



2019–2022 Community Health Needs Assessment

Adopted: June 21, 2019

PeaceHealth St. John Community Health Board



PeaceHealth
St. John Medical Center

Table of Contents

I. Executive Summary	1
II. Prior CHNAs: Implementation Plan Progress and Accomplishments	4
III. State, Regional and Community CHNA Context	7
IV. Overview of the PeaceHealth St. John Service Area	9
V. Health Status.....	12
VI. PeaceHealth System Defined System Level Gaps.....	27
VII. Community Input and Convening.....	31
VIII. Next Steps	33
IX. Data Sources	33



I. Executive Summary and Key Takeaways

Overview

PEACEHEALTH

Caring for those in our communities is not new to PeaceHealth. It has been a constant since the Sisters of St. Joseph of Peace, PeaceHealth's founders, arrived in Fairhaven, Washington, to serve the needs of the loggers, mill workers, fishermen and their families in 1890. Even then, the Sisters knew that strong, healthy communities benefit individuals and society, and that social and economic factors can make some community members especially vulnerable. The Sisters believed they had a responsibility to care for the vulnerable, and that ultimately, healthier communities enable all of us to rise to a better life. This thinking continues to inspire and guide us toward creating a better future for the communities we serve.

Today, PeaceHealth is a 10-hospital, integrated, not-for-profit system serving communities in Alaska, Washington and Oregon. PeaceHealth is a Catholic healthcare ministry with a Mission to *carry on the healing mission of Jesus Christ by promoting personal and community health, relieving pain and suffering, and treating each person in a loving and caring way.*


PeaceHealth has embraced the Community Health Needs Assessment (CHNA) process as a means of realizing our Mission and engaging and partnering with the community in identifying disparities and prioritizing health needs. We also align our work to address prioritized CHNA needs.

PEACEHEALTH ST. JOHN MEDICAL CENTER

PeaceHealth St. John Medical Center (PeaceHealth St. John) is a 346-bed licensed acute care hospital in Longview, Washington. It is the sole hospital located in Cowlitz County, providing, among other programs and services, a comprehensive array of general acute care and specialty services including cancer care, cardiovascular services, critical care, dialysis, emergency services, hospice, imaging, surgery, acute rehabilitation and women and children's services. In 2017, more than 7,500 individuals received inpatient care at PeaceHealth St. John. PeaceHealth St. John provided more than \$13,879,000 in community benefit in 2018. Nearly 27% of its patient days were to patients with Medicaid or self-pay, the 10th highest percentage of any hospital in the State.

2019 CHNA PROCESS

PeaceHealth St. John conducted its 2019 CHNA process in coordination with its community partners, including Cowlitz County Public Health and Pathways 2020. Pathways 2020, founded in 1999, is a partnership of the Cowlitz Economic Development Council, Cowlitz County Health Department, Kaiser Permanente, and PeaceHealth. It is dedicated to improving the quality of life in Cowlitz County through collaborative partnerships, resource mobilization, strategic planning, and program development.




For this CHNA, both primary and secondary data were collected and analyzed. The input of key informants was solicited, community listening sessions were conducted and a community open house in which needs were identified and prioritized was conducted. At various times throughout the nearly eight-month CHNA process, data, findings and input was shared with PeaceHealth St. John's Community Health Board (CHB).

Key themes that emerged during the process included:

- **Housing instability, affordable housing, homelessness and service enriched housing:** Data suggests that there is an increasing number of seniors who are homeless due to limited income and high costs of rent. Further, the inventory of low-income housing is not adequate for all residents and there is a large number of homeless youths in Cowlitz County. There is need for service enriched housing.
- **Substance abuse/mental health:** All agree that existing agencies and providers are eager to work together, but more work needs to be done to link services and reduce barriers. Tobacco, specifically vaping products, is a significantly larger issue than in 2016.
- **Inclusion/equity:** There continues to be a need to support special populations (Hispanic, elderly) and expand community efforts to coordinate resources. Increasing the use of Community Health Workers was universally identified as a key strategy.
- **Food insecurity and healthy eating:** While many reported broader supports for school gardens (and Longview/Kelso are doing them very well) and while there are healthier commodity options available, there are still gaps. Certain populations need support to learn basic cooking and shopping skills and food insecurity continues to be a concern.
- **Adverse Childhood Experiences (ACES):** There was consensus that developing and using trauma-informed approaches to help build resiliency, and especially supporting parents is important.

The community's prioritization of need is as follows. Note that two needs tied at #2:

- #1 - Access to behavioral health services and combating the opioid epidemic
- #2 - Affordable housing including service enriched housing
- #2 - Engaging patients beyond the walls of the hospital to address factors that affect impact access and equity
- #3 - Family and childhood nutrition and food insecurity
- #4 - Care coordination for complex patients



The community's identified priorities directly align with the PeaceHealth System's identified four focus areas of need. These four focus areas were identified as common to each of the communities PeaceHealth serves across three States, and include:

- Family and childhood well-being including nutrition and food insecurity
- Affordable housing including service enriched housing
- Healthcare access and equity; and
- Behavioral health including the opioid epidemic

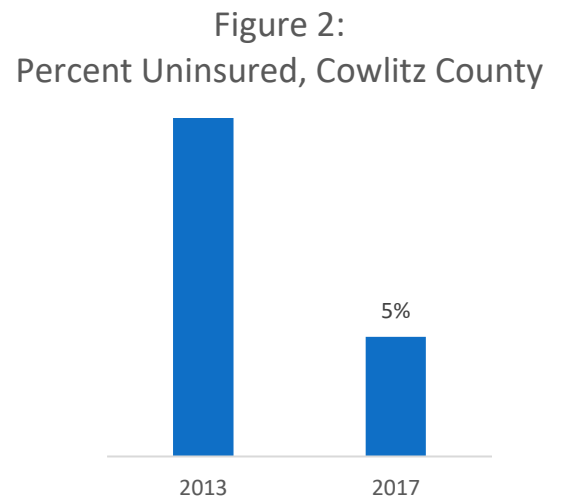
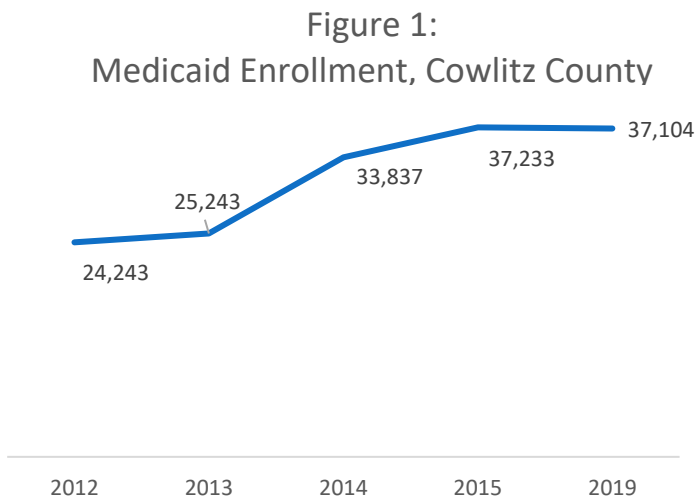
Of the identified community priorities, PeaceHealth St. John has selected the following priorities:

- Access to behavioral health services, inclusive of combating the opioid epidemic
- Family and childhood well-being with a focus on food insecurity
- Affordable housing including service enriched and transitional housing
- Care coordination for complex patients outside of the hospital setting with a focus on access and equity for special populations.

II. Prior CHNAs: Implementation Plan Progress and Accomplishments

This 2019 CHNA is the third CHNA developed by PeaceHealth St. John since the implementation of the Affordable Care Act's CHNA requirement.

In 2013, access to healthcare and the lack of insurance coverage was selected as the major focus area. PeaceHealth was an active member of the community coalitions that were formed across the State for the purpose of helping people sign up for commercial health insurance and Apple Health, i.e. Medicaid. By any and all measures, and as depicted in Figures 1 and 2 below, these efforts were extremely successful, and continue to benefit the community.




Source: OFM, 2011-17 County Uninsured Rates Chart Book: Washington state, 2019

In its 2016 CHNA, PeaceHealth St. John selected three focus areas:

- Behavioral health
- Care coordination for complex patients
- Maternal child health and childhood development

In adopting its implementation strategies, the PeaceHealth St. John Community Health Board (CHB) considered the size of the population impacted, the needs in relation to hospital competencies and the types of community partnerships that would be required to advance the need and available resources. Note that in developing the implementation plan, the priority needs and identified initiatives under the care coordination focus area were targeted towards children, so those initiatives were rolled into the maternal child health and childhood development focus area.



The final 2016 Implementation Plan is restated in Table 1. For each need, a set of initiatives was noted, as was a listing of potential partners. The expected degree of PeaceHealth engagement was framed in terms of “lead,” “co-lead” or “support.” While the work is ongoing, progress and accomplishments to date are summarized in the table.

Activities over the past three years included funding and/or in-kind support to Pathways 2020, Community Health Partners, Lower Columbia School Gardens, YMCA- Go Girl Go program, Youth and Family Link-Link to Health program, Lower Columbia CAP- Supportive Housing Services Café for young adults, and the coordination and hosting of a Community Health Worker Forum in partnership with Kaiser, Healthy Living Collaborative, and Youth and Family Link. PeaceHealth St. John is also participating in a project with Cascade Pacific Action Alliance to provide the Diabetes Prevention Program to Cowlitz County residents in partnership with the SW Washington YMCA, and in the development of a Food Farmacy program to provide food to patients who are food insecure and have been in the hospital. The Food Farmacy program is in partnership with Lower Columbia CAP and Meals on Wheels.

Table 1: PeaceHealth St. John 2016 CHNA - Selected Priorities and Initiatives

	Initiatives	Target Population	Potential Partners	Activities and Accomplishments
Behavioral Health	Orient targeted clinical staff to the effects of Adverse Childhood Events (ACEs) to increase awareness of and support for those at risk <i>PeaceHealth Engagement: Co-lead</i>	Vulnerable populations at risk for ACEs	Emergency Support Shelter; Cowlitz County Public Health Dept.; Justice & Hope Conference	PeaceHealth caregivers participated in community education events hosted by partners.
	Promote and support educational programs aimed at preventing chemical dependency among youth <i>PeaceHealth Engagement: Support</i>	Youth at risk for chemical dependency	Schools; Cowlitz County Public Health	PeaceHealth funded The Lower Columbia CAP young adult café program addressing multiple high-risk behaviors including chemical dependency.
Maternal Child Health & Childhood Development	Co-lead and/or participate in selected programs providing highest need children and their families with physical activity events such as the AHA Jump Rope for Heart, Special Olympics, etc. <i>PeaceHealth Engagement: Co-lead/Support</i>	School-aged children and their families	American Heart Association; Cowlitz Parks and Recreation; YMCA; Schools; Youth & Family Link; Cowlitz County Public Health	PeaceHealth fully funded the Go Girl Go program provided by the SW WA YMCA for two years, increasing participation from 30 girls in 2017 to 270 girls in 2018 and 2019.
	Support and promote a farm to table experience for children including: <ul style="list-style-type: none"> School Gardens Teaching Kitchen <i>PeaceHealth Engagement: Support</i>	School-aged children and their families	Youth and Family Link; School Gardens; Dr. Robert Ellis; Lower Columbia Community Action; Altrusa International	PeaceHealth continued to fund Lower Columbia School Gardens in 2017, 2018 and 2019. The program provides cooking instruction as well as garden activities to more than 5,000 children each year.
	Support development of Community Health Worker Project: Link to Health to address identified disparities <i>PeaceHealth Engagement: Support</i>	Infants and children	Youth & Family Link; Cowlitz County Public Health; Nurse Family Partnership Program; Healthy Living Collaborative; Children Protective Services	PeaceHealth partnered to fund the Link to Health Community Health Worker Pilot Program. In our community, 182 families were served by four community health workers during the two-year pilot program.

III. State, Regional and Community CHNA Context

PeaceHealth St. John's 2019 CHNA process was undertaken within the context, and with the knowledge of other existing, recent or concurrent community health improvement planning efforts in the State, Region and County, including:

The Washington State Health Improvement Plan (2014-2018 *Creating a Culture of Health in Washington*) provides a statewide framework for health improvement efforts. This plan will be updated again in 2020.



Cowlitz County Public Health: The most recent Community Health Improvement Plan (CHIP) conducted in 2014, provides a common agenda for addressing publicly selected County Health Priorities and was intended as a tool that can be used to help advance policy, systems and environmental (PSE) change strategies in the three areas identified as priorities:

- Increase healthy habits for all ages
- Ensure healthy starts to life for all kids
- Improve economic opportunity



In summary, the CHIP proposed to strengthen the system of care for Mothers and Children, foster Community Health Worker expansion, increase community coordination and run an annual health improvement agenda. In addition, in 2016, the County conducted a **Behavioral Health Gap Analysis** which provides an understanding of the behavioral health gaps and needs that exist within the community and their impact upon the entire population, but specifically Medicaid enrollees, the uninsured and the underinsured.

Cascade Pacific Action Alliance (CPAA), the regional Accountable Community of Health (ACH): Its purpose is to improve community health and safety while advancing the Triple Aim: improving the patient experience of care, including quality and satisfaction; improving the health of populations; and reducing per capita healthcare costs. In addition to Cowlitz, it operates in six other Counties in Central Western Washington region including Grays Harbor, Lewis, Mason, Pacific, Thurston and Wahkiakum counties.



ACHs are regional coalitions convened as part of the State's **Healthier Washington Initiative** in 2015. The State Health Care Authority (HCA) is supporting ACH development through guidance, technical assistance (TA), and funding. In late 2018 and in response to HCA's request, CPAA submitted a successful Project Plan portfolio for six project areas:

- Bi-directional care integration
- Care coordination

- Care transitions
- Opioid response
- Reproductive, maternal and child health
- Chronic disease prevention

PeaceHealth St John has received funding from CPAA to participate in the Opioid Response project, chronic disease prevention for the Diabetes Prevention Program in partnership with the YMCA and for the Food Farmacy program to address food insecurity for patients who have been hospitalized.

Healthy Living Collaborative of Southwest Washington (HLC): A program that focuses on shaping policy, improving health and amplifying community voices. With a strong commitment to health equity, HLC supports the development of a skilled Community Health Worker workforce, increasing availability of affordable housing and improving the health and stability of all residents in Southwest Washington by incorporating health considerations into decision making across all sectors, systems and policy areas to prevent and mitigate chronic disease and poverty.



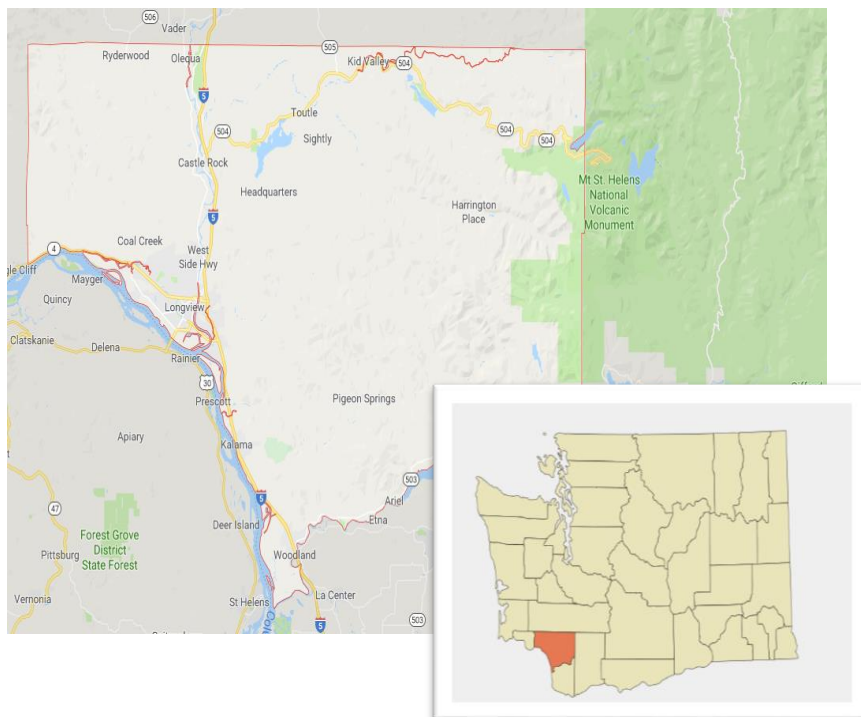
Pathways 2020: A non-profit organization dedicated to improving the quality of life in Cowlitz County through collaborative partnerships, resource mobilization, strategic planning and program development. Its mission is to promote and improve the health and well-being of Cowlitz County by fostering community partnerships that provide the fabric and support each person needs to be a healthy and contributing member of the community. Since 1997, the organization has produced a Community Report Card. Its most recent 2017 Report Card includes data on social cohesion, economic measures, education, overall health, housing, and access to healthy food in the County. Much of the data is summarized later in this CHNA. As PeaceHealth St. John was undertaking its CHNA, Pathways 2020 was also collecting data for its various updates. It conducted a number of listening sessions/roundtables in the Spring of 2019, two that focused on health/nutrition and housing. PeaceHealth actively supported and attended these sessions and has used data and input collected during these roundtables in this CHNA. Food insecurity was identified by Pathways 2020 as a priority issue for Cowlitz County residents. A community call to action was issued by Pathways 2020 to reduce food insecurity in Cowlitz County to 10% or below the State average at the report card roll out event in May of 2019.



IV. Overview of the PeaceHealth St. John Service Area

DEMOGRAPHIC AND SECONDARY DATA

More than 78% of PeaceHealth St. John's inpatients come from Cowlitz County. At approximately 1,140 square miles, Cowlitz County ranks 28th out of 39 in land area and twelfth in population at 103,590 residents. Longview is the largest city in the county representing nearly 36% of the county's population, and when combined with Kelso, the two cities account for almost 50% of the County's population. A portion of the Cowlitz tribal land is located in Cowlitz County, as is their Health Clinic in Longview, resulting in a larger percentage of American Indian/Alaska Natives than the rest of the State. The County is also older than the State, particularly in the population 65+.



COWLITZ COUNTY CURRENT DEMOGRAPHIC PROFILE

6,169 (6.0%) are preschoolers under five years old

19,972 (19.27%) are five-19 years old (compared to 18.69% statewide)

58,628 (56.6%) are adults age 20-64 (compared to 60.70% statewide)

18,821 (18.2%) are seniors age 65+ (compared to 14.35% statewide)

8,936 (8.6%) are Hispanic or Latino (compared to 12.30% statewide)

3,716 (3.6%) are American Indian and Alaska Native (compared to 3% statewide)

In terms of social determinants of health, Cowlitz County has made significant progress, but continues to fare worse than the State on several indicators. Social determinants of health include access to social and economic opportunities; resources and supports available at home, neighborhoods, and communities; the quality of schooling; the safety of workplaces; the cleanliness of water, food and air; and the nature of social interactions and relationships. In Cowlitz County the impact of social determinants of health are reflected in lower graduation rates, higher poverty rates, less access to nutritious food, and higher rates of substance use and homelessness.

The County also has a higher percentage of ALICE households than the rest of the state. ALICE is an acronym that stands for Asset Limited, Income Constrained, Employed families. The United Ways of the Pacific Northwest ALICE report summarizes the ALICE families as families that work hard and earn above the Federal Poverty Level (FPL), but do not earn enough to afford a basic household budget of housing, childcare, food, transportation, and healthcare. Most do not qualify for Medicaid coverage.

In Cowlitz County, 41% of all households are either in poverty or are ALICE households. This is similar to Washington state overall, wherein 37% of all households are either ALICE or in poverty.

SOCIOECONOMIC DETERMINANTS

High School Graduation Rate

Cowlitz County = 88.5%

Washington state: 90.8%

Individuals Living Below the Federal Poverty Line

Cowlitz County = 16.9%

Washington state: 12.2%

Median Household Income

Cowlitz County= \$49,804

Washington state = \$66,174

Percent without Reliable Access to a Sufficient Quantity of Affordable, Nutritious Food

Cowlitz County = 14.8%

Washington state: 12.0%

Opioid Deaths per 100,000

Cowlitz County = 12.1%

Washington state: 10.1%

Point in Time Homelessness Rate

Cowlitz County = 1:320

Washington state: 1:346

Table 2: Cowlitz County Poverty and Alice Households

	2010	2016
Cowlitz County		
% ALICE	19%	23%
% Poverty	21%	18%
Total ALICE and Poverty	39%	41%
WA State		
% ALICE	22%	26%
% Poverty	12%	11%
Total ALICE and Poverty	34%	37%

Source: ALICE: A Study of Financial Hardship in Washington, [2018 Report](#)

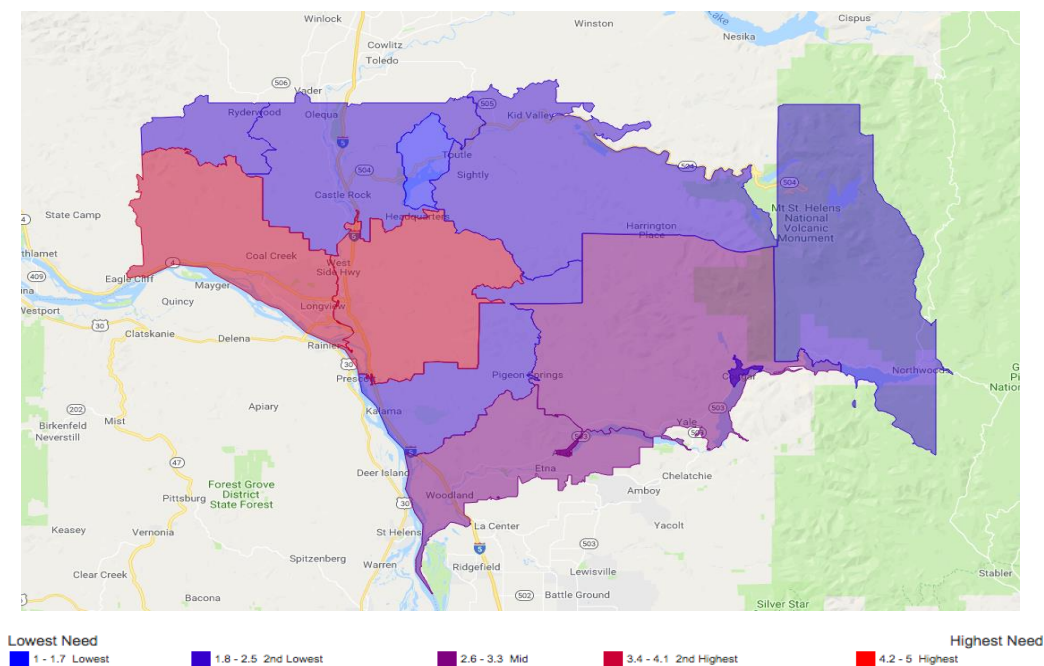
Table 3 provides data by each of the cities in the County, demonstrating disparities between cities on the social determinants of health throughout the County.

Table 3. Cowlitz County Sociodemographic Profile by City

City	High school diploma (%)	Individuals living below the FPL (%)	Median Household Income	People over age five who are linguistically isolated
Castle Rock	79.8%	8.5%	\$60,854	0.7%
Kalama	87.5%	8.5%	\$71,410	0.5%
Kelso	87.3%	19.3%	\$49,632	3.3%
Longview	88.1%	20.4%	\$42,144	3.1%
Toutle	92.0%	11.1%	\$56,944	1.8%
Woodland	85.2%	11.9%	\$67,929	5.2%
Cowlitz County	86.6%	16.9%	\$49,804	3.0%
Washington State	80.9%	12.2%	\$66,174	7.6%

The Community Need Index (CNI), a tool created by Dignity Health, measures a community's social and economic health on five measures: income, cultural diversity, education level, unemployment, health insurance and housing. The CNI demonstrates that within Cowlitz County, there are pockets of higher and lower need:

Map 3. Cowlitz County, WA Community Need Index Map, 2018



Source: Dignity Health



V. Health Status

The Health Status indicators identified in this section are from primary data from Robert Wood Johnson Foundation's (RWJF) *County Health Rankings*. RWJF's county health rankings data compare counties within each state on more than 30 factors. Counties in each of the 50 states are ranked according to summaries of a variety of health measures. Counties are ranked relative to the health of other counties in the same state.

This is a nationally recognized data set for measuring key social determinates of health and health status. RWJF measures and reports this data annually. The remaining data in this section is organized into four areas defined as priorities by the PeaceHealth System in 2018. These include:

- Family and childhood well-being including nutrition and food insecurity
- Affordable housing including service enriched housing
- Healthcare access and equity; and
- Behavioral health including the opioid epidemic

Data in this section is supplemented and expanded with sources from state, regional and local sources, including Behavioral Risk Factor Surveillance System; Washington Healthy Youth Survey; Washington Department of Health, Vital Statistics; US Census Bureau; The University of Washington's Alcohol and Drug Abuse Institute; Washington state WIC; WA Office of the Superintendent for Public Instruction; Feeding America; Enroll America; Centers for Medicare and Medicaid Services; Community Commons.

COWLITZ RWJF RANKING

The data in Table 4 tracks Cowlitz County's progress on the RWJF's metrics. While Cowlitz County generally remains in the lower quartiles, there has been considerable improvement, and improvement that deserves strong recognition. Specifically, the most improvement has occurred in specific health factors including health behaviors, social and economic, and physical and environment factors.

Table 4: County Health Rankings 2011-2019
Ranking out of Washington's 39 Counties

<i>Measure</i>	'11	'12	'13	'14	'15	'16	'17	'18	'19	<i>Ranking Change 11-19</i>
Health Outcomes										
Mortality and Morbidity	32	33	34	34	32	31	32	29	31	+1 ↑
Length of Life										
<i>Premature death</i>	33	31	30	30	31	32	34	34	35	-2 ↓
Quality of Life										
<i>Poor or fair health, Poor physical health days, Poor mental health days, Low birthweight</i>	31	32	38	38	36	31	35	26	25	+6 ↑
Health Factors	33	35	35	32	33	29	33	30	28	+5 ↑
Clinical Care										
<i>Uninsured adults, primary care providers rate, preventable hospital stays, diabetic screenings</i>	9	20	21	19	20	20	19	17	23	-14 ↓
Health Behaviors										
<i>Adult smoking, adult obesity, binge drinking, motor vehicle crash deaths, Chlamydia, teen birth rate</i>	39	39	39	39	39	35	35	36	36	+3 ↑
Social and Economic Factors										
<i>High school graduation rate, college degrees, children in poverty, income inequality, inadequate social support</i>	32	34	30	27	27	28	29	29	28	+5 ↑
Physical and Environment										
<i>Air pollution – particulate matter days, air pollution-ozone days, access to healthy foods, liquor store density</i>	26	26	16	11	12	20	32	21	16	+10 ↑

Family and childhood well-being, nutrition and food insecurity



WHAT IS CHILD AND FAMILY WELL-BEING?

Child and family well-being is a key pillar of a healthy community. Circumstances in pregnancy through early childhood are key predictors of health and well-being later in life. Well-being is envisioned as a community where all pregnant women, infants, children, adolescents and families are well-fed, safe and equipped with resources and knowledge to succeed in school, from kindergarten to high school graduation and through the rest of their lives.

WHAT IS FOOD INSECURITY?

The U.S. Department of Agriculture (USDA) defines food insecurity as a lack of consistent access to enough food for an active, healthy life. Hunger and food insecurity are closely related, but distinct, concepts. Hunger refers to a **personal, physical sensation** of discomfort, while food insecurity refers to a **lack of available financial resources** for food at the level of the household. Poverty and food insecurity are closely related. In 2017, an estimated one in eight Americans were food insecure, including more than 12 million children.

According to Feeding America, children who do not get enough to eat - especially during their first three years - begin life at a serious disadvantage. When they're hungry, children are more likely to be hospitalized and they face higher risks of health conditions like anemia and asthma. And as they grow up, children struggling to get enough to eat are more likely to have problems in school and other social situations; they are more likely to repeat a grade in elementary school, experience developmental impairments in areas including language and motor skills and have more social and behavioral problems.

Children struggling with food insecurity and hunger, come from families who are struggling, too. 84% of households Feeding America serves report buying the cheapest food - instead of healthy food - in order to provide enough to eat.

HOW DOES COWLITZ COUNTY FARE?

In social and economic factors, including the percentage of adults who have completed high school and have some college education, as well as the percentage of babies born to single mothers, Cowlitz County is ranked 29th out of 39 counties in Washington. Cowlitz County is ranked 36th out of 39 Washington counties for its food and physical activity environment, as well as adult behavioral health indicators such as excessive drinking and smoking. The food environment index, which measures access to healthy foods and incomes, for Cowlitz County ranks lower (7.3) than that of Washington state (8.1). According to Feeding America, 79% of households in Cowlitz County are below the Snap threshold of 200% poverty. Additionally, childhood food insecurity in Cowlitz is 22.4%, versus: 17.5% for the State at large. This means that Cowlitz is not doing as well as many counties in Washington.

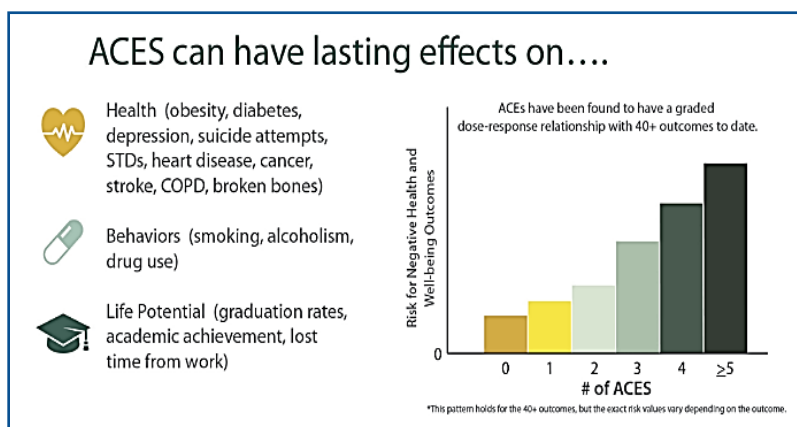
In the key informant and community convening open house process, family and child well-being and food insecurity ranked the third highest priority.

Deeper dive

ADVERSE CHILDHOOD EXPERIENCES (ACEs)

Adverse Childhood Experiences, or ACEs, are traumatic events that occur in childhood and cause stress that changes a child's brain development. Exposure to ACEs has been shown to have a dose-response relationship with adverse health and social outcomes in adulthood, including but not limited to depression, heart disease, COPD, risk for intimate partner violence and alcohol and drug abuse. ACEs include emotional, physical, or sexual abuse, emotional or physical neglect, seeing intimate partner violence inflicted on one's parent, having mental illness or substance abuse in a household, enduring a parental separation or divorce or having an incarcerated member of the household.

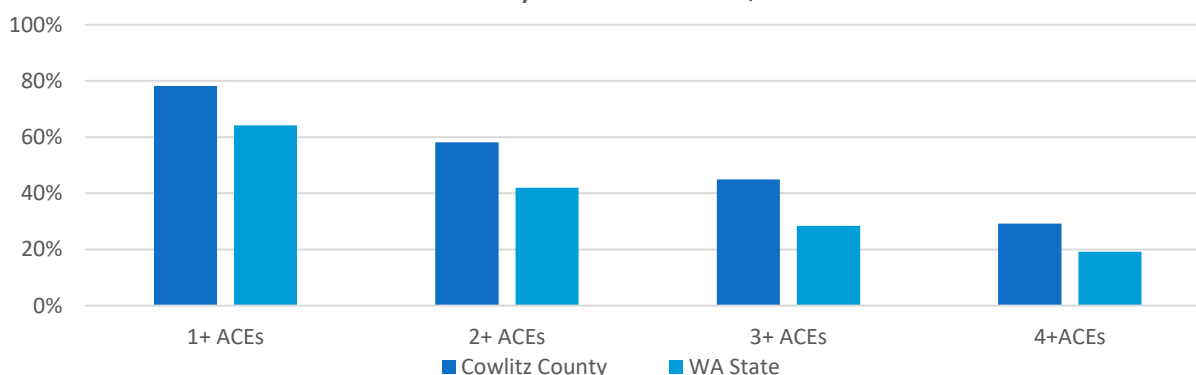
Figure 3 Association between ACEs and Negative Outcomes



Source: Centers for Disease Control & Prevention, "Association between ACEs and negative outcomes"

Washington state's ACEs data was only collected from 2009-2011. It identifies ways that childhood trauma affects the lifecycle. By reviewing indicators self-reported by adults, a relationship between poor health and social outcomes and ACEs indicators can be seen.

Figure 4: ACEs Reported by Adults in Cowlitz County and WA State, 2011



Source: Washington state Behavioral Risk Factor Surveillance System

HIGH RATE OF MATERNAL SMOKING

Pregnant women in Cowlitz County are nearly 1.5 times as likely as pregnant women in Washington overall to smoke during pregnancy, despite being just as likely to receive appropriate prenatal care in the first trimester of pregnancy. Smoking during pregnancy can imperil the health of women and babies alike and contribute to higher rate of babies born at low birth weight. While Cowlitz County's rate of low birth weight babies is consistent with the State level, the rate of smoking can lead to other complications and should be reduced.

OBESITY AND RELATED CHRONIC DISEASES

There is a clear connection between food insecurity and high levels of stress, poor nutrition and chronic diet-related diseases, like obesity and diabetes. Looking at data collected over the past seven years, a declining trend in the amount of fruits and vegetables (five plus) eaten per day has prevailed among 10th grade youth. The data has also shown this trend in eating a full three meals a day, with 10th grade youth often skipping breakfast.

Over a third of Cowlitz County adults are obese (31%), and 13% of Cowlitz County adults have diabetes, compared to a 9% diabetes rate for Washington state overall. Obesity and diabetes imperil the health of Cowlitz County residents, lower their life span, and put enormous pressure on families and the healthcare system to provide long-term care for aging relatives with avoidable chronic disease. Heart disease, a common comorbidity of obesity has a much higher rate in Cowlitz County adults (8%) than that of Washington state (6%). Additionally, this data shows a reduction in quality of life with 21% of the county reporting lowered activity due to mental and physical health furthering the trends of obesity and related chronic disease from inactivity.

Family health and well-being profile

Educational Attainments

Students demonstrating expecting skills in 6 of 6 domains

WA state:
47.4%

Cowlitz County:
28.9%

Graduation rate

WA State:
79.4%

Cowlitz County:
80.8%

Maternal and Child Health

Maternal smoking in third trimester

WA state:
7.0%

Cowlitz County:
10.0%

Prenatal care in first trimester

WA State:
83.0%

Cowlitz County:
84.0%

Low birth weight

WA State:
6.0%

Cowlitz County:
6.0%

Incomplete Vaccinations-Kindergarten

WA State:
11.0%

Cowlitz County:
17.0%

Nutrition

WIC women with high nutrition risk

WA state:
47.8%

Cowlitz County:
49.9%

WIC infants with high nutrition risk

WA State:
49.9%

Cowlitz County:
45.9%

Adult Health

Obesity

WA state:
28.0%

Cowlitz County:
31.0%

Physical Inactivity

WA State:
16.0%

Cowlitz County:
21.0%

Diabetes

WA State:
9.0%

Cowlitz County:
13.0%

Heart Disease

WA State:
6.0%

Cowlitz County:
8.0%

Youth Health

Obesity

WA state:
14.0%

Cowlitz County:
18.0%

Physical Inactivity

WA State:
78.0%

Cowlitz County:
75.0%

Poverty

WA State:
14.0%

Cowlitz County:
21.0%

Children show a disproportionate rate of obesity compared to adults. According to the National Initiative for Children’s Healthcare Quality, 12% of all children living in Cowlitz County are considered obese. This trend of youth obesity continues as they age with 18% of youth (10th grade) rating as obese.

Affordable housing, housing insecurity, homelessness and enriched services



Safe and stable housing is a key component of financial well-being and helps form the basis of good health. Housing challenges occur alongside poverty and food insecurity, together imperiling the well-being of affected households and the community as a whole. Good health depends on having homes that are safe and free from physical hazards. When adequate housing protects individuals and families from harmful exposures and provides them with a sense of privacy, security, stability and control, it can make important contributions to health.

WHAT IS HOUSING INSECURITY?

More than 19 million households in America (or about 30 percent of all renters) pay more than half of their monthly income for housing. This is a key factor in what the government now refers to as “housing insecurity” — a condition in which a person or family’s living situation lacks security as the result of high housing costs relative to income, poor or substandard housing quality, unstable neighborhoods, overcrowding (too many people living in the house or apartment for everyone to live safely and/or homeless (having no place to live, sleeping on the streets or in shelters).

HOW IS HOMELESSNESS DEFINED?

There are a number of definitions. For this CHNA, the U.S. Department of Health and Human Services (HHS) definition used, which is an individual without permanent housing who may live on the streets, stay in a shelter, mission, single room occupancy facilities, abandoned building or vehicle, or in any other unstable or non-permanent situation.

WHAT IS SERVICE-ENRICHED HOUSING?

Service-enriched housing is permanent, basic rental housing in which social services are available onsite or by referral through a supportive services program or service coordinator. Programs often support low income families, seniors, people with disabilities or veterans.

In the key informant and community convening open house process, housing insecurity, affordable housing and homelessness ranked the second highest priority.

HOW DOES COWLITZ COUNTY FARE?

Among all of the PeaceHealth system communities, Cowlitz County is among the counties most impacted by a lack of affordable housing and housing instability.

AFFORDABLE HOUSING PROFILE

- Households with ‘severe housing problems,’ including cost-burdened housing: 18% (=WA: 18%)
- 331 people are homeless in Cowlitz County, both sheltered and unsheltered
- In the Longview, Washington school district, 486 children in grades K-12 are reported from homeless families (sheltered – 76; unsheltered – 22; motel/hotel - 37) or doubled up (living with other families - 351)

SEVERE HOUSING PROBLEMS

Cowlitz County is similar to Washington state, in that, nearly one in five residents is impacted by severe housing problems. Severe housing problems is measured as an overall score, but includes four different types of housing problems:

- Overcrowding
- High housing costs
- Lack of kitchen facilities
- Lack of plumbing facilities

In Cowlitz County, over one third of residents cannot afford a basic household stability budget, largely caused by a lack of affordable housing. The 2010 Census for Cowlitz County listed the rental vacancy rate at 2.3%, but in 2017 the rental vacancy rate dropped to an all-time low of 1%. Cowlitz County’s low rental vacancy rates drive up demand for and costs of rental housing, resulting in residents spending more of their income on rent. When households who pay more for rent have less to spend on essential items such as food, childcare, transportation and healthcare needs, it impacts their health.

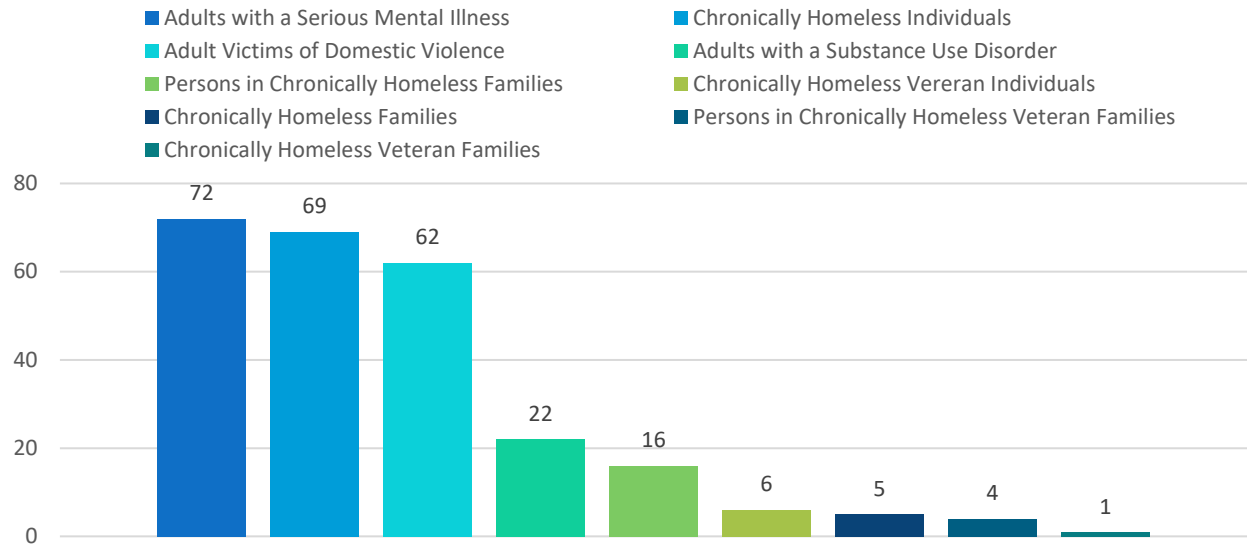
Deeper dive

ADULT HOMELESSNESS

Cowlitz County’s Annual Point in Time Count of the homeless reported an average of 318 individuals experiencing homelessness per year over the course of the last five years. Over the most recent three years, there has been little fluctuation, with 341 people counted in 2015, 356 people counted in 2016, and 331 people counted in 2017. Among the 331 total homeless individuals in Cowlitz County, 69 (20.8%) were chronically homeless, this is consistent with the rest of Washington state (22.7%). Table 5 below identifies the other homeless subpopulations including adults with a serious mental illness, adult victims of domestic violence and adults with a substance use disorder.

Table 5: Homeless Subpopulations

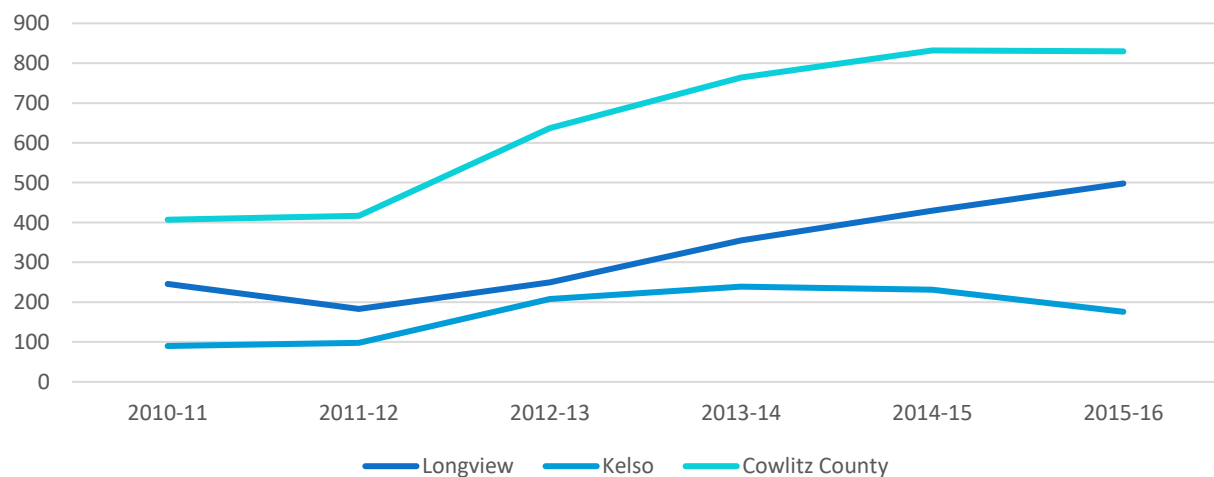
(Responses are duplicated for individuals who identified more than one category)



YOUTH HOMELESSNESS

Of concern is the youth homelessness rate which, as identified in Figure 5 below has been on the rise since 2010 and has risen to over 800 homeless youth reported by school districts in Cowlitz County in the 2016-2017 school year.

Figure 5: Number of Homeless Students by City



Healthcare access and equity



Access to quality, affordable, comprehensive care throughout the life course is an important facet of community wellness. We envision a community where all people have access to quality, affordable preventive and acute care, including mental health and dentistry, throughout the life course. Many disparities in health are rooted in inequities in the opportunities and resources needed to be as healthy as possible. The determinants of health include living and working conditions, education, income, neighborhood characteristic, social inclusion and medical care. An increase in opportunities to be healthier will benefit everyone but more focus should be placed on groups that have been excluded or marginalized in the past.

WHAT IS HEALTHCARE EQUITY?

The RWJF states that health equity means that everyone has a fair and just opportunity to be as healthy as possible. This requires removing obstacles to health such as poverty, discrimination, and their consequences, including powerlessness and lack of access to good jobs with fair pay, quality education and housing, safe environments and healthcare.

HOW IS HEALTHCARE ACCESS DEFINED?

Access means ensuring that all people have the opportunity to get the medical, public health and social services they need to live healthier lives. Access includes affordability.

In the key informant and community convening open house process, access and equity, ranked as the second highest priority.

HOW DOES COWLITZ COUNTY FARE?

Healthcare delivery factors including the ratio of physicians, dentists and mental health providers to the population, as well as certain measures of access to care (percentage of Medicare recipients receiving mammograms and flu shots), Cowlitz County ranks 17th out of 39 counties in Washington. In social and economic factors, including the percentage of children in poverty, violent crime and income inequality, Cowlitz County is ranked 28th of 39 counties in Washington, meaning that Cowlitz County faces greater obstacles to social and economic well-being than other counties in Washington; which, in turn, impacts equity.

HEALTH EQUITY SYSTEM PROFILE

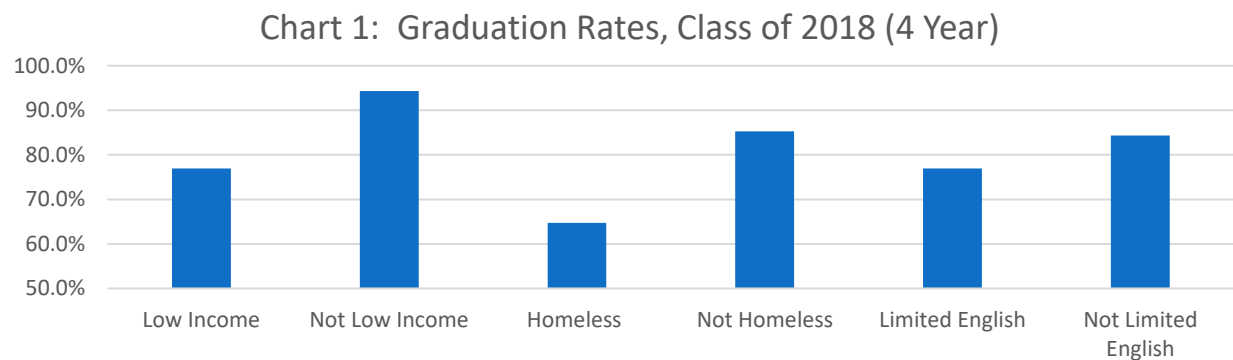
- Ratio of care providers to residents:
 - Primary care: 1,570:1 (>WA: 1,218:1).
 - Dentists: 1,724:1 (>WA: 1,237:1)
- Uninsured rate: 5.1% (<WA: 5.5%)
- 10th graders who reported no dental visit in the past year: 19% (>WA: 17%)
- Individuals living in poverty: 16.9% (>WA: 12.2%)

- Households that are Asset Limited, Income Constrained, Employed or in poverty: 41% (>WA: 37%)
- Children in poverty 21% (> WA 14%)
- Mammogram screenings for female Medicare enrollees were better in Cowlitz (44%) than in Washington state (39%)
- Linguistic isolation: 3% (<WA: 7.6%)
- Unemployment rate: 8.4% (>WA: 6.0%)
- Veteran population: 8.9% (>WA: 7.3%)
- Income inequality (ratio of income at the 80th percentile to income at the 20th percentile): 4.5 (=WA: 4.5)

Deeper dive

GRADUATION RATES:

High school graduation rates for different population groups are lower than the Cowlitz County overall rate as seen in Chart 1.

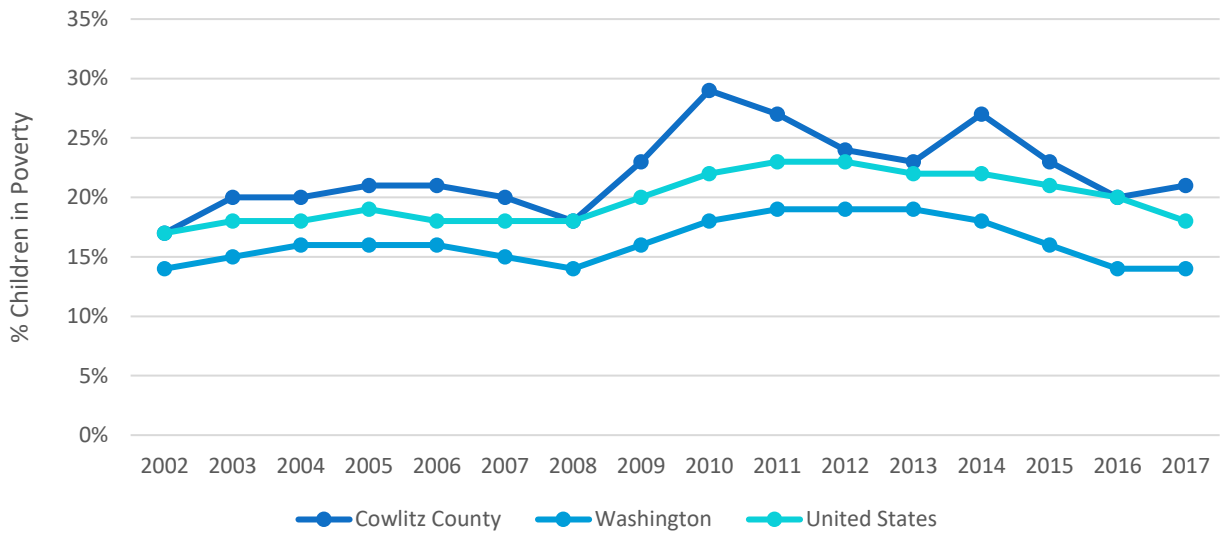


Source: RWJ County Health Rankings, 2013-2019

CHILDREN IN POVERTY:

Cowlitz County's percentage of children in poverty is higher than the State and is trending worse. In addition, rates are even higher for minority populations with 39% of Hispanic children living in poverty.

Chart 2: Children in Poverty in Cowlitz County, WA
County, State, and National Trends

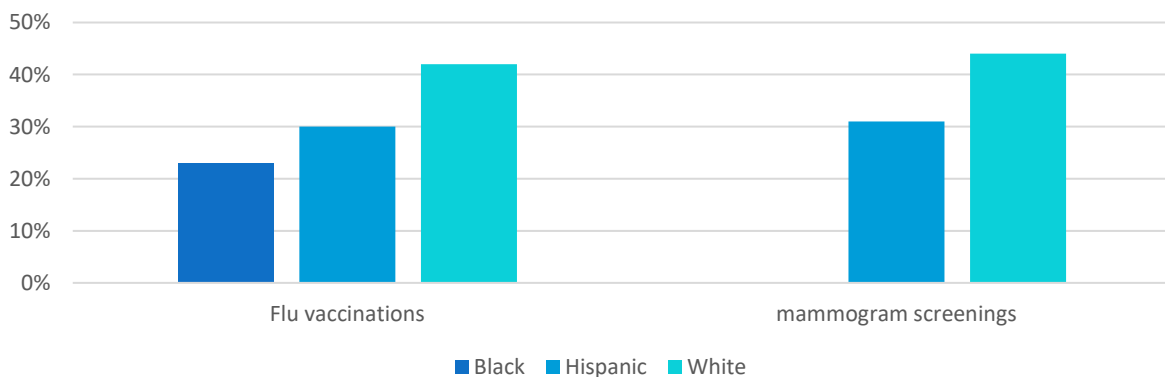


Source: RWJ County Health Rankings, 2013-2019

PREVENTATIVE HEALTH MEASURE INEQUITIES

Though Cowlitz County's overall rates for mammogram screenings and flu vaccinations are generally better than the State, 2017 rates are lower for minority populations as depicted in Chart 3.

Chart 3: Flu Vaccination and Mammogram Screening Rates



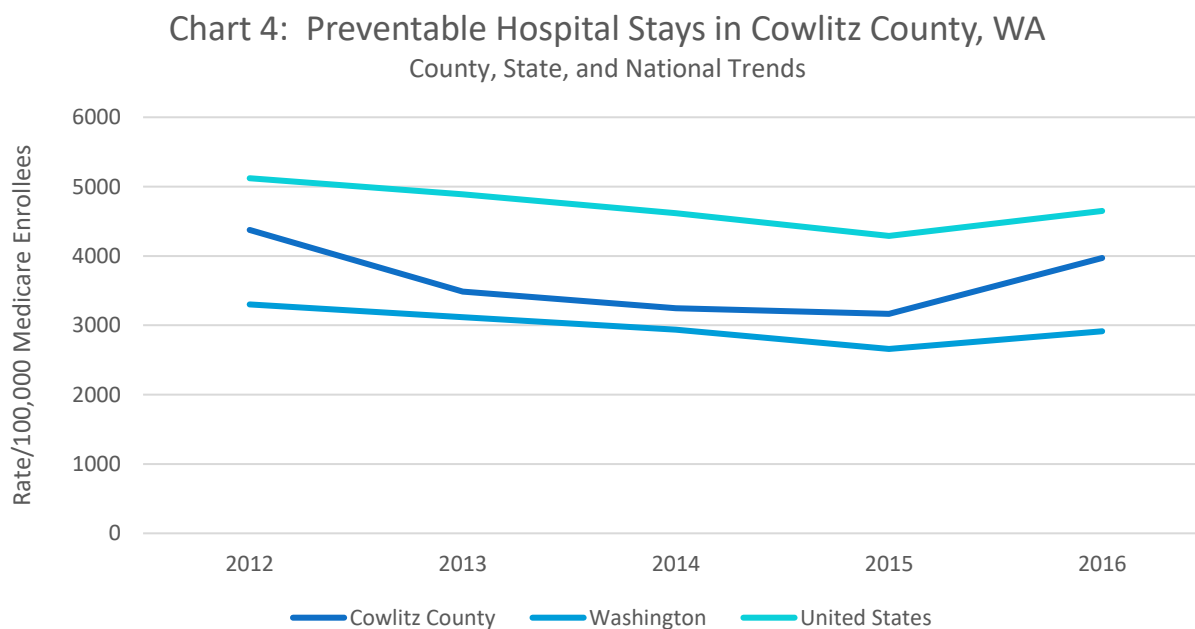
Source: RWJ County Health Rankings, 2013-2019

PREVENTABLE HOSPITAL STAYS

Hospitalization for ambulatory-care sensitive conditions, which are diagnoses treatable in outpatient settings, suggests that the quality of care provided in the outpatient setting was less than ideal. This measure may also represent a tendency to overuse hospitals as a main source of care. Preventable hospital stays could be classified as both a quality and access measure, as some literature describes hospitalization rates for ambulatory care-sensitive conditions primarily as a proxy for access to primary healthcare.

Ambulatory care-sensitive conditions include convulsions, chronic obstructive pulmonary disease, bacterial pneumonia, asthma, congestive heart failure, hypertension, angina, cellulitis, diabetes, gastroenteritis, kidney/urinary infection and dehydration. This measure is age-adjusted.

Lower numbers on this measure are the goal. Cowlitz County ranks well below the nation but is higher than the Washington state average. In 2019, County Health Rankings reported preventable hospital stays by race. Data for the Black and Hispanic populations in Cowlitz County were higher than the overall County rates (8,907 for Blacks and 4,230 for Hispanics and 3,904 for Whites).



Source: RWJ County Health Rankings, 2013-2019

Table 6 below compares Cowlitz County to the state on many additional access and equity indicators, with Cowlitz County faring worse than the state on five out of nine of these indicators.

Table 6: Additional Access and Equity Indicators

	Better	Equal	Worse
Primary Care Provider to resident ratio			●
Dentists to resident ratio			●
Uninsured adults		●	
Child and adolescent access to primary care		●	
Saw a dentist for checkup, cleaning, or other work in past year (10th graders)			●
Individuals living below the poverty line			●
Individuals over age five in linguistic isolation	●		
Unemployment rate			●
Income inequality		●	

Behavioral health and the opioid epidemic



WHAT IS BEHAVIORAL HEALTH?

Behavioral health is an umbrella term that includes mental health and substance abuse conditions, life stressors and crises, stress-related physical symptoms and health behaviors. Behavioral health issues can negatively impact physical health, leading to an increased risk of some conditions.

WHAT ARE OPIOIDS?

Opioids are a class of drugs that include the illegal drug heroin, synthetic opioids such as fentanyl, and pain relievers available legally by prescription, such as oxycodone (OxyContin®), hydrocodone (Vicodin®), codeine, morphine and many others. When used correctly under a healthcare provider's direction, prescription pain medicines are helpful. However, misusing prescription opioids risks dependence and addiction.

HOW DOES COWLITZ COUNTY FARE?

In health behaviors, which include substance use (drugs/alcohol/smoking) and overdose rates, Cowlitz County ranks 36th out of 39 counties in Washington—among the worst of all Washington counties.

Cowlitz County residents use alcohol, smoke, experience drug overdose and opiate related deaths at higher rates than the rest of the State. Youth in Cowlitz also smoke and use vapor products at higher rates.

Importantly, adults and youth in Cowlitz County also have higher indicators of poor mental health than State residents.

Cowlitz County Behavioral Health Profile

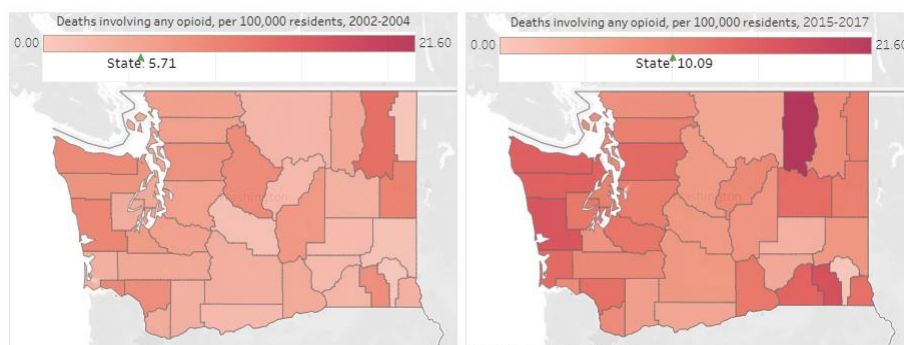
- Ratio of care providers to residents:
 - Mental health: 327:1 (>WA: 310:1)
- Excessive alcohol use: 19% (>WA: 18%)
- Adult smoking: 17% (>WA: 14%)
- Drug overdose death rate per 100,000: 18 (>WA: 15)
- Deaths due to any opiate per 100,000: 12.1 (>WA: 10:1)
- 10th graders smoking cigarettes: 9% (>WA: 5%)
- 10th graders reporting use of vapor products: 23% (>WA: 21%)
- Adults' average mentally unhealthy days: 4.1 (>WA: 3.8)
- 10th graders reporting 'seriously considering suicide': 24%

Deeper dive

GROWTH OF OPIATE ABUSE

Cowlitz County's death rate is higher than the rest of Washington at 12.1 deaths per 100,000 population compared to 10.1 deaths per 100,000 population in Washington state. The death rate from opiates in Cowlitz County has grown 50% from 2002-2004 to 2015-2017, as shown in Figure 6.

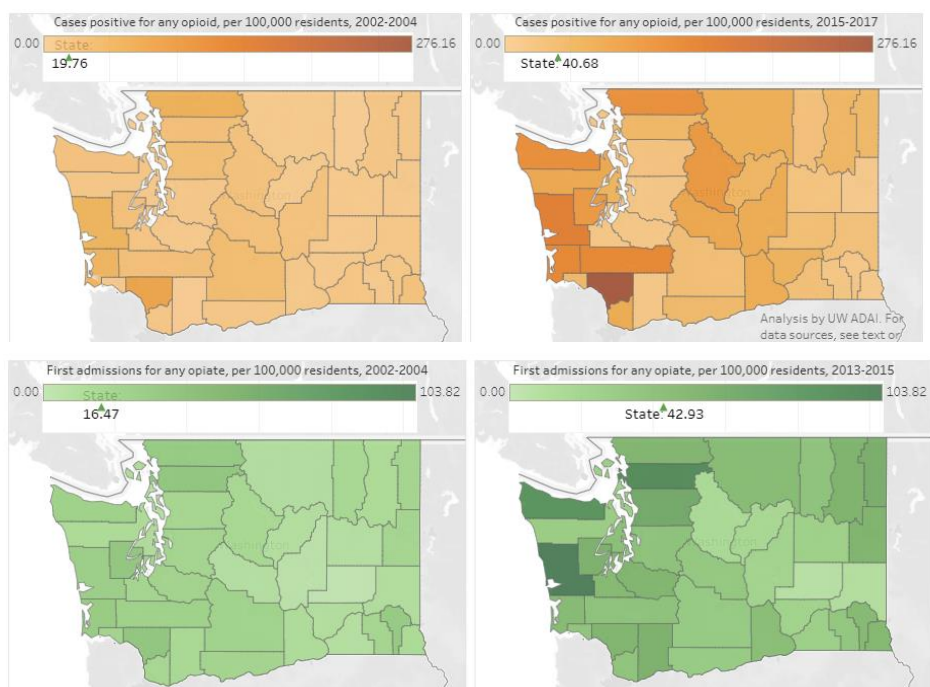
Figure 6. Rate of Deaths Attributed to any Opiate by County, WA State



Source: Univ. of Washington Alcohol & Drug Abuse Institute

Accordingly, there is a high rate of opiate-related crime in Cowlitz County, in fact Cowlitz County has the highest number in Washington state at 276.2 cases per 100,000 population (compared to 40.68 per 100,000 population in Washington state). In response, Cowlitz County has seen higher rates of treatment for opiate abuse.

Figure 7. Rate of Opiate-Related Crime and Rate of Treatment for Opiate Abuse by County, WA State



Source: Univ. of Washington Alcohol & Drug Abuse Institute

Opiate use in Cowlitz County is a public health emergency and a high priority among all health issues facing our community.

VI. PeaceHealth System Defined System Level Gaps

In 2018 the PeaceHealth System identified four primary pillars of a healthy community, that appear universal in the communities across the three States in which PeaceHealth provides care. These needs were confirmed through key informant interviews which allowed feedback from the individuals “on the ground” in providing community health initiatives. While these do not supplant the local CHNA process they are insightful and provide insight into potential focus areas and identify needs.

The four areas and their impact on community health are summarized below. Possible action steps for PeaceHealth are summarized below.

Family and childhood well-being, nutrition and food insecurity



More than 215,000 individuals in the PeaceHealth three-state, 10-county service area are food insecure, and 25% of them earn too much to qualify for assistance. Making food insecurity a systemwide community health priority is crucial to ensuring the well-being of the communities served and fulfills PeaceHealth’s Mission and Core Value of Social Justice.

Taking Action:

1. Expanding successful partnerships in the area of food insecurity and nutrition, broadening PeaceHealth’s participation wherever possible.
2. Identifying program gaps to make a meaningful difference.
3. Empowering caregivers to be community-based and trained with skills to identify food and nutrition related issues.
4. Partnering with others to improve nutrition and nourish the community.
5. Advocate for programs that provide nutrition assistance and education.
6. Educate and engage through access to emergency assistance to the PeaceHealth family and community

Impact on Community Health

- There is a clear connection between food insecurity and diet-related disease.
- Children can suffer a lifetime of consequences including a higher risk of chronic diseases, learning difficulties and social and behavioral problems.



DIABETES



HYPERTENSION



HEART DISEASE



OBESITY

Affordable housing, housing insecurity, homelessness and enriched services



Overall, individuals living in PeaceHealth areas of service are unable to secure a stable basic household budget due to the lack of affordable housing options. Low-income households that spend more than 50% of their income on housing costs are spending 41% less on food and describe their health as fair or poor. Social determinants, including poverty and housing instability, make up 60% of health outcomes.

Taking Action:

1. Partner with others to provide emergency and transitional housing along with prescriptions, medical equipment and transportation assistance.
2. Collaborate to reduce the housing costs for families and patients seeking treatment.
3. Contribute to supporting the cost of resident services.

Deeper Dive

Unaffordable housing impacts other areas of health, with research showing:

- As a state's average rent increases, the food insecurity rate also increases.
- Low-income households that spend more than 50% of their incomes on housing costs spend 41% less on food each month than similar households.
- Adults living in unaffordable housing are more likely than other adults to describe their health as fair or poor.
- Living in unaffordable housing is associated with higher levels of stress, depression and anxiety.
- Stable housing is a key intervention for people who experience serious mental illness.

What are the different types of housing in play?



Healthcare access and equity

Many of the patients served by PeaceHealth have difficulty managing care at home due to lacking adequate home care support. To bridge the gap between providers and patients, community health workers (CHWs) offer support. CHWs assist patients in developing the skills and relationships needed to manage their own health and navigate the healthcare system, which makes for more equitable access to care.



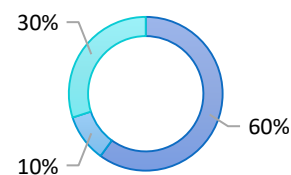
Impact on Community Health

CHWs are frontline public health workers who are trusted members of the community with shared experiences and a close understanding of those they serve. They are effective in bridging care because they are able to respond creatively to the unique needs of diverse individuals and communities. This results in:

- Improved health outcomes;
- Reduced readmissions and emergency room visits; and
- Educated and empowered patients and families.



Determinants of Health



■ Social ■ Health Care ■ Genetics

Taking Action:

1. Employing Patient Health Navigators, Care Management, Behavioral Health, and caregivers
2. Contracting with Community Connector Programs and Care Navigators
3. Connecting patients to contacts that will assist in setting appointments and other health needs
4. Partnering with community services to collaborate on health, dental and social services for children, families and pregnant women



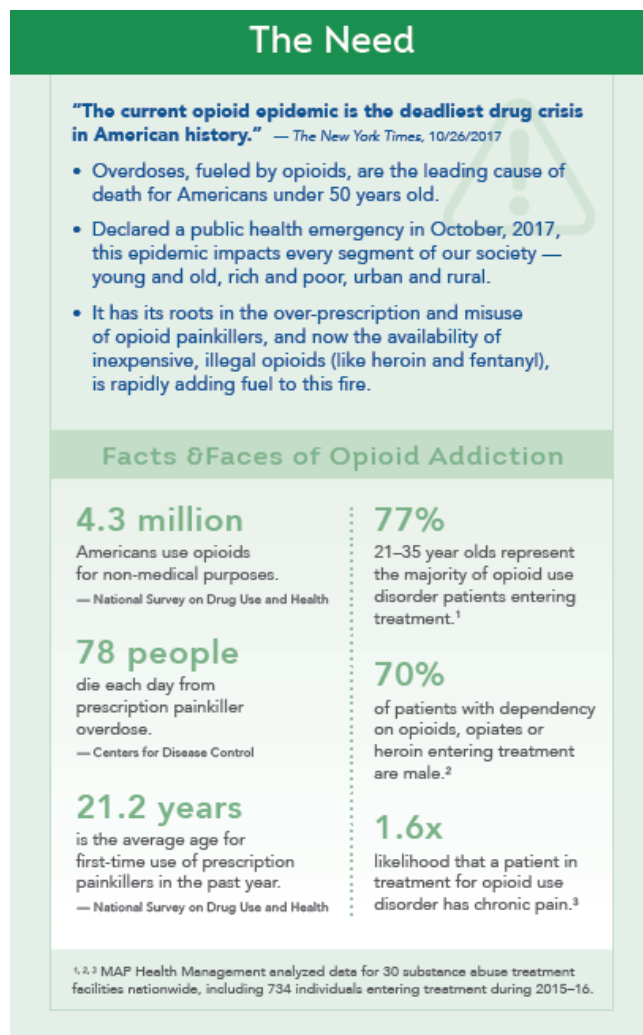
Behavioral health and the opioid epidemic

PeaceHealth is using a multidisciplinary approach to halt the opioid epidemic and heal patients and families suffering from substance use disorders and chronic pain. Focusing on prevention through “fire proofing,” PeaceHealth is implementing a strategic plan to curtail opioid use and treat behavioral health disorders stemming from substance abuse.



Taking Action:

1. Creating standard guidelines and alternatives to opioids such as acupuncture and yoga for the treatment of chronic pain.
2. Implementing new tools to document and report opioid usage.
3. Holding physicians and prescribers accountable with peer reviews.
4. Preventing and treating by creating Narcan (naloxone) policies and procedures, treatment programs, and prescribing suboxone to treat addiction.
5. Partnering with behavioral health centers for treatment of substance abuse disorders.



VII. Community Input and Convening

Community input was secured in a number of ways. First, a survey/interviewing of key informants was conducted. Secondly, PeaceHealth St. John participated in and support listening sessions and roundtable meetings conducted by Pathways 2020. Finally, a community open house was conducted at PeaceHealth St. John on March 29, 2019.

KEY INFORMANT INTERVIEWS AND SURVEYS

PeaceHealth St. John surveyed and interviewed community leaders from organizations throughout the County representing perspectives from public health and medically underserved and vulnerable groups. PeaceHealth St. John conducted interviews and meetings with key community leaders throughout the month of February. A number of these occurred in close partnership with Pathways 2020 as part of their community report card process.

The key informant interviews and surveys were designed to collect input on the following:

- Health needs and gaps of the community;
- Feedback on the 2016 CHNA priorities and accomplishments to date; and
- Secondary data gathering for 2019 CHNA

Table 7 details the organizations that participated in the key informant interviews:

Table 7. Key Informant Interview Participants by Organization, 2019 CHNA

Organization	Population Served
Pathways 2020	All Cowlitz County residents.
Cowlitz County Health Departments	All Cowlitz County residents; 0-25 ages for individual services, medically underserved.
Cowlitz Family Health Center	Medically underserved, homeless, immigrant, early childhood to senior groups.
Lower Columbia School Gardens	School-age children.
Community Health Partners	Medically underserved, homeless, immigrant, early childhood to senior groups.
Washington State University – Extension Staff	All Cowlitz County residents.
Cowlitz County Department of Public Works	All Cowlitz County residents.
Meals on Wheels/Community Action Program	Elderly population (60+), homeless, low income and disabled population.
Child & Adolescent Clinic	Children ages 18 and under.
Love Overwhelming	Homeless individuals in Cowlitz County

Organization	Population Served
Healthy Living Collaborative	Southwest Washington residents
Head Start	Low income children ages 3 to 4 and their families.
Longview School District	School age children and their families
Kelso School District	School age children and their families
Lower Columbia College	All Cowlitz County residents

ROUNDTABLES AND LISTENING SESSIONS


Pathways 2020 as part of a biennial update of its Community Report Card, conducted a number of roundtable and listening sessions on topic areas including education, health and nutrition, housing and economic vitality. PeaceHealth St. John supported the convening of the sessions and actively participated. The insights from attendees are reflected throughout this CHNA.

COMMUNITY CONVENING OPEN HOUSE

In late March, PeaceHealth St. John held a community open house. As with the key informant interviews, participants were guided through a three-part process: 1) a look back to the 2016 CHNA and progress to date; 2) a review of updated primary and secondary data gathered for the 2019 CHNA including a summary of the PeaceHealth system defined unmet needs and key informant interview themes, and then, 3) they were asked to provide their input into priorities and, importantly, provide input on anything that may have been missing. The input was provided both verbally and within a written survey. The process was specifically designed to provide flexibility for participants.

Community leaders from local and regional public health, health and social services, business, schools and law enforcement attended, representing the following organizations:

- Longview Police Department
- Weyerhaeuser
- Cowlitz County Public Health Department
- Pathways 2020
- Safe Kids Coalition
- St John Foundation
- Longview Fire Department
- Healthy Living Collaborative
- Cowlitz County Health and Human Services
- Cowlitz Family Health Center
- City of Longview
- Cowlitz Economic Development Council
- Highlands Neighborhood Association
- South Kelso Neighborhood Association



The top needs/gaps as identified in the key informant interviews and community open house are summarized as:

- **Housing instability, affordable housing, homelessness and service enriched housing:** Data suggests that there is an increasing number of seniors who are homeless due to limited income and high costs of rent. Further, the inventory of low-income housing is not adequate for all residents and there is also a large number of homeless youths in Cowlitz County. There is need for service enriched housing.
- **Substance abuse/mental health:** All agree that existing agencies and providers are eager to work together, but more work needs to be done to link services and reduce barriers. Tobacco, specifically vaping products, is a significantly larger issue than in 2016.
- **Inclusion/equity:** There continues to be a need to support special populations (Hispanic, elderly) and expand community efforts to coordinate resources. Increasing the use of Community Health Workers was universally identified as a key strategy.
- **Food insecurity and healthy eating:** While many reported broader supports for school gardens (and Longview/Kelso are doing them very well) and while there are healthier commodity options available, there are still gaps. Certain populations need support to learn basic cooking and shopping skills and food insecurity continues to be a concern.
- **Adverse Childhood Experiences (ACES):** There was consensus that developing and using trauma-informed approaches to help build resiliency, and especially supporting parents is important.

VIII. Next Steps:

Consistent with 26 CFR § 1.501(r)-3, PeaceHealth St. John will adopt an Implementation Strategy on or before the 15th day of the fifth month after the end the taxable year in which the CHNA is adopted, or by November 15, 2019. Prior to this date, the Implementation Plan will be presented to the Community Health Board for review and consideration. Once approved, the Implementation Plan will be appended to this CHNA and widely disseminated. It will serve as PeaceHealth St. John's guidance for the next three years in prioritizing and decision-making regarding resources and will guide the development of an annual plan that operationalizes each initiative.



IX. Data Sources

Behavioral Risk Factor Surveillance System BRFSS: used to measure chronic diseases and health behaviors among a population of adults in all 50 states at the County level.

Washington Healthy Youth Survey: measures health risk behaviors and outcomes among sixth, eighth, 10th and 12th graders in Washington state.

Washington Department of Vital Statistics: measures cause of death prenatally and at birth.

Robert Wood Johnson Foundation County Health Rankings: aggregates BRFSS, Vital Statistics, US Census and business data to provide an overview of measures that matter for health. Also provide estimates of individuals who have ‘severe housing problems,’ meaning individuals who live with at least one of four conditions: overcrowding, high housing costs relative to income or lack of kitchen or plumbing, as well as a measure of income inequality at the County and State level, which is the ratio of household income at the 80th percentile to income at the 20th percentile.

Washington Department of Health: compiled ACEs data on adults for the period of 2009-2011.

Office of the Superintendent for Public Instruction: measures “Readiness to Learn” among entering kindergarteners in Washington state in six domains: social-emotional, physical, language, cognitive, literacy and math.

USDA Women, Infant and Children Nutrition Program: measures breastfeeding among its program recipients by individual WIC site.

Childhood food insecurity: measured by the USDA and Feeding America and is characterized by a lack of consistent and sufficiently varied nutrition.

National Initiative for Children’s Healthcare Quality and Child Research Policy Center: combined data from County Health Rankings and Food Environment Atlas to highlight key health indicators.

Washington State Office of Financial Management: produces County Uninsurance rates from 2011 to 2017.

US Census: measures the percentages of individuals living in poverty, in linguistic isolation and adults who are unemployed.

Community Commons: provides maps of census-tract level data, including housing cost burden. The United Way Pacific Northwest ALICE report provides County-level estimates of ALICE households and households in poverty.