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Overview

OHSU Knight Cancer Network

Launched in October 2015, the OHSU Knight Cancer Network is a statewide cancer outreach program. Community-based health organizations, hospitals, medical oncology practices and physicians that join the network gain access to OHSU Knight Cancer Institute expertise in cancer prevention, education, diagnostics, treatment and survivorship. The network is the first of its kind in Oregon that also offers support for directing patients to appropriate clinical trials.

The OHSU Knight Cancer Network is part of OHSU’s commitment to increase engagement with communities statewide. The network’s goals are to provide educational and training opportunities for health care professionals as well as develop strong support programs within community health care organizations. These goals are meant to meet patients’ needs more effectively by ensuring they have access to the best treatment at the most appropriate and convenient location.

The introduction of the OHSU Knight Cancer Network in Coos Bay builds on a longstanding collaborative relationship between the OHSU Knight Cancer Institute and Bay Area Hospital (BAH) in Radiation Therapy. Since 2008, Bay Area Hospital’s radiation oncologist has spent one week per quarter at OHSU seeing patients and teaching and attending multidisciplinary tumor conferences with other specialists at the OHSU Knight Cancer Institute. To ensure uninterrupted care for BAH patients, an OHSU radiation oncologist travels to Coos Bay to cover the Radiation service. In 2014, Bay Area Hospital received a grant from the OHSU Knight Cancer Institute Community Partnership Program to establish a telemedicine program for oncology specialty care consultations.

Bay Area Hospital Needs Assessment

As a first step in supporting the Bay Area Hospital cancer services, the OHSU Knight Cancer Network has conducted a cancer-specific community needs assessment. This assessment was completed throughout the course of several months and includes the identification and aggregation of cancer incidence, mortality, screening and prevention behaviors in Coos County and the surrounding region.

These data were augmented by targeted interviews with key community stakeholders in the medical field, policy makers and public health employees. These targeted interviews focused on health care conditions in the community, including:

• How the community interacts with tobacco
• What survivorship programs are available, if any
• What resources are available to women and high-risk patients, such as rural community members and the disabled

The purpose of this assessment is to provide a baseline understanding of the state of cancer in Coos County and surrounding communities, as well as real and perceived needs relating to cancer prevention and control.
Coos County and surrounding communities have a higher incidence rate of cancer than the rest of Oregon, and frequently rank as the No. 1 county for tobacco use. Our assessment includes these and other facts, such as:

- Overall cancer rate, Coos County: 11 percent
  - Oregon cancer rate: 8.5 percent
  - Cancer is the No. 1 cause of death in Coos County
- Tobacco use is reported by 33.5 percent of Coos County residents, compared to 21.8 percent for Oregon residents as a whole
  - Reported use of smokeless tobacco (most often “chew”) in Coos County is more than twice the rate of Oregon
- Statistics from neighboring Curry and Douglas counties are often used in this assessment to show regional comparisons:
  - Curry County is largely rural, without a major population center, relying on Josephine and Coos Counties for many health and human services
  - Much of rural Douglas County is geographically closer to Coos Bay and surrounding communities, and thus relies on Coos County for their health and human services
Map 1. Coos, Curry and Douglas Counties
Community Demographic Profile

Coos County is a historically rural community, with a strong tradition of timber harvesting and fishing. As the industry has changed in recent decades due to federal and statewide cuts to the timber harvest, the demographics have shifted from a young working-class population to an older community. Respondents from our targeted interviews indicated that the high-quality medical care in Southwest Oregon attracts many retirees from neighboring California and Nevada. This shift has contributed to an additional strain on the medical community, without the added tax base to help fund medical infrastructure.

COUNTY RESIDENTS ARE **38.4** PERCENT RURAL

50.8 PERCENT ARE FEMALE

59.6 PERCENT LIVE WITH ONE OR MORE CHRONIC DISEASES

Source: U.S. Census Bureau 2013
Chronic Diseases in Coos County vs. Oregon

Table 1. Chronic Diseases

<table>
<thead>
<tr>
<th>Condition</th>
<th>Coos County</th>
<th>Oregon</th>
</tr>
</thead>
<tbody>
<tr>
<td>One or more</td>
<td>59.6%</td>
<td>52.3%</td>
</tr>
<tr>
<td>Arthritis</td>
<td>31.1%</td>
<td>24.5%</td>
</tr>
<tr>
<td>Depression</td>
<td>30.1%</td>
<td>25.8%</td>
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<tr>
<td>Asthma</td>
<td>14.0%</td>
<td>10.4%</td>
</tr>
<tr>
<td>Cancer</td>
<td>11.0%</td>
<td>8.5%</td>
</tr>
<tr>
<td>Diabetes</td>
<td>8.4%</td>
<td>8.2%</td>
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Table 2. Age Distribution

<table>
<thead>
<tr>
<th>Age Group</th>
<th>Coos County</th>
<th>Oregon</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
<td>%</td>
</tr>
<tr>
<td>&lt;19</td>
<td>11,895</td>
<td>19.1%</td>
</tr>
<tr>
<td>18-64</td>
<td>35,899</td>
<td>57.6%</td>
</tr>
<tr>
<td>40-64</td>
<td>21,955</td>
<td>35.3%</td>
</tr>
<tr>
<td>50-64</td>
<td>15,306</td>
<td>24.6%</td>
</tr>
<tr>
<td>&gt;65</td>
<td>14,511</td>
<td>23.3%</td>
</tr>
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</table>

Fig. 4. An Aging Population

Coos County vs. Oregon Population

<table>
<thead>
<tr>
<th>Age Group</th>
<th>Coos County</th>
<th>Oregon</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pop &gt;65</td>
<td>15.5%</td>
<td>21.8%</td>
</tr>
<tr>
<td>Pop &lt;18</td>
<td>23.3%</td>
<td>18.5%</td>
</tr>
</tbody>
</table>

Percentage of population

- **Oregon**
- **Coos County**
Health Insurance

Coos County lags behind the state in terms of uninsured citizens, although following implementation of the Affordable Care Act, these rates have been improving in recent years.

A frequent comment in our targeted interviews with health care professionals is that due to the sudden influx of newly insured patients, demand for services far exceeds the supply of medical providers. OHSU’s Office for Rural Health considers Coos County a medically underserved population.

Although many low-income patients have been able to sign up for Medicaid, the cost of taking time off work and traveling to a clinic for care can also become a burden and result in difficulties accessing care, particularly in rural areas.

Most people interviewed responded with concern over the number of people living in poverty in Coos County. However, due to the expansion of Medicaid, and the efforts of the local Coordinated Care Organization (Western Oregon Advance Health LLC), Coos and Curry counties report lower than state-average rates of uninsured citizens living at or below the poverty line.

Health care options for low-income citizens have decreased in recent years. Based on responses from our targeted interviews, a local federally qualified health center (FQHC) has recently stopped providing free or reduced-cost Pap tests and mammograms. Additionally, the Planned Parenthood in neighboring Florence has recently closed its doors.

Transportation is a constant struggle for low-income or disabled rural patients. To date, few options are available for people who do not drive or are unable to find transportation on their own. Possible solutions mentioned in our targeted interviews include arranging taxi credits, soliciting the Coordinated Care Organization (CCO) to improve its nonemergency transportation service to include low-income patients, and establishing a ride-share program for patients traveling on similar days (this suggestion involves HIPAA-related concerns, however). Reaching out and learning from CCOs that also serve rural patients about how they handle nonemergency rural patient healthcare needs can also be considered (e.g., Community Paramedicine project in Central Oregon).

Uninsured Rate by Age Group and Income

Fig. 5. Uninsured Rate by Age Group

Fig. 6. Uninsured Rate by Income
**Education and Socioeconomic Status**

High-paying blue-collar jobs used to flourish in Coos County, providing the backbone to its economy. With the shuttering of many mills, and the recent economic recession, Coos County has seen an increase in citizens at or below the poverty line (17.8 percent, compared with Oregon at 16.2 percent).

Children and families have been hit hard by the economic downturn:
- 60 percent of students are eligible for free or reduced lunches
- 57 percent of pregnant women in Coos County received benefits or services from the WIC program
- 18 percent of residents in Coos County could not see a doctor due to the cost
- Unmarried mothers accounted for 47.4 percent of all births in 2014 in Coos County, compared to 36 percent for the state of Oregon

Access to quality education can help low-income citizens lift themselves out of poverty:
- 88 percent of Coos County residents over the age of 18 have a high school diploma or higher
  - 18 percent of Coos County residents have a bachelor’s degree or higher, compared with 29.7 percent in Oregon

Unemployment remains a concern for Coos County and surrounding communities. Unemployment rates for Coos County (6.9 percent), Curry County (8.2 percent) and Douglas County (7.2 percent) remain above the last reported (as of January 2016) state unemployment rate of 5.7 percent.

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**Fig. 6. Percentage of Population by Highest Level of Education**

**Table 3. Percentage of Population and Poverty Line**

<table>
<thead>
<tr>
<th></th>
<th>At or below 138% of poverty line</th>
<th>Between 138% and 400% of poverty line</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
<td>% of total population</td>
</tr>
<tr>
<td>Coos County</td>
<td>14,936</td>
<td>31.7%</td>
</tr>
<tr>
<td>Oregon</td>
<td>832,825</td>
<td>25.6%</td>
</tr>
</tbody>
</table>
**CHAPTER 2: Cancer Incidence and Mortality**

**Fig. 7. Cancer Incidence Rates in Coos County**

- Prostate*, breast*, lung and bronchus, and colon and rectal cancers are the top four sites of cancer in Coos County.
- Coos County reported one of the highest incidence rates of lung cancer (76.4) in the state, higher than both the state of Oregon (61) and the U.S. (63.7).

**Fig. 8. Cancer Incidence Rates**

- Oral cavity and pharynx cancer in Coos County is 14.7/100,000, compared with Oregon at 10.9 and the U.S. at 11.3.
  - Curry County was higher at 18.4/100,000.
- Females under the age of 50 years are at a higher risk of cancer than males.
  - Breast cancer is the most common cause of cancer in women under the age of 50.
- This trend reverses after age 50, with males over the age of 50 at a higher risk of developing cancer than women.

*Prostate and breast cancer rates are for male and female populations respectively.

Source: NCI U.S. Cancer Incidence Dataset.
• Coos County has the highest incidence rate of esophagus cancer of any county in Oregon; this is followed by Josephine, Columbia and Clatsop counties.

• Curry County has the highest incidence rate of oral cavity and pharynx cancer of any county in Oregon; this is followed by Klamath, Josephine and Coos counties.

• Coos County has the second highest incidence of lung or bronchus cancer among males out of all counties (88.2 cases per 100,000); only Morrow County was higher.
  - Women were also shown to have a high incidence rate at 66.1 per 100,000 residents.

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Fig. 8b. Cancer Incidence Rates: Aged 50+

Fig. 8c. Cancer Incidence Rates: Aged <50

Fig. 9. Lung and Bronchus Cancer by Sex
Table 3. Cancer Mortality Rates

<table>
<thead>
<tr>
<th>All Cancer Sites: Annual Death Rate per 100,000</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
<tr>
<td>Oregon</td>
</tr>
<tr>
<td>United States</td>
</tr>
<tr>
<td>Coos County</td>
</tr>
<tr>
<td>Curry County</td>
</tr>
<tr>
<td>Douglas County</td>
</tr>
</tbody>
</table>

- Curry County is ranked No. 2 in Oregon for colon cancer mortality
- Coos County is ranked No. 1 in Oregon for oral and pharynx cancer, as well as for lung and bronchus cancer mortality
  - Douglas County is ranked fourth
- Douglas County is ranked No. 3 in Oregon for lung and bronchus cancer mortality

Fig. 10. Breast, Prostate, Esophagus, Oral Cavity and Pharynx and Lung and Bronchus Cancer Occurrence
Fig. 11. Mortality Rates

Fig. 11a. Lung and Bronchus Cancer Death Rates (Males)

Fig. 11b. Oral and Pharynx Cancer Death Rates (Males)

Fig. 11c. Annual Mortality Rate per 100,000 Residents
• Coos County has one of the highest rates of adult smoking in Oregon:
  - 27.5 percent of Coos County residents are cigarette smokers, compared with Oregon (19 percent)

• 18 percent of Coos County residents reported binge drinking, compared with Oregon (16 percent) and the U.S. (10 percent)

• 28.6 percent of Coos County residents are obese, compared to the State of Oregon (25.9 percent)
  - Curry and Douglas County residents have an even higher rate of obesity (40.3 and 34.4 percent respectively)

• 22 percent of Coos County residents reported physical inactivity, with only 13 percent of residents meeting the CDC recommendations for physical activity, compared with the State of Oregon (25.1 percent) and Douglas County (21.3 percent)

• 19.3 percent of Coos County residents consumed fruits and vegetables five or more times per day, compared with Oregon 21.9 percent in Oregon and 28.5 percent in Curry County

Cancer Screening

- Coos and Curry counties are well below the state average for colorectal cancer screening (57.7 and 57.5 percent, compared to 61.1 percent)

- Bay Area Medical Center (BAMC) holds annual cancer screening events as part of their cancer center accreditation:
  - Some interviewees expressed that they hope screening events will be advertised more broadly in the future, such as: reaching out to all primary care providers or creating a Facebook event

Fig. 13. Percentage of Population Using Tobacco Products

Source: Oregon Public Health Dataset

Fig. 14. Percentage of Residents Age 50–75 Screened for Colorectal Cancer

Source: Oregon Public Health Dataset
Tobacco Use

- Tobacco-linked deaths: 250 (out of 860; 29.1 percent of total deaths)
  - 80 lung and bronchus cancer diagnoses in Coos County: 17.8 percent of all cancer diagnoses
  - Oregon lung and bronchus cancer diagnoses – 13.6 percent of all cancer diagnoses
  - Oral cavity and pharynx diagnoses in Coos County – 3.1 percent of all cancer diagnoses
  - Oregon oral cavity and pharynx diagnoses: 2.5 percent of all cancer diagnoses

- Tobacco use in Coos County: 35.5 percent, vs. 21.8 percent for the state of Oregon

- Smokeless tobacco use in Coos County: 17.2 percent, vs. 7.7 percent for the state of Oregon

- Coos County babies are twice as likely to be born to a mother who uses tobacco while pregnant (23.5 percent, which remains nearly unchanged since 2000)

COOS COUNTY CHILDREN ARE THREE TIMES MORE LIKELY TO BECOME LIFELONG TOBACCO USERS THAN CHILDREN BORN IN HOOD RIVER COUNTY

Fig. 15. Tobacco Use of 8th and 11th Grade Students

<table>
<thead>
<tr>
<th>8th Graders</th>
<th>11th Graders</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Chewing tobacco (males)</strong></td>
<td>2.7%</td>
</tr>
<tr>
<td>Any non-cigarette</td>
<td>8.0%</td>
</tr>
<tr>
<td>Cigarette smoking</td>
<td>4.3%</td>
</tr>
<tr>
<td>Any tobacco use</td>
<td>7.4%</td>
</tr>
</tbody>
</table>

Reported tobacco use

<table>
<thead>
<tr>
<th>8th Graders</th>
<th>11th Graders</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Chewing tobacco (males)</strong></td>
<td>11.2%</td>
</tr>
<tr>
<td>Any non-cigarette</td>
<td>8.0%</td>
</tr>
<tr>
<td>Cigarette smoking</td>
<td>3.4%</td>
</tr>
<tr>
<td>Any tobacco use</td>
<td>9.9%</td>
</tr>
</tbody>
</table>

Reported tobacco use
Fig. 16. Tobacco-linked Deaths in Coos County vs. Oregon

Tobacco-linked Deaths in Coos County

- 49% Not linked
- 29% Linked
- 22% Unknown

Tobacco-linked Deaths in Oregon

- 56% Not linked
- 21% Linked
- 23% Unknown

Fig. 17. Help With Smoking Cessation

<table>
<thead>
<tr>
<th>Location</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oregon</td>
<td>65.9%</td>
</tr>
<tr>
<td>Coos County</td>
<td>54.8%</td>
</tr>
<tr>
<td>Curry County</td>
<td>75.2%</td>
</tr>
<tr>
<td>Douglas County</td>
<td>70.3%</td>
</tr>
</tbody>
</table>

Percentage of adults who recall being asked by their health care provider whether they smoke.
Women's Health

Fig. 18. Percentage of Women (50–74) Having an Annual Mammogram

- Respondents in our targeted interviews indicated that services for low-income or at-risk women are diminishing:
  - The Waterfall Clinic offers a sliding scale for Women’s Health services, including mammograms, Pap tests, annual exams and cervical and breast cancer screenings
  - Coos County Public Health offers a free health screening for women including a pelvic exam, Pap test, clinical breast exam and referral for mammogram

Sexual and reproductive health:

- 6.4 percent of married and 8.8 percent of unmarried pregnant women reported inadequate prenatal care

- 10 percent of eighth graders in Coos County reported being sexually active; by the 11th grade this jumps to 44.5 percent, compared with 41.1 percent of Oregon 11th graders
  - Only 68 percent of sexually active 11th graders reported using a condom during their most recent intercourse
  - 6.3 percent of 11th graders reported using no birth control during their most recent intercourse
  - Unprotected sex increases risk for transmission of HPV, which has been shown to increase the risk of cervical cancer

- 63.9 percent of women between the ages of 50 and 74 in Coos County reported having a mammogram in the past year, compared to Oregon (75.3 percent)

- 75.2 percent of women between the ages of 21 and 65 in Coos County reported having a Pap test within the past three years, compared to Oregon (81.7 percent)
HPV vaccination rates for Coos County are lower than the overall rates for the state of Oregon. In order to meet the Healthy People 2020 goal of 80 percent, both the state of Oregon and Coos County will need to drastically improve HPV vaccination rates.

- Neighboring counties, such as Curry and Douglas, are falling behind:
  - Curry County reported only 10.8 percent of women between the ages of 13 and 17 with all three doses of the HPV vaccine, which is the lowest in the state.

- Respondents in our targeted interviews indicated a rise in "anti-vaccine" patients.

**Fig. 20. HPV Vaccination Rates for Girls Between the Ages of 13–17**

- Oregon: 28.3% for 3-dose, 55.9% for 1+ dose
- Coos: 23.9% for 3-dose, 50.9% for 1+ dose
- Curry: 10.8% for 3-dose, 30.0% for 1+ dose
- Douglas: 20.7% for 3-dose, 40.2% for 1+ dose

**Fig. 19. Percentage of Women 21–65 Having a Pap Test in the Past Three Years**

- Oregon: 81.7%
- Coos County: 75.2%
- Douglas County: 86.3%
Summary of Interview Findings

In total, seven stakeholders were identified and interviewed; our population of respondents included practicing primary care physicians, county commissioners, state senators and Public Health Department representatives. These interviews assessed four main topics:

- Survivorship programs
- Tobacco
- Women’s health
- Community access to health care

Each interview lasted 30–60 minutes; the majority of these interviews were conducted over the phone. Of those interviewed, two were practicing primary care physicians, one was a county commissioner, one was a state senator, two worked for the Public Health Department and one worked for a local health care service provider.

Survivorship

Assessment: None of the interviewees have any knowledge of currently operating survivorship programs. Most recommend setting up a system that enables community leaders or hospital staff to facilitate a Coos County-based program. They need a push to get started and perhaps a form of continued support after initiation.

Resources currently available:
- Cancer Relay for Life – very active
- Epilepsy and mental health support groups
- Hospice coordinates grief counseling – may have resources
- Hospital foundation – framework for drawing people with a natural interest in cancer survivorship

Recommendations from interviewees:
- Interviewees see two possible approaches the OHSU Knight Cancer Network can take to help facilitate survivorship programs:
  – Hands-on approach: Send a coordinator down once a month, or hire a staff locally to run a network of survivorship meetings. Once these meetings are established, the Knight could appoint a local leader either within the group, or a volunteer within the community
  – Hands-off approach: Provide resources directly to a program organized and coordinated through a local organization
- There are people within the community with interest in starting survivorship programs – give them the tools and the vision
- Put together a package that includes currently available resources and programs. Are there national organizations that organize survivorship programs? Coordinate with hospital
- Initiate focus groups to better assess the needs of the cancer survivor community
- PCPs may be willing to help facilitate survivorship programs as these will reduce visits and/or length of appointments with PCPs. PCPs currently spend much of their time with cancer survivors discussing coping with cancer’s long-term effect/recurrence
**Tobacco**

**Assessment:** Problem is largely cultural and no single program is going to fix it. Cessation programs need to focus on providing a resource to those who want to utilize it: People will not use it if they feel pressured. Nicotine replacement, group therapy and quit lines should be available to all regardless of health plan. Limit marketing, exposure and accessibility of tobacco products to youth, without it seeming like “Big Brother” is trying to restrict their individual freedoms.

**Resources currently available:**
- Tobacco Quit Line
- CCO Tobacco Cessation Program

**Tobacco attitudes:** Poverty, lack of education, libertarian ideals and the remnants of logging culture perpetuate a positive attitude towards tobacco that, for many people, outweighs the health concerns.

**Recommendations from interviewees:**
- Marketing tobacco to youth is still a problem in the community
- Community health improvement plan (CHIP) has a youth tobacco prevention/cessation subcommittee that could help prevent future generations from starting to use tobacco
- It helps that some places are smoke-free: Get it out of sight
- Quit Line fulfills a need that the CCO program does not
  - Transportation is a limiting factor for CCO classes
  - Mental/physical health disabilities make classes difficult: People are hesitant to go to a group session
- Smokers don’t really feel that the Quit Line can help them
- Smokers want a drug to make them quit – take the easy way out
- Explore potential to partner with the CHIP youth tobacco prevention/cessation subcommittee

**Women’s Health**

**Assessment:** Too few resources for the demand. Need reduced-cost or free services to meet the need of low-income residents. Almost zero advocacy and not enough public education on reproductive or women’s health.

**Resources currently available:**
- Waterfall Clinic – recent reduction of services (lack of funding)
- Planned Parenthood – outreach clinics have seen a reduction in service; closest full-service clinic is in Cottage Grove
- NBMC Bandon Clinic
- Public Health Department

**Recommendations from interviewees:**
- Hospital network could explore options for sliding scale payments or reduced-cost screening. There is some foundation money for this, but not enough. Fundraising could improve this
- There is a great need for reaching out to rural areas. Rural communities are very independent. Physicians could reach out to one another in order to develop better partnerships. Bandon and Coquille have already done this. New CCO is going to try to facilitate these partnerships
- Contradictory information – recommendations have changed, and patients hear what they want to hear
Community Access to Health Care

Assessment: Transportation is the biggest hurdle to getting rural citizens access to health care. Very little reaching out is done to populations outside of the city. At-risk populations (seniors, low-income, non-English speakers) lack access to health care.

Resources currently available:
• BAMC offers screening events
• CCO is taking over nonemergency medical transportation service
• Vouchers through taxi companies
• North Bend Medical Center (NBMC) has satellite sites that reach out to rural communities

Recommendations from interviewees:
• Culture of poverty: People do not feel they have the ability or “free will” to take advantage of resources – County struggles with this constantly – how do we get people to believe that they can change their circumstances?
• Screening events: not really advertised through other providers and no follow-up
• Need better communication between screening events and PCPs and/or CCO
• Sponsorship/scholarships for low-income residents – like gas cards, cab vouchers

<table>
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<th>Identified Needs</th>
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<tbody>
<tr>
<td><strong>Need</strong></td>
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<tr>
<td>Survivorship Programs</td>
</tr>
<tr>
<td>Tobacco Cessation</td>
</tr>
<tr>
<td>Women's Health</td>
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</tbody>
</table>
References


2014 Coos County Factsheet (Oregon Health Authority)


