.
6. Oregon Health Authority, *Oregon Healthy Teens Survey,* 2015. (Note: The 2013 survey did not include responses from Linn County, so 2015 has been used as the baseline year.)
7. Samaritan Health Services ED/UC data, 2014.
8. Samaritan Health Services ED/UC data, 2016.

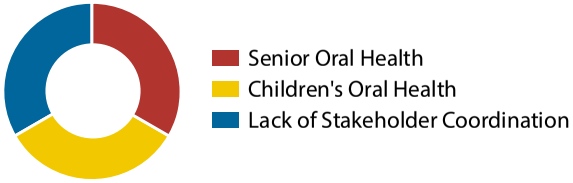
APPENDIX: STAKEHOLDER SURVEY QUESTIONS & FINDINGS

The following questions were used in interviews with expert stakeholders working on oral health issues in Benton, Lincoln and Linn counties. These interviews were conducted in February and March 2017. In addition, the questions were answered collectively by the Lincoln County Oral Health Coalition in February 2017.

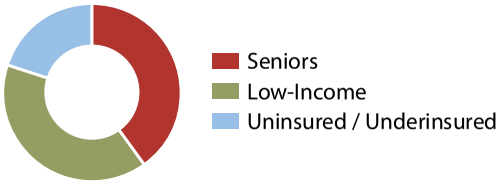
1. What is the most important oral health problem in your county or region as of 2017?
2. Who is most likely to have oral health problems in your county or region as of 2017?
3. What keeps people in your county or region from receiving oral health care?
4. The tri-county *Strategic Plan for Oral Health* released recommendations for improving regional oral health in 2015. Has your agency or organization implemented any of these recommendations? If so, which ones?
5. Have these recommendations had a positive effect? Please explain.
6. What are the most important or promising steps your county, region or organization has taken toward improving oral health since 2015?
7. What are the most important steps that still need to be taken?
8. If you could do just two things to improve oral health in your county or region over the next year, what would they be?
9. What opportunities for collaboration on oral health with other agencies or providers do you see?
10. Which data sources do you rely on to track oral health trends in your region? What information gaps exist, if any?
11. Any additional comments or closing thoughts?

BENTON COUNTY

What is the most important oral health problem as of 2017?

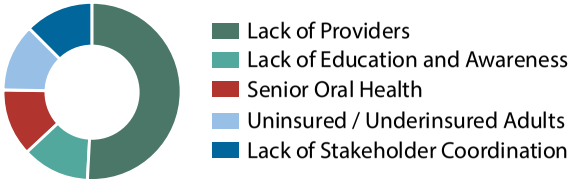


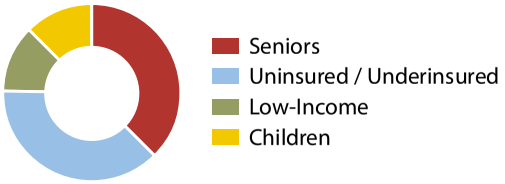
Who is most likely to have oral health problems as of 2017?

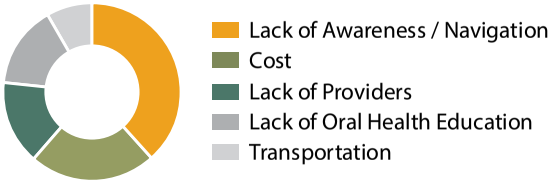


What keeps people from receiving oral health care?

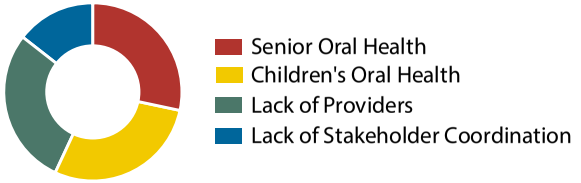
LINCOLN COUNTY

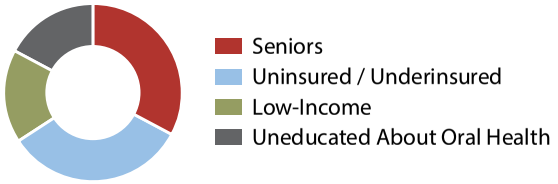


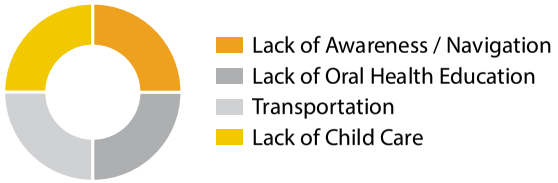




LINN COUNTY







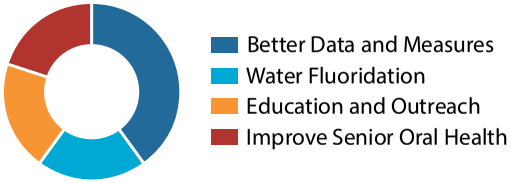
Which Strategic Plan recommendations have you implemented / are you implementing?

- IHN-CCO integrates oral health
- Monitor county-level surveillance data (ED/UC use, *Healthy Smiles* program use, CCCWN evaluation data)
- Collaborate with allies to build community capacity
- Support fluoridated water
- Promote oral exams and treatment for pregnant women
- Expand First Tooth to all family and pediatric care providers
- Include a dental screening along with mandatory vision and hearing tests
- Foster collaboration and coordination between community partners to expand dental sealant programs
- Expand access to screenings and care for high-risk children (Head Start, WIC)
- Encourage development of school-based oral health access points for high school students (Lincoln County only)
- Include dental screening and risk assessments in chronic disease programs (e.g., diabetes, heart disease)
- Expand prevention, outreach and intervention to underserved and disadvantaged adults and seniors (e.g., voucher program, co-location)
- Develop a culturally appropriate communications plan to educate all residents on oral health
- Support deployment of teledentistry and mobile dentistry units in underserved rural and urban areas

BENTON COUNTY

What are the most important or promising steps taken toward improving oral health since 2015?

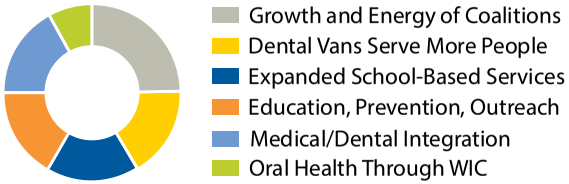
What are the most important steps that still need to be taken?



If you could do just two things to improve oral health over the next year, what would they be?

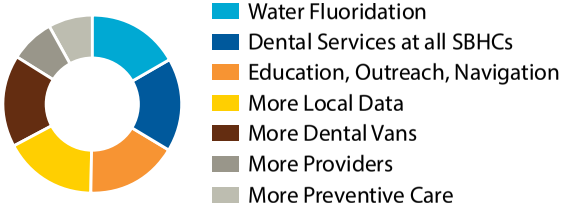
LINCOLN COUNTY

What are the most important or promising steps taken toward improving oral health since 2015?



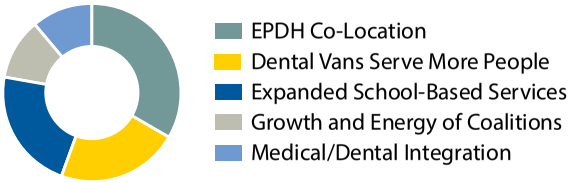
What are the most important steps that still need to be taken?

If you could do just two things to improve oral health over the next year, what would they be?

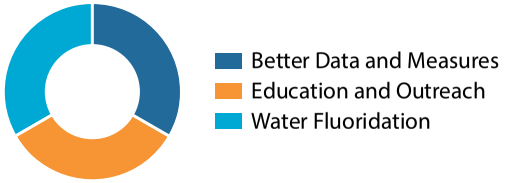


LINN COUNTY

What are the most important or promising steps taken toward improving oral health since 2015?



What are the most important steps that still need to be taken?



If you could do just two things to improve oral health over the next year, what would they be?

BENTON, LINCOLN LINN STRATEGIC PLAN FOR ORAL HEALTH: SUMMARY OF STAKEHOLDER FINDINGS & RECOMMENDATIONS

MAJOR SUCCESSES

Regional

- IHN-CCO has encouraged dental professionals to participate on boards
- IHN-CCO medical/dental integration pilot
- Availability of IHN-CCO data
- Coalitions are diverse, energized and effective
- *Healthy Smiles for All* program
- *Smiles for Life* program
- EPDH co-location project
- Expanded school-based services
- Voucher care (correlates with reduced ED/UC use)
- Services for children and pregnant mothers through WIC, Head Start, etc.
- Dental screenings with hearing and vision tests
- Dental van service expanded (300 patients seen)

Benton County

- Sealant program (17 schools added in Benton/Linn, including all OHA priority schools)
- Health navigators at OB/GYN clinics
- Patient retention at Johnson Clinic: 37 hygiene charts in 2015; 350 hygiene charts now

Lincoln County

- Lincoln Co. Oral Health Coalition is reinvigorated
- Lincoln Co. Oral Health Coalition has three oral health professionals that volunteer at local schools
- Dental vans expanded and are very effective

Linn County

- Water fluoridation maintained in Lebanon
- River Center (Pandora ads boosted visits)
- Health navigators at OB/GYN clinics
- EPDH co-location (1,600 patients seen)
- Sealant program (17 schools added in Benton/Linn, including all OHA priority schools)
- Lebanon dental screening rules allow info sharing between school and Johnson Clinic
- Patient retention at Johnson Clinic: 37 hygiene charts in 2015; 350 hygiene charts now

MAJOR CHALLENGES

Regional

- Lack of consistency and coordination
- Public opposition to water fluoridation
- Senior oral health (cost and availability of dentures; Medicaid to Medicare transition)
- People most in need often lack basic oral health knowledge (care is reactive, not preventive)
- Patients who get access through programs (e.g., vouchers) don't always follow through
- More people eligible for care, but system lags in meeting their needs (long wait times)
- Difficulties accessing care and long wait times make preventive care visits less likely
- Difficulty of navigating the system affects adults and children; parents don't know how to get care
- Lack of provider/service info may lead to duplication of effort
- Inadequate care for seniors and people with disabilities who are homebound or in assisted living facilities
- Rising fear and distrust among migrants
- Persistent barriers to access such as transportation and the cost of child care

Lincoln County

- Huge demand for care, but few providers
- Difficulties launching co-location project
- Lack of dental van volunteers
- Dental van coverage is poor south of Newport
- Need to keep coalition going and maintain staff support after the *Healthy Smiles* grant runs out

Linn County

- Children in some rural areas lack access
- Lack of dental van volunteers
- Difficulties securing consent and transportation from Boys & Girls Clubs in Lebanon and Sweet Home to Johnson Clinic

MAJOR OPPORTUNITIES

Regional

- Consistent communication and coordination between local and regional partners
- Continue educating the population on water fluoridation safety and benefits
- More services for underserved adults and seniors; reduce wait times, especially for preventive visits
- Better parenting education
- More collaboration with schools and parent volunteers
- Targeted oral health messaging for all communities
- Help people to understand and navigate the system
- Targeted outreach and care for migrant population
- More involvement of dental professionals in oral health coalitions
- Expanded services for homebound seniors, people with disabilities and people in assisted living facilities (train staff in basic care, and then have monthly or quarterly visits onsite)
- Dental services in all SBHCs
- Work with Boys & Girls Clubs to establish an onsite hygienist during afterschool programs
- Work with local schools to eliminate school vending machines that sell sugary drinks and snacks

Data Needed

- Better local data collection and outcome measures: need hard numbers to demonstrate impact
- Inventory of services and providers: Who's doing what, and for whom? Where are the gaps? Are services being duplicated regionally, locally or for specific populations?
- Inventory of cultural attitudes: What do people think they need, vs. what they actually need?
- Follow-up tracking of ED/UC data: Where are patients being referred? Did they go? If so, did the care they got resolve their condition?
- Number of youth and adults served under OHP, and by which provider
- Transient population of Lincoln County

Optimal oral health is fundamental to our well-being, happiness, productivity and quality of life.

BENTON, LINCOLN, LINN REGIONAL ORAL HEALTH COALITION OF OREGON

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