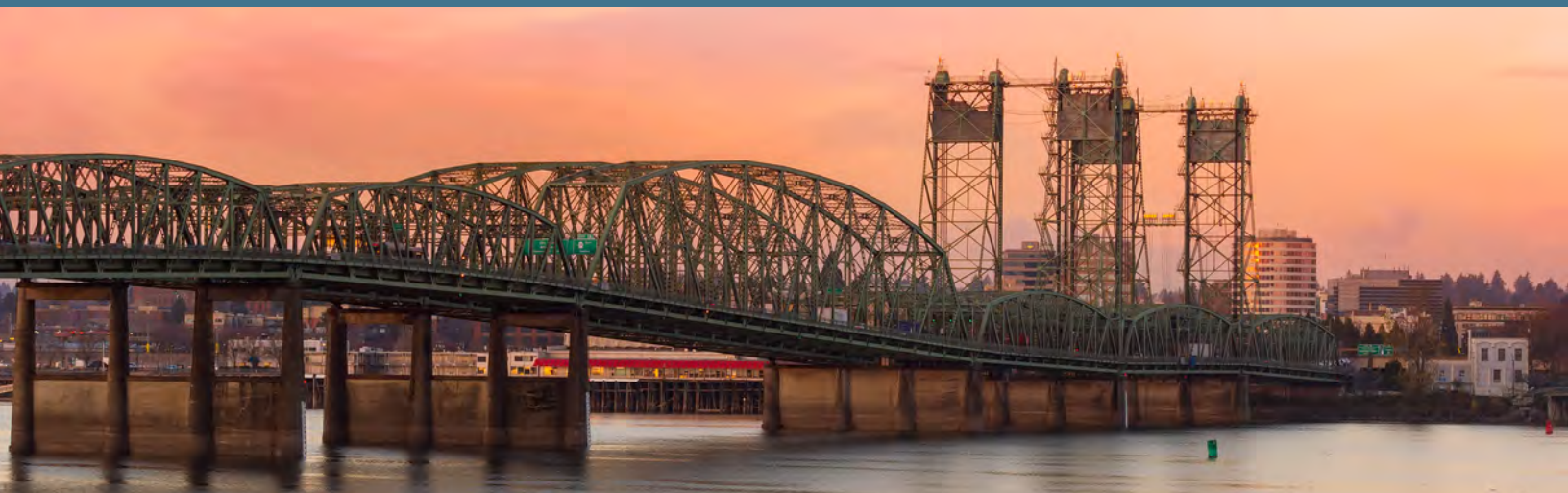


2019 Community Health Needs Assessment

Healthy Columbia Willamette Collaborative



Healthy **Columbia Willamette**
Assessing Community Needs, Improving Health



Adventist Health Portland



TUALITY HEALTHCARE
An OHSU Partner



Reader's Guide

This report presents results of a 2016–2019 community health needs assessment of the quad-county region: Clark County, Washington, and Clackamas, Multnomah, and Washington counties in Oregon.

This report is divided into five main sections:

1. Beginning: glossary of terms used in this report, summary, and overview
2. Social determinants of health
3. Core issues
4. Looking ahead (conclusions)
5. Appendices

Reading the first part of the report—from the Summary and Overview, through the social determinants of health—will provide context for the rest of the report. Healthy Columbia Willamette Collaborative (HCWC) identified nine core issues for this community health needs assessment, which each have their own section. The report includes links throughout to enable readers to easily jump from section to section as needed. Links to references cited in this report are also included.

Additional information about the following is included in the report appendices:

- HCWC background and workgroups: [Appendix A](#)
- Methodology for this community health needs assessment: [Appendix B](#)
- Additional information about social determinants of health not included in the main report: [Appendix C](#)
- Additional data about income, education, and literacy in the quad-county region: [Appendix C](#)
- Demographic information about listening session participants: [Appendix D](#)
- Health indicators including ED visit rates and mortality data for region: [Appendix E](#)
- HCWC's literature review for this assessment: [Appendix F](#)
- County-specific information: [Appendix G](#)

HCWC hopes readers will find this report useful in understanding the state of health in the communities, and that the assessment will inform future health initiatives and programs in this region.

Table of Contents

Section 1:	Summary.....	4
Section 2:	Glossary.....	9
Section 3:	Overview.....	12
Section 4:	Social Determinants of Health.....	18
Section 5:	Core Issues.....	34
	Discrimination and Racism.....	36
	Trauma.....	40
	Behavioral Health.....	43
	Chronic Conditions.....	48
	Sexually Transmitted Infections.....	53
	Access to Health Care, Transportation and Resources.....	55
	Community Representation	64
	Culturally Responsive Care	67
	Isolation.....	71
Section 6:	Looking Ahead.....	73
Section 7:	References.....	80
Section 8:	Appendices.....	84

Summary

This report presents results of the third community health needs assessment (CHNA) conducted by the Healthy Columbia Willamette Collaborative (HCWC). Consisting of seven hospitals systems, four county health departments and one coordinated care organization, the HCWC region covers Clark County, Washington, and Clackamas, Multnomah, and Washington counties in Oregon.

This unique public/private partnership serves as a platform for collaboration around health needs assessments. It allows for a more comprehensive view of community needs, informs priorities for HCWC member organization improvement plans, and supports a shared understanding for HCWC stakeholders and partners who collaborate on how to best meet community health needs. This group focuses on broad issues impacting the health of the region, including chronic conditions, language barriers, economic instability, isolation, and others. HCWC identified discrimination, racism, and trauma as the overarching issues that shape the lives and health of community members.

Equity and Community Voice

HCWC is committed to centering community voice and health equity¹ in its work and as integral to its vision. HCWC prioritized equity throughout the data collection, analysis, and reporting process for this CHNA (see [Appendix A](#) for more explanation).

HCWC prioritized community input and lived experiences of priority populations and leaders from community-based organizations across the region. Volunteer participants shared their insights on the vision, strengths, challenges, and needs of their communities in town halls and listening sessions.

Four town halls were conducted—one in each county—and community-based organizations hosted 18 community listening sessions across the quad-county region, with more than 200 participants.

The town halls were guided by these questions:

- What are the major issues impacting the health – and access to health care – of residents in the quad-county area?
- What has shaped their experiences with the health care systems and how has this impacted their current health and well-being?

The listening sessions were guided by these questions:

- How can you tell if your community is healthy?
- What gets in the way of your community being healthy?
- What's currently working?
- What are the resources that currently help your community to be healthy?
- What is needed? What more could be done to help your community be healthy?

See Methodology in [Appendix B](#) for more about the town halls and listening sessions.

Social Determinants of Health

HCWC heard directly from community members that racism, discrimination, and trauma impact the health and well-being of communities. These are key drivers of each of the core issues identified in this report.²

In shaping this CHNA, the HCWC used Healthy People 2020's definition and five categories³:

- 1. Social and Community Context:** civic participation, discrimination, incarceration, social cohesion
- 2. Education:** early childhood education and development, enrollment in higher education, high school graduation, language and literacy
- 3. Health and Health Care:** access to health care, access to primary care, health literacy
- 4. Economic Stability:** employment, food insecurity, housing instability, and poverty
- 5. Neighborhood and Built Environment:** access to foods that support healthy eating patterns, crime and violence, environmental conditions, and quality of housing

See [page 18](#) for more information about social determinants of health.

Key Findings of CHNA: Nine Core Issues

Through the listening sessions and town halls, the HCWC gathered feedback directly from community members to identify important issues. As supported by quantitative data collected and analyzed for this CHNA, HCWC identified nine core issues as central to the needs of the region.

Discrimination and Racism and Trauma are the driver issues to all the core issues. The other core issues are broken into two categories, as shown below:

- **Key Drivers of all Core Issues:**
 - **Discrimination and Racism**
 - **Trauma**
- **Health Outcomes**
 - Behavioral Health
 - Chronic Conditions
 - Sexually Transmitted Infections
- **Social Factors**
 - Access to: Health Care, Transportation, and Resources
 - Community Representation
 - Culturally Responsive Care
 - Isolation

The key findings from each core issue are summarized below.

Discrimination and Racism

Discrimination and racism impact all aspects of a person's health and well-being and intersect with all major systems of society—education, governing/political, law enforcement, health care, and others. The impacts of discrimination and racism are deep rooted and multi-generational. These are just a few of the effects discussed as part of HCWC's listening sessions and town halls:

- Health inequity
- Collective historical trauma
- Toxic stress
- Lack of representation

Trauma

Trauma has a profound impact on people. Adverse childhood experiences can have long-lasting adverse effects on people and correlate directly with poorer health outcomes.

As understanding of the long-term social and health impacts of trauma grows, trauma-informed care practices, policies, and resources will continue to grow and develop to respectfully and compassionately support needs of people in the community.

Behavioral Health

Behavioral health includes mental and emotional health, and conditions such as anxiety, depression, substance use disorders, and many others.

Across the quad-county region, almost a quarter of the population has been diagnosed with depression. Depression and suicide are major concerns for adults and youth alike.

- More access to behavioral health services is needed, as well as more providers who can provide culturally and linguistically competent behavioral health services (also see Culturally Relevant Care).

Chronic Conditions

HCWC identified the following chronic conditions as significantly impacting residents of the region, with communities of color having higher rates than whites:

- Heart disease
- Diabetes
- Hypertension
- Liver disease

Listening session participants highlighted several needs in this area, including for more peer navigators to help people access comprehensive health care and for intergenerational lifestyle change programs to improve health.

Sexually Transmitted Infections

Rates of chlamydia and gonorrhea are increasing in the region. Youth in listening sessions raised the issue of STIs and the need for more resources and education about STIs.

Access to Health Care, Transportation, and Resources

Access to these three areas is a major issue in the region.

Access: To Health Care

Access to health care is a challenge for those without insurance and for those with Medicaid, Medicare, and commercial insurance. Cost, location, and availability of services are key factors influencing access.

- More focus on prevention, including understanding and acknowledging what has happened in a person's lives before they come to a health provider (for example, what was happening in their life before they're admitted to a hospital?).

Access to Health Care, Transportation, and Resources (continued)

- Cost is a major barrier. Even for those who are insured, copays can be barriers to service if they are struggling financially
- Language can be a barrier to care (see Culturally Responsive Care below)
- More coordination between types of services and providers is needed to help people access and navigate care. Peer navigators and community health workers were frequently mentioned in listening sessions and town halls as great ways to help people navigate the health care system.

Access: To Transportation

Through this assessment, HCWC found transportation to be both a strength and an area for improvement, depending on where residents live and their particular needs.

- Challenge for residents of rural areas; impacts abilities to access health care. Geographic isolation (see Isolation below). Centralized services are ideal.

Access: To Resources

HCWC identified many strengths and areas for improvement in the area of resources. Communities in the region have many valuable resources like food banks, emergency shelters, multicultural centers, and LGBTQ+ organizations.

These are key areas that fall under community resources:

- Safe and affordable housing
- Community spaces
- Safe spaces for children and youth
- Resources for low-income people

Participants in the HCWC listening sessions often mentioned the following as areas of need:

- More preventive care and screening for mental health issues
- More financial counseling
- More resources for parents, particularly those who are immigrants or refugees and/or whose primary language is not English (see Community Representation for more)
- Better coordination of existing community resources

For community-based organizations, obtaining sufficient and consistent funding for their programs is a major challenge. They also find the lack of coordination between agencies and organizations as an area for improvement—more awareness of each others' available resources could help the communities they serve.

Community Representation

The lack of representation in local governments, particularly of communities of color, is a core issue. The lack of diversity and representation extends to all areas, including schools, workplaces, and the organizations that serve communities. This representation gap contributes to perpetuating policies that are outdated and misinformed.

- Increased representation and civic engagement among underrepresented communities helps elevate voices at the table that both represent and understand the lived experiences of community members.
- Increased representation and cultural awareness in health care settings increases clear communication, trust and understanding of how to best manage health (see Culturally Responsive Care below).

Culturally Responsive Care

For those in immigrant or refugee communities, and for those whose English is limited, language barriers and a lack of translators in health care settings poses significant challenges to accessing health care. Lack of cultural awareness by health care providers can also be a barrier.

Participants in the HCWC listening sessions and town halls often mentioned the following as key to culturally responsive care:

- Community health workers
- Peer navigators
- Translators
- More translated resources in non-English languages

Isolation

Geographic and social isolation adversely impact health and well-being. Geographic and physical isolation decrease people's ability to access services. This is often an issue in rural areas where there are limited, if any, public transportation options and limited health care providers and health care centers in those areas.

Social isolation, which occurs in both rural and urban areas, means limited support through family or a social circle and limited involvement with the community. For some immigrants, social isolation can mean feeling culturally isolated.

- To address geographic isolation in rural areas, medical mobile units and other outreach efforts are important.
- For social isolation, community outreach and social services are key to supporting better social connections.

Glossary

Abbreviations

- ACEs: Adverse Childhood Experiences
- BRFSS: Behavioral Risk Factor Surveillance System
- CHNA: community health needs assessment
- HCWC: Healthy Columbia Willamette Collaborative
- STI: sexually transmitted infection

Definitions

- **Achievement gaps:** Achievement gaps, which begin as opportunity gaps, are disparities in academic performance between groups of students (for example, between students of different socioeconomic backgrounds, gender, and between different racial and ethnic groups).
- **Built environment:** The human-made space in which people live and work on a daily basis. Built environment can include access to healthy foods, community gardens, mental and physical health services, walkability, and bike-ability (such as bike paths or bike lanes).ⁱ
- **Community:** Group of people with diverse characteristics who are linked by social ties, common perspectives, and who may be engaged in joint action in geographical locations or settings. This is but one definition. Community can be defined in multiple ways depending on the people asked and what groups have in common.ⁱⁱ
- **Discrimination:** Socially structured action that is unfair or unjustified and harms individuals or groups. Occurs on both structural and individual levels. For a robust explanation and definition, please see Healthy People 2020's [definition](#).ⁱⁱⁱ
- **Food insecurity:** Limited or uncertain access to adequate food because of lack of money and other resources.^{iv,v}
- **Gentrification:** Influx of new residents to an area, usually middle class or wealthier, that causes an increase in rent and housing costs and displaces the original or long-time residents of that area. Gentrification can have adverse effects on health for those being displaced.^{vi}

ⁱ https://en.wikipedia.org/wiki/Built_environment

ⁱⁱ MacQueen KM, McLellan E, Metzger DS, et al. What is community? An evidence-based definition for participatory public health. *Am J Public Health*. 2001. Dec;91(12):1929-38. <https://www.ncbi.nlm.nih.gov/pubmed/11726368>

ⁱⁱⁱ Healthy People 2020. Office of Disease Prevention and Health Promotion. Social Determinants of Health topics: Discrimination: <https://www.healthypeople.gov/2020/topics-objectives/topic/social-determinants-health/interventions-resources/discrimination>

^{iv} U.S. Department of Agriculture. Definitions of Food Security: <https://www.ers.usda.gov/topics/food-nutrition-assistance/food-security-in-the-us/definitions-of-food-security.aspx>

^v Healthy People 2020. Office of Disease Prevention and Health Promotion. Food Insecurity: <https://www.healthypeople.gov/2020/topics-objectives/topic/social-determinants-health/interventions-resources/food-insecurity#1>

^{vi} Centers for Disease Control and Prevention. Health Effects of Gentrification: <https://www.cdc.gov/healthylives/healthtopics/gentrification.htm>

Glossary

Definitions (continued)

- **Health equity:** Means everyone has a fair and just opportunity to be as healthy as possible.^{vii} HCWC, using an adapted definition from the World Health Organization,^{viii} defines health equity as when all people can reach their full potential and are not disadvantaged by social or economic class, race, ethnicity, religion, age, disability, gender identity, sexual orientation or socially determined circumstance. Optimal health depends on mitigating or eliminating avoidable inequities in the access to and utilization of resources and opportunities. Health equity demands intentionally and systematically addressing poor health outcomes by purposefully engaging the root and intersectional causes of adverse health status such as racism, structural disadvantage and differential privilege.
- **Health justice:** The health of the quad-county region is not only defined by the quality of health care, it is assessed by the complete physical, social, and mental well-being of the population.^{ix} It is defined by the World Health Organization as necessary for human wellbeing, providing intrinsic value for comfort, contentment, and the pursuit of the joys of life.^x The network for health justice defines it as: giving human dignity to everyone, regardless of who they are or where they come from. It means access to equitable and affordable, quality care for all.^{xi}
- **Health literacy:** The degree to which individuals have the capacity to obtain, process, and understand basic health information and services needed to make appropriate health decisions. It is dependent on individual and systemic factors: communication skills of lay persons and professionals.^{xii}
- **Housing insecurity:** Circumstance in which you have no residence or have an unexpected cost/catastrophic event that results in not having enough money for rent/housing.^{xiii}
- **Isolation:** Isolation is a key determinant of health. It is different from loneliness, though they are often discussed together. In this report, isolation means either geographic, physical, and/or social isolation. It pertains to social contacts or network that can include family and friends, but also the broader environment through social activities. Isolation also means being geographically isolated (where you live is a long way from other people, services).^{xiv}

^{vii} Robert Wood Johnson Foundation. "What Is Health Equity?" 2017.

<https://www.rwjf.org/en/library/research/2017/05/what-is-health-equity-.html>

^{viii} World Health Organization. Equity. <https://www.who.int/healthsystems/topics/equity/en/>

^{ix} Daniels N. Justice, Health, and Healthcare. The American Journal of Bioethics. 2001. 1:2, 2-16; DOI: 10.1162/152651601300168834.

^x Ruger JP. Health and social justice. Bulletin of the World Health Organization. 2011; 89:78-78.

<https://www.who.int/bulletin/volumes/89/1/10-082388/en/>

^{xi} The Network for Public Health Law. Health Justice: Empowering Public Health and Advancing Health Equity. 2018.

https://www.networkforphl.org/the_network_blog/2018/09/12/1031/health_justice_empowering_public_health_and_advancing_health_equity/

^{xii} U.S. Department of Health and Human Services. Quick Guide to Health Literacy.

<https://health.gov/communication/literacy/quickguide/factsbasic.htm>

^{xiii} APHA: <https://www.apha.org/policies-and-advocacy/public-health-policy-statements/policy-database/2018/01/18/housing-andhomelessness-as-a-public-health-issue>

Glossary

Definitions (continued)

- **Life-course theory:** Refers to studying people in a more holistic way including their lives, structural context, and social change. This discipline includes history, sociology, demography, developmental psychology, biology, and economics. Focus on the connection between individual lives and the historical and socioeconomic context which influence/encompass lives.^{xv}
- **Morbidity:** rate of a disease or diseases
- **Mortality:** rate of death
- **Non-binary:** gender identity and/or gender expression falling outside the categories of man and woman
- **Qualitative data:** Non-numerical data based on traits or characteristics (for example, types of chronic health conditions someone may have)
- **Quantitative data:** Numerical data calculated and collected through established methods (for example, number of times a year someone visits the doctor or hospital, etc.)
- **Racism:** “A system of structuring opportunity and assigning values based on the social interpretation of how one looks (which is what we call “race”), that unfairly disadvantages some individuals and communities, unfairly advantages other individuals and communities, and saps the strength of the whole society through the waste of human resources.” - APHA Past President Camara Jones, MD, PhD, MPH ^{xvi}
- **Social determinants of health:** Are the conditions in which people are born, grow, live, work, and age. These circumstances are shaped by the distribution of money, power, and resources at global, national, and local levels.^{xvii}
- **Transgender:** gender identity and/or gender expression different from what is typically associated with the sex assigned at birth ^{xviii}
- **Trauma:** A deeply distressing or disturbing experience

^{xiv} Menec VH, Newall NE, Mackenzie CS, et al. Examining individual and geographic factors associated with social isolation and loneliness using Canadian Longitudinal Study on Aging (CLSA) data. PLOS ONE. 2019. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6358157/>

^{xv} Life Course Theory: <https://www.encyclopedia.com/reference/encyclopedias-almanacs-transcripts-and-maps/life-course-theory>

^{xvi} American Public Health Association. Racism and Health. <https://www.apha.org/topics-and-issues/health-equity/racism-and-health>

^{xvii} World Health Organization. Social Determinants of Health: https://www.who.int/social_determinants/sdh_definition/en/

^{xviii} GLAAD. Media Reference Guide: <https://www.glaad.org/reference/transgender>



Community Health Needs Assessment Overview

Overview

HCWC is dedicated to advancing health equity by identifying health assets and challenges facing communities in the quad-county region. This 2019 community health needs assessment (CHNA) seeks to highlight the community's needs and provide a road map for future collaborations and health improvement projects. It will also inform the individual community health improvement plans of partner organizations.

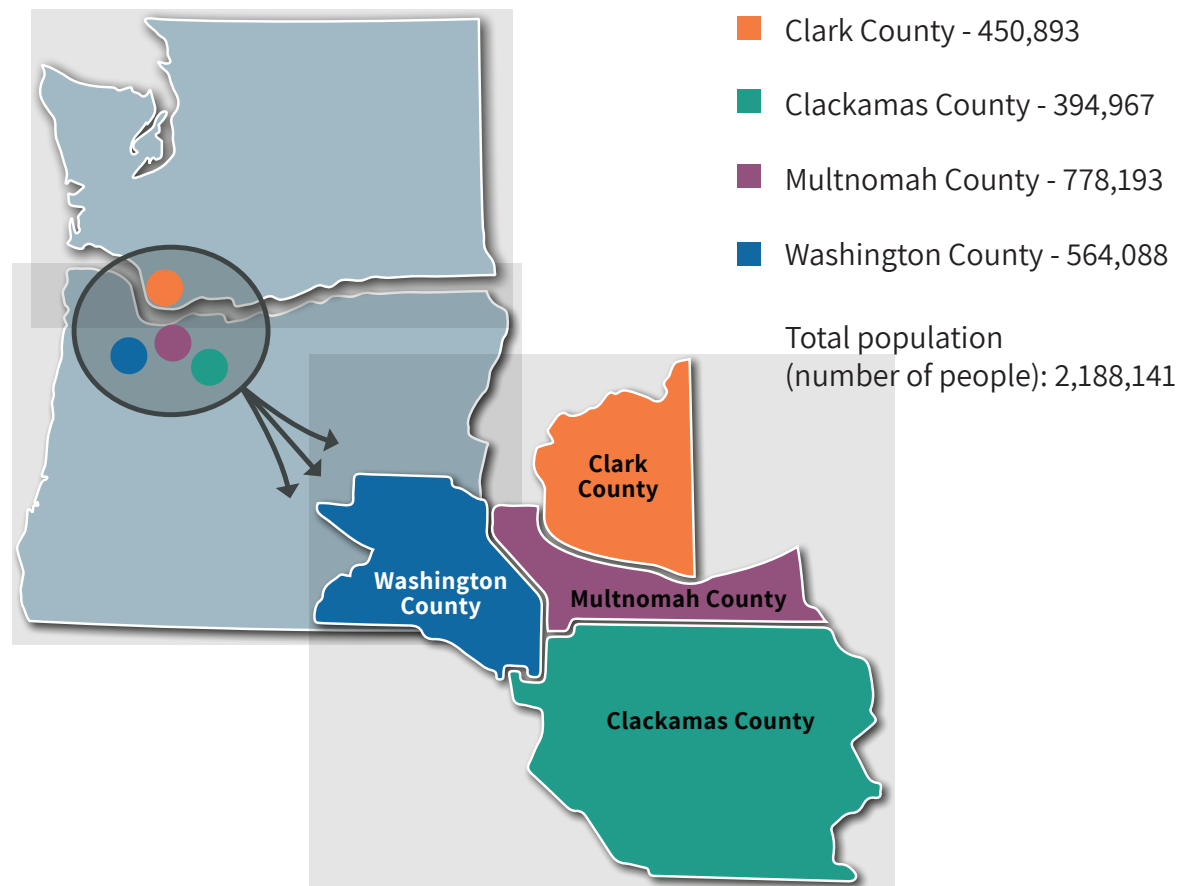
In past cycles, the opioid crisis was highlighted and led to statewide focus and work to reduce opioid-related harms. The "Housing is Health Initiative," with Central City Concern, began as a result of a previous CHNA, which addressed social determinants affecting the overall health of the community. The 2016 CHNA report is available [here](#).

HCWC members:

- Adventist Health
- Clackamas County Health, Housing and Human Services
- Clark County Public Health
- Health Share of Oregon
- Kaiser Permanente
- Legacy Health
- Multnomah County Health Department
- Oregon Health & Science University (OHSU)
- PeaceHealth Southwest Medical Center
- Providence Health and Services
- Tuality Healthcare
- Washington County Public Health

Quad-County Region

This CHNA covers the quad-county region of Clark County, Washington, and three counties in Oregon: Clackamas, Multnomah, and Washington.



Quad-County Region (continued)

The demographics of the region shows the importance of having a community health system that is responsive to diversity. Tables 1–3 show basic demographic characteristics of the quad-county region’s population.

Table 1. Selected Demographic Characteristics of the Region.

	Clark	Clackamas	Multnomah	Washington	Region
	450,893	394,967	778,193	564,088	2,188,141
Gender					
Male	49.4%	49.2%	49.5%	49.3%	49.4%
Female	50.6%	50.8%	50.5%	50.7%	50.6%
With a disability	12.6%	11.9%	13.3%	10.2%	12.0%
Foreign born	10.4%	8.0%	13.9%	17.0%	12.9%
Language other than English spoken at home	15.0%	12.1%	19.7%	24.1%	17.4%

Source: American Community Survey 5-year estimates 2012–2016.

Table 2. Quad-County Region: Ages.

	Clark	Clackamas	Multnomah	Washington	Region
Age					
Median age (years)	37.8	41.4	36.7	36.2	38.0
Under 5 years	6.4%	5.5%	5.9%	6.6%	6.1%
5 to 19 years	21.1%	19.1%	15.9%	19.9%	18.6%
20 to 44 years	32.2%	30.3%	41.1%	36.4%	36.1%
45 to 64 years	26.6%	29.0%	25.2%	25.2%	26.2%
65 years and older	13.7%	16.1%	11.9%	11.8%	13.0%

Source: American Community Survey 5-year estimates 2012–2016.

Table 3. Quad-County Region: Race and Ethnicity.

	Clark	Clackamas	Multnomah	Washington	Region
Race/ethnicity					
American Indian and Alaska Native	0.6%	0.7%	0.8%	0.6%	0.7%
Asian	4.3%	4.1%	6.9%	9.5%	6.5%
Black or African American	1.9%	0.9%	5.4%	1.8%	3.0%
Hispanic or Latino (of any race)	8.7%	8.2%	11.1%	16.2%	11.4%
Native Hawaiian and Other Pacific Islander	0.8%	0.3%	0.6%	0.4%	0.5%
Two or more races	4.6%	3.4%	5.2%	4.9%	4.7%
White	84.6%	89.0%	78.2%	77.6%	81.3%

Source: American Community Survey 5-year estimates 2012–2016.



Influencers of Change

Many issues affecting the quad-county region are driven by local, state and national issues and policy. A brief summary of factors, trends, and events includes:

- Local, state, and nationwide election cycles and policy shifts
- Wildfire, flooding, and other natural disasters affecting landscape, housing, and health
- Historic racism and discrimination ([see Discrimination and Racism](#))
- Other reports evaluating the region for priority areas of focus to affect resourcing
- Housing, opioids, and education are focus factors in the quad-county region

For more information about these impactful trends and events, see [Appendix C](#).

Community Voice

Community-based organizations hosted 18 community listening sessions focusing on the following priority populations:

- Senior (65+) LGBTQ+ persons
- Senior (65+) Low-Income
- Senior (65+) Rural
- Farmworkers
- Hispanic/Latinx
- LGBTQ+ Homeless Youth
- Middle Eastern
- Military Connected
- Pacific Islanders
- People of Color with Housing Concerns
- People with Mental Health Concerns
- Rural
- Slavic
- Youth
- Youth of Color

Community Voice (continued)

The listening sessions were discussions with community members focusing on their lived experiences and perspectives regarding the strengths and challenges facing their communities. This information was analyzed to support the findings in this report. See [Appendix D](#) for demographic information about participants in these listening sessions.

HCWC conducted four town halls, one in each county, with participants that represented community organizations. At the town halls, representatives of community-based organizations, public health professionals, and community leaders gathered to review morbidity and mortality data and reflect on their experiences supporting community health and well-being. Their input was collected and analyzed.

Methodology

HCWC used a mixed methods approach for the CHNA. HCWC prioritized community voice and input in this assessment (qualitative data), while also including data from public health surveys, hospitals, and other sources (quantitative data). HCWC used a modified version of the Mobilizing for Action through Planning and Partnerships (MAPP) model to guide the needs assessment (see Figure 1). The MAPP model is an iterative process combining health data and community input to identify and prioritize community health needs.

In this report, HCWC examines conditions by ethnic and racial categories, whenever possible, to focus on how health differs within communities of color, who are

often most impacted by health disparities. Because comparing communities of color on a single health issue in a single chart can unintentionally contribute to racism by reinforcing scarcity-based thinking and creating competition between groups for limited resources, the assessment is organized in some sections by race or ethnicity rather than by health condition.

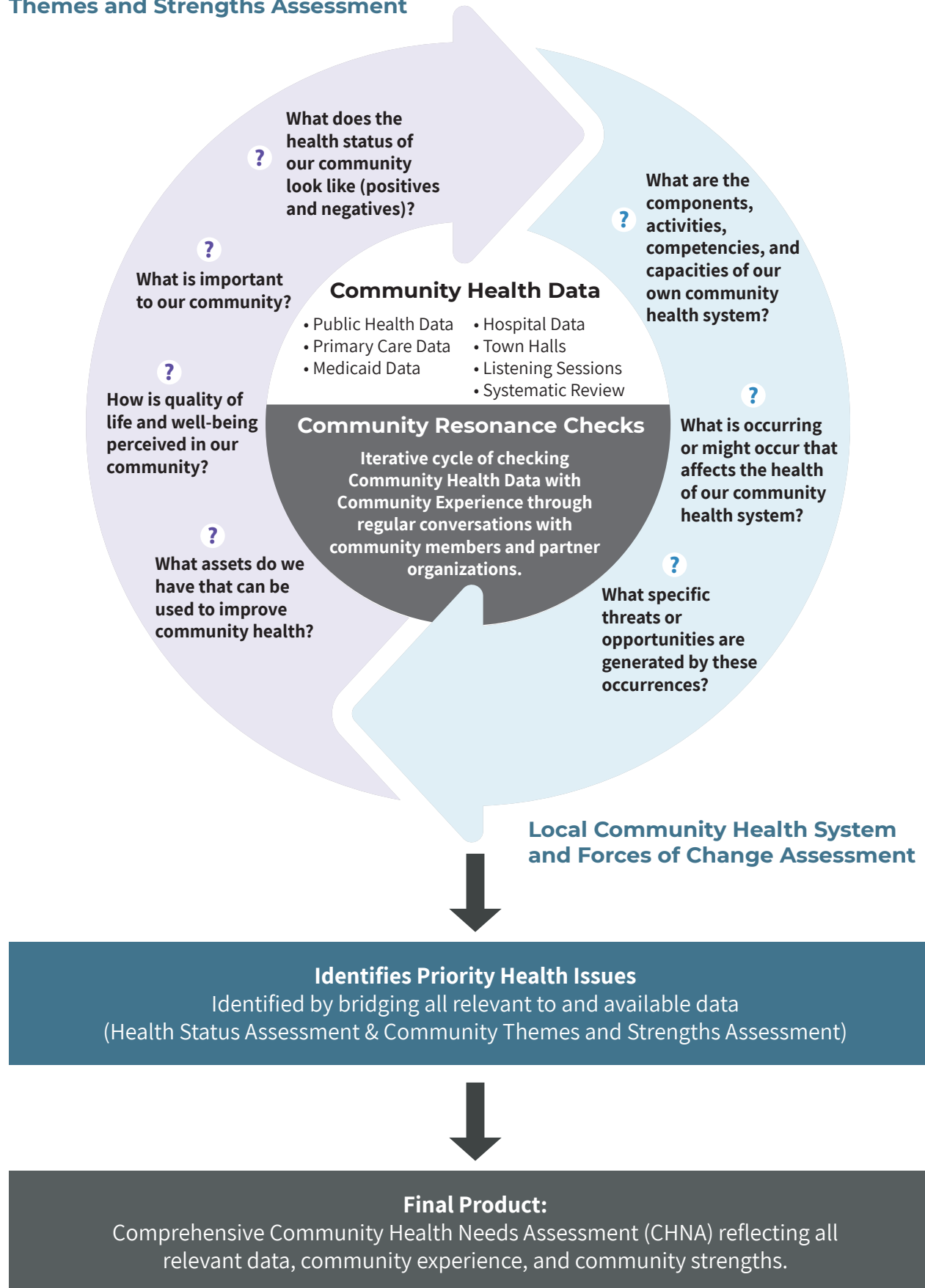
There are limitations on how race and ethnicity are collected and categorized in the data systems used in this report. Most data collection systems use a limited number of racial and ethnic categories that are not always self-reported by an individual, leading to bias in data collection. The categorization of people who identify with multiple races or ethnicities is limited.

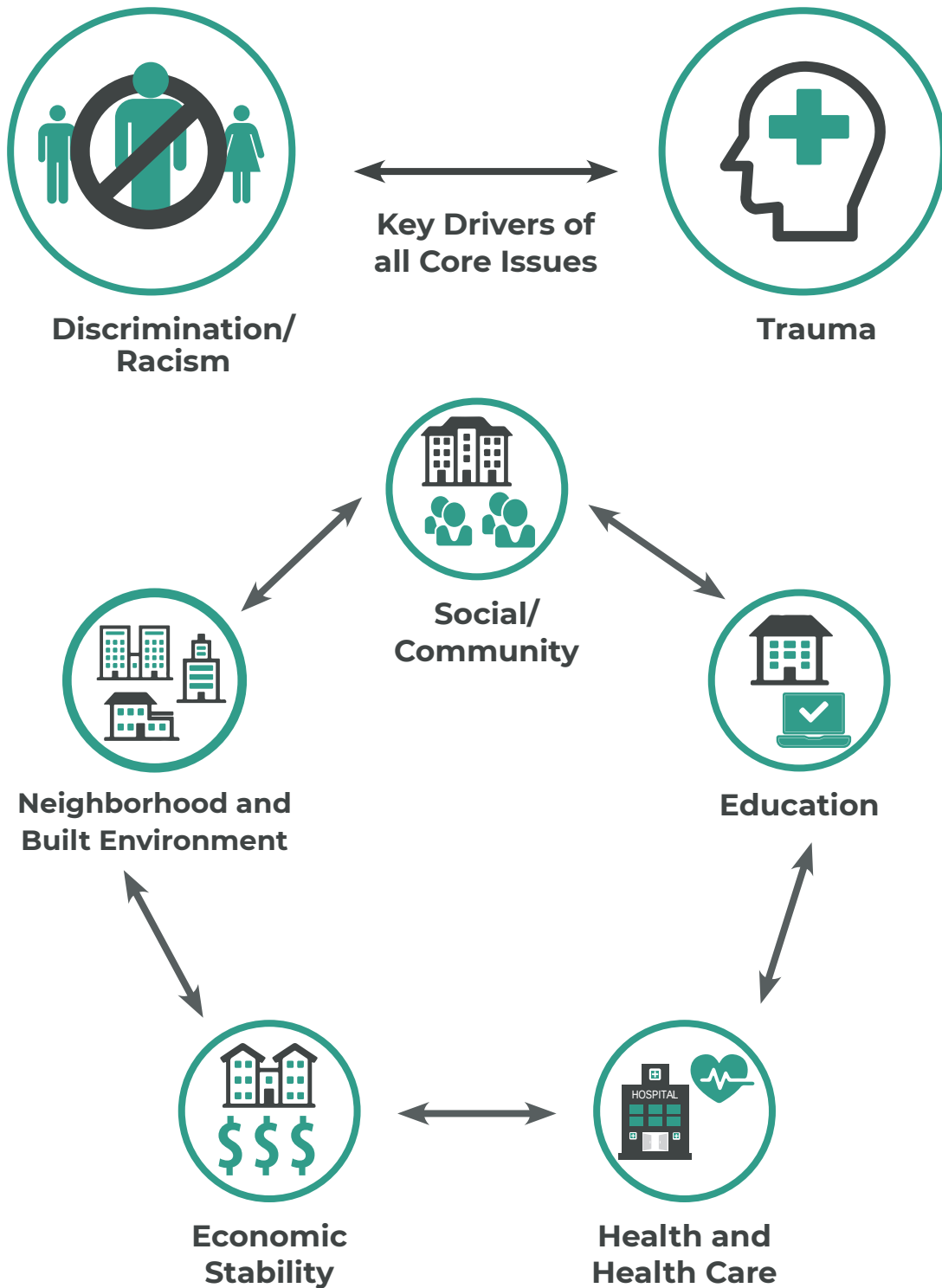
Both Oregon's and Washington's populations are predominantly white with 84.4% and 75.4% of the population identifying as white, non-Hispanic. The region's large white population makes it hard to collect data that would allow for a robust analysis of health disparities and health outcomes in communities of color. Due to sample sizes for some populations, data connecting the themes of the qualitative data collection to the quantitative data is limited.

For more information about the methodology, see [Appendix B](#).

Figure 1. HCWC 2019 Assessment Model.

Health Status Assessment & Community Themes and Strengths Assessment





Social Determinants of Health



Social and Community Context

Social and community connections and context are crucial to the health and well-being of the region. Civic participation, discrimination, racism, incarceration, and social cohesion affects the lives of individuals throughout the region in a myriad of ways. Strong social and community connections are key to addressing health outcomes. All the social determinants of health are intrinsically linked with discrimination and racism. Discrimination and racism impact all aspects of community members' lives.

Discrimination and Racism

Discrimination and racism across the region continue to impact the health of community members. The policies and structures that are in place across the region limit opportunities for some individuals. The link between discrimination and racism and health is clear. Differences in health between racial groups in the United States are significant and persistent, even after controlling for known factors. The physical impact of discrimination and racism can cause people to live in a constant state of stress,⁴ which over time leads to chronic conditions. It also impacts the mental health of those experiencing it.

Discrimination

Discrimination, while often tied to racism, is not entirely the same. Discrimination is the unjust or prejudicial treatment of categories of people based on race, age, sex, sexual orientation, gender identity, disability status, mental health status, cultural identity, and other factors. Similar to racism, discrimination affects the everyday lives of community members across the region through large and small actions taken by individuals and institutions.

“As a society we have an unwillingness or inability to acknowledge the role of structural racism in informing people’s health, including how we decide what data are ‘valid’ and ‘statistically significant.’”
- Town Hall Participant

Community members who experience unjust treatment based on race may also experience discrimination. Some people whose race aligns with the white majority (see quad-county region demographics, [page 14](#)) experience discrimination based on other identities.

This discrimination can include:

- harassment such as inappropriate jokes, insults, or visual displays
- wage discrimination, where an employer offers a lower wage to one person versus another based on their identity
- hiring discrimination where an employer asks inappropriate questions about life circumstances or declines to hire a person based on disabilities or health limitations
- housing discrimination where a landlord may refuse to rent to, for example, a family or a young person

Racism

Race and racism are social constructs. Racism structures opportunity and assigns value based on the social interpretation of the way people look. It unfairly disadvantages some individuals and communities, while unfairly giving other individuals and communities advantages. Racism saps strength from society by undermining the realization of full potential for some communities based on their race (Camara Jones, MD, PhD, MPH).⁵

Racism affects people's everyday lives through small and large actions at the individual, community, and system level.

“Racism and prejudices from childhood are a hard boulder to move.”
– Listening Session Participant

Effects of Historical Racism

The region's history influences the racism and discrimination of today. This includes the genocide and removal of Native American tribes from their ancestral land, national immigration restrictions limiting immigrants from certain countries or regions, and redlining against African Americans, which is the practice of denying or limiting financial services (like home loans) to certain neighborhoods.^{6,7}

These policies and events continue to impact people of color across the region today. Gentrification of neighborhoods historically populated by communities of color, perpetuates racism as people are driven out of their communities. At the same time, national policies affect immigrant and refugee communities.

Isolation and Social Cohesion

Poor family support, minimal contact with others, and limited involvement in community life are associated with increased disease and early death. Studies have shown that the magnitude of health risk associated with social isolation are similar to that of smoking cigarettes.⁸ Social networks have been shown to be predictors of health behaviors, suggesting people with strong social networks will make healthier lifestyle choices than those without social support.⁹ See [Isolation](#) section for more.

Across the region there are significant differences in the rate of social associations, which are the number of membership associations in a population.¹⁰ Lower rates of social associations can indicate isolation from the larger community.

Rate of Social Associations per 10,000 population:

- | | |
|---------------------|------|
| • Clark County | 7.1 |
| • Clackamas County | 9.0 |
| • Multnomah County | 11.4 |
| • Washington County | 7.3 |

Source: 2018 County Health Rankings & Roadmaps.



Education, Literacy and Language

Education is a powerful driver of wellness and can improve health outcomes, health behaviors, and social outcomes into adulthood.¹¹ Achievement gaps, which begin as opportunity gaps, are disparities in academic performance between groups of students; for example, between students of different socioeconomic backgrounds and between different racial and ethnic groups.^{12,13} Achievement gaps are evident in children as young as nine months,² suggesting that early childhood services and education are necessary to support achievement. This sentiment was echoed by participants in listening sessions who expressed a desire for skills and education development supporting better employment opportunities for community members, especially those with limited access to housing or stable income.

Below are some notable literacy and education findings about the region:

- Youth literacy in the region:
 - 56% of students in all grades met Oregon's English language arts standard in 2016–2017
 - 67% of Grade 10 students in Clark County met Washington's English language arts standard
- Between 2012 and 2016, 6.5% of preschool age children were enrolled in nursery school or preschool across the region (does not include daycares or other types of childcare).
- Five-year graduation rates in Clark County in Washington have been increasing since 2013.¹⁴
- Across the quad-county region, 8.9% of the population has an associate's degree, 23.9% has a bachelor's degree, and 14.7% has a graduate or professional degree.¹⁵

During the 2016–2017 academic year an average of 16 languages were spoken in schools and nearly one-quarter (23%) of students in Clackamas, Multnomah, and Washington counties were English language learners.¹⁶ In Clark County, the percentage of students who were English language learners was much lower (5%).¹⁷

Limited English proficiency creates additional hurdles to accessing health care services and understanding health information.¹⁸ Listening session and town hall participants from the Hispanic/Latino community described feeling discriminated against after being turned away by health care providers due to lack of insurance and language barriers. Participants cited language barriers and a lack of translators as significant challenges to health.

See [Appendix C](#) for more about education and literacy in the quad-county region.



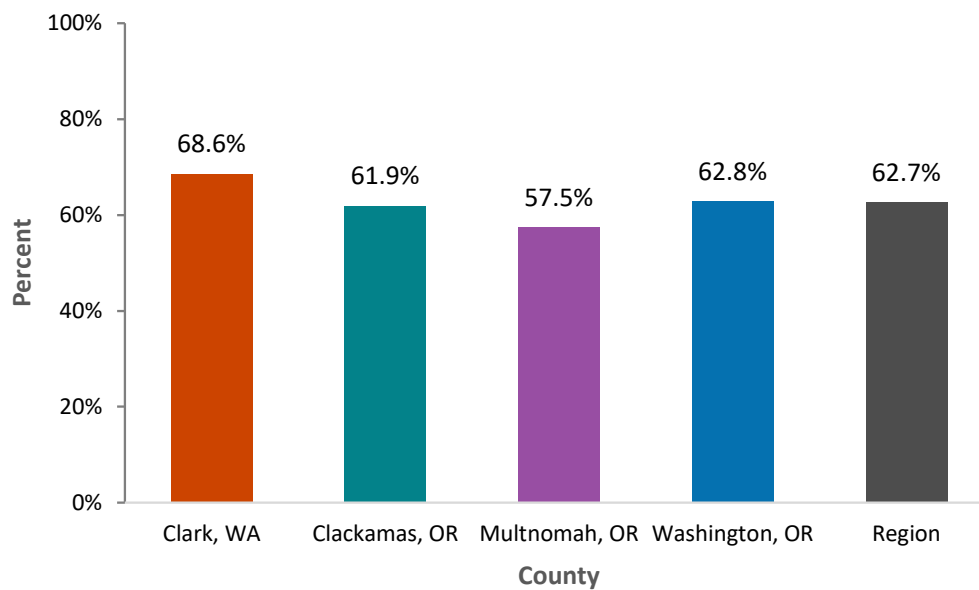


Health and Health Care

Access to health care is fundamental to the improved health and well-being of the region. Across the region, about 90% of the population has some form of health insurance,¹⁹ but accessing health care services continues to be a challenge for many communities.

As shown in Figure 2, fewer than 70% of people across the region reported they had a routine check-up with a health care provider in the last year.

Figure 2. Percentage of Population Who Had a Routine Check-up in the Last Year (2012–2015).



Source: BRFSS, 2012–2015.

Health and Health Care (continued)

Some data suggests that the number of providers available across the region varies significantly based on location. Data from County Health Rankings shows that across the United States, the top-performing counties have a primary care provider to population ratio of 1 to 1,030. Only Multnomah County has a better ratio than that (1:712), with Clark County having significantly fewer primary care providers per population. See [Appendix E](#) for specific ratios by county and provider type.

“Insurance issues are a nightmare in this country.”
– Listening Session Participant

Even though most quad-county residents have health insurance, many face challenges related to the cost and coverage of services.

Over 10% of the population in every county reported not being able to access health care services due to cost.

This challenge was echoed by listening session participants, some of whom noted the choice they had to make between accessing health care services and paying for their basic needs. The financial burden of medical care, notably the high cost of insurance and co-pays, limited access to health services. Often participants had to choose between affording health care or medications and providing for their families.

In addition:

- Listening session participants who identify as transgender or non-binary noted the lack of coverage for services related to body dysphoria and transitioning.
- Participants with disabilities noted difficulty in accessing medical equipment and transportation to medical care.
- Immigrant communities noted that the cost of co-pays and insurance deductibles affected their decisions about accessing health care services.

Health literacy is also related to multiple facets of health. Limited literacy is a barrier to health knowledge access, proper medication use, and utilization of preventive services.²⁰⁻²² Individuals with limited literacy face additional difficulties following medication instructions, communicating with health care providers, and attaining health information, which may have negative implications for health.²³



Economic Stability

Economic stability is a crucial part of community health and well-being. Socioeconomic status, job stability, access to financial assistance programs, affordable housing, and access to education and job training are all factors that determine economic opportunity and stability for people living in the region.

Racism and Discrimination, Health, and Poverty

Poverty is a strong indicator of overall health. People who live below the poverty line are more likely to suffer from [chronic diseases](#) and [mental health concerns](#).²⁴ Income inequality can exacerbate mental health issues.

Some listening session participants expressed feeling isolated and indicated their poor mental health was being exacerbated by the financial stressors in their lives.

Non-dominant racial and ethnic groups, the LGBTQ+ community, women, single-parent households and people with disabilities are more likely to experience poverty.²⁵⁻²⁹ Due to historic and systemic barriers, and the lack of available resources, people in affected communities are often unable to access systems, such as financial systems of support or higher education, that lead to economic stability. These barriers reinforce discriminatory practices that create additional obstacles to professional advancement and financial security.

These issues greatly impact the likelihood of experiencing adverse outcomes of health and well-being across the course of one's life.

Communities of color are more economically insecure than other communities in the region. The intersection between racial and ethnic disparities, gender disparities, rates of houselessness, experiences in foster care, incarceration rates, education access, and unemployment rates are exacerbated by systemic and institutional forms of discrimination. [See page 37](#) for more about how discrimination and racism impact these issues and more.

As shown in Figures 3–9, residents of Multnomah County who identified as African American, Native Hawaiian/Pacific Islander, Native American/Alaska Native, and Hispanic/Latino were, on average, twice as likely to live below the poverty line than white individuals. Consistently, white and Asian individuals were significantly less likely to live below the poverty line in the region than other races/ethnicities. Overall, a lower percentage of the white population lives below the poverty line in the quad-county region.

Racism and Discrimination, Health, and Poverty (continued)

Figures 3–9. Percentages of Individuals below the Poverty Line by Racial/Ethnic Group and County.

Figure 3.

County	African American/Black
Clark	20.0%
Clackamas	14.0%
Multnomah	38.0%
Washington	18.0%
Region*	22.5%

Figure 4.

County	Asian
Clark	8.0%
Clackamas	8.0%
Multnomah	17.0%
Washington	9.0%
Region*	10.5%

Figure 5.

County	Hispanic/Latino
Clark	18.0%
Clackamas	16.0%
Multnomah	32.0%
Washington	24.0%
Region*	22.5%

Figure 6.

County	Native American/Alaska Native
Clark	18.0%
Clackamas	22.0%
Multnomah	38.0%
Washington	18.0%
Region*	24.0%

Racism and Discrimination, Health, and Poverty (continued)

Figure 7.

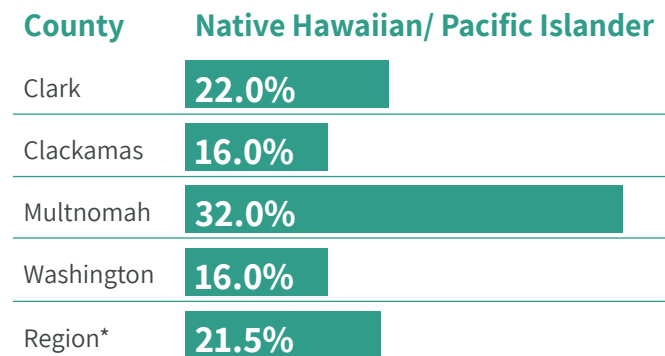


Figure 8.

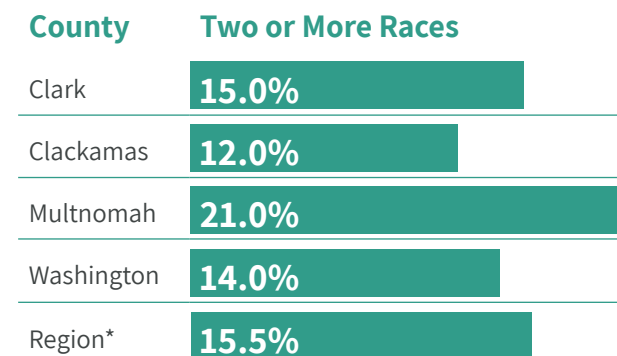
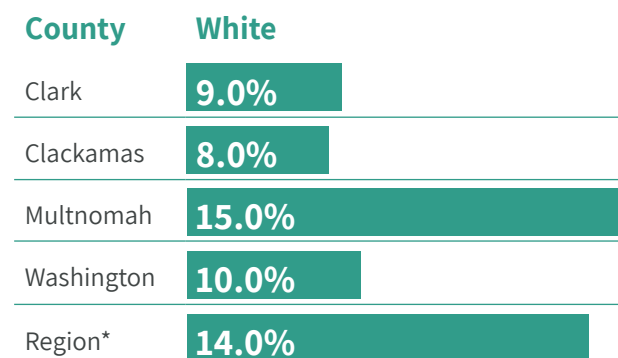


Figure 9.



Source: American Community Survey 5-year estimates 2012–2016.

*Regional percentages calculated by unweighted averages.

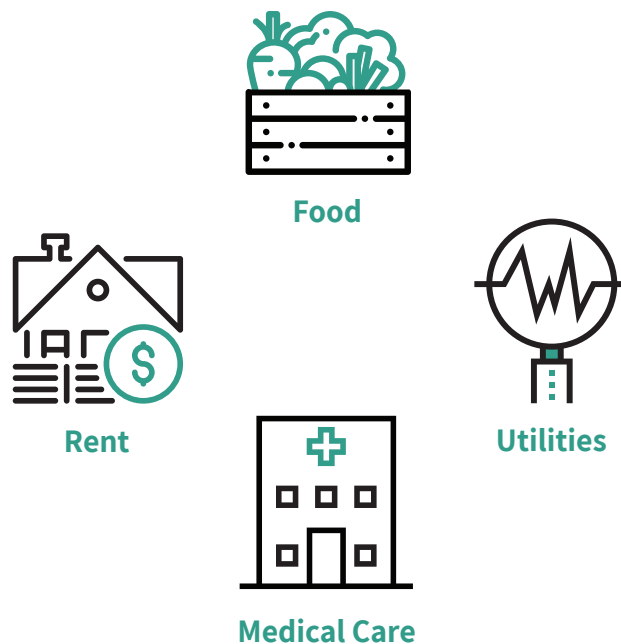
Racism and Discrimination, Health, and Poverty (continued)

Listening session participants described obstacles to economic stability as multi-faceted and intersectional, including:

- Housing security
- Financial burden of medical care
- Discrimination and representation
- Trauma
- Mental health concerns
- Socioeconomic status

They described limited opportunities to transcend barriers, keeping their communities economically unstable.

Many face a cycle of difficult decisions to achieve or maintain economic stability. Often, these difficult choices entail choosing between:



Participants described struggling against a common cultural misconception that they could simply pull themselves up by their bootstraps and climb out of poverty, regardless of the hurdles in their way. This sentiment neglects to acknowledge the barriers in the overall systems that prevent many from attaining, and maintaining, economic stability despite their hard work and merit.

Inequity in the Employment Sector

Town hall and listening session participants described inequities in the workforce as barriers to professional advancement of minority populations in the region.

They described their communities as unable to escape the cycle of poverty due to structural and institutional barriers, including:

- the inability to secure stable jobs that pay a living wage
- lack of insurance benefits
- the inability to advance due to work-place discrimination

“I thought that diversity [in the work place] was important, but now I see that’s a cover up – yeah, let’s hire a few blacks, let’s hire a few trans people – but they basically deny you from moving up.”
– Listening Session Participant

For individuals with disabilities, communities of color, LGBTQ+ communities, single parent families, and immigrant and refugee communities, workplace discrimination is an additional barrier to economic stability. These economic disparities are much worse for women, non-binary people, people who are transgender, and for others with identities from underrepresented communities.³⁰

Participants in the listening sessions for immigrants and refugees described financial challenges due to discrimination (see [Discrimination and Racism section on page 36](#)) and cultural misunderstandings, such as lack of credit history, to assist in financial endeavors.

While many immigrants and refugees came to the United States with transferrable job skills and education from their home countries, their credentials were not transferrable. This hurdle often required finances to fund additional education or changing careers.

One solution offered by participants to help close this gap would be to invest in community-centered small businesses, particularly family-oriented and culturally specific businesses. Participants want to see investment in their communities to encourage economic growth and financial security for all community members.

Income Gap

The income gap between many communities of color and the white population, as shown in Table 4, reflects the unequal opportunities described by listening session and town hall participants. Individuals who identified themselves as Two or More Races and individuals who identified as Hispanic/Latino made significantly less money per capita than individuals in the region who identified as white. On average, across the region, Hispanic/Latino and those identifying Two or More Races had a lower median per capita income than other groups.

Table 4. Median Per Capita Income by Race and County.

	Clark	Clackamas	Multnomah	Washington	Region*
African American/Black	\$24,854	\$27,741	\$17,805	\$26,730	\$24,282
Asian	\$32,306	\$34,355	\$27,896	\$37,972	\$33,382
Hispanic/Latino	\$15,171	\$20,162	\$17,335	\$15,255	\$16,981
Native American/Alaska Native	\$24,928	\$20,676	\$16,534	\$24,245	\$21,596
Native Hawaiian/Pacific Islander	\$21,686	\$24,676	\$15,905	\$21,765	\$21,008
Two or More Races	\$15,935	\$20,720	\$17,335	\$17,030	\$17,755
White	\$31,704	\$36,674	\$36,751	\$35,540	\$35,167

Source: American Community Survey 5-year estimates 2012–2016.

*Regional percentages calculated by unweighted averages.

Pathways to Economic Stability

Many people who participated in the listening sessions expressed the need for services linked to longer-term pathways to improving living standards, while still maintaining the immediate basic needs. Participants who were a part of immigrant and refugee communities described receiving more outreach efforts and resources when they first arrived, but not for the long-term.

To achieve economic stability, participants stated they need more pathways to education, to transfer existing job skills, and to access financial coaching and job assistance to establish credit and develop a long-term plan to support their families. See more in the Access section on [page 56](#).



Neighborhood and Built Environment

The natural and built environment strongly influences the health and well-being of the region and contributes to quality of life. As the region's population continues to grow, the restructuring of neighborhoods, transportation infrastructure, the accessibility of parks and community spaces, environmental exposure, and safety remain important topics and contributors to community health. Individuals with low socioeconomic status, communities of color, rural communities, and other communities traditionally underrepresented in the region's data measures are often the most impacted by these influencers on health (see [Discrimination/Racism, on page 37](#)).

Impact on Health

Both town hall and listening session participants described healthy neighborhoods and built environment as crucial to living a healthy life. For a healthy community to thrive, participants highlighted the power of a united neighborhood that has strong community ties, and access to support and resources that are affordable and located within their neighborhoods (see [Access to Health Care, Transportation and Resources on page 56](#) for more).

Neighborhood and built environment factors contributing to health include, but are not limited to:

- [Transportation](#)
- Sidewalk accessibility
- Environmental pollution
- Public safety

- Access to technology
- Housing
- Access to healthy foods
- Access to recreational and educational settings

Many [chronic health conditions](#) are mapped back to stressors originating in neighborhoods and built environments, which are one of the most powerful influencers on population health. A person's ZIP code and the surrounding area is a strong indicator for access to resources, long-term health outcomes, and economic advantages.^{31,32}

Listening session participants expressed concerns about their environment, including exposure to pollutants and other human-related hazards that have an impact on the health of the community.³³ Exposure to environmental pollutants, notably air pollution, is linked to an increase in developing chronic health conditions such as diabetes, hypertension, asthma, chronic obstructive pulmonary disease, emphysema, and obesity.³⁴ Participants were concerned by what they are exposed to, both in their natural environment as well as in hazardous housing conditions. They also voiced concerns about how transportation and infrastructure contributed to the air quality of the region.

Participants wanted more geographically accessible spaces that offer pathways to healthy lifestyle choices, such as healthy eating, cooking classes, after-school youth activities, family-centered exercise classes, and classes to help manage chronic diseases.

Affordable Housing

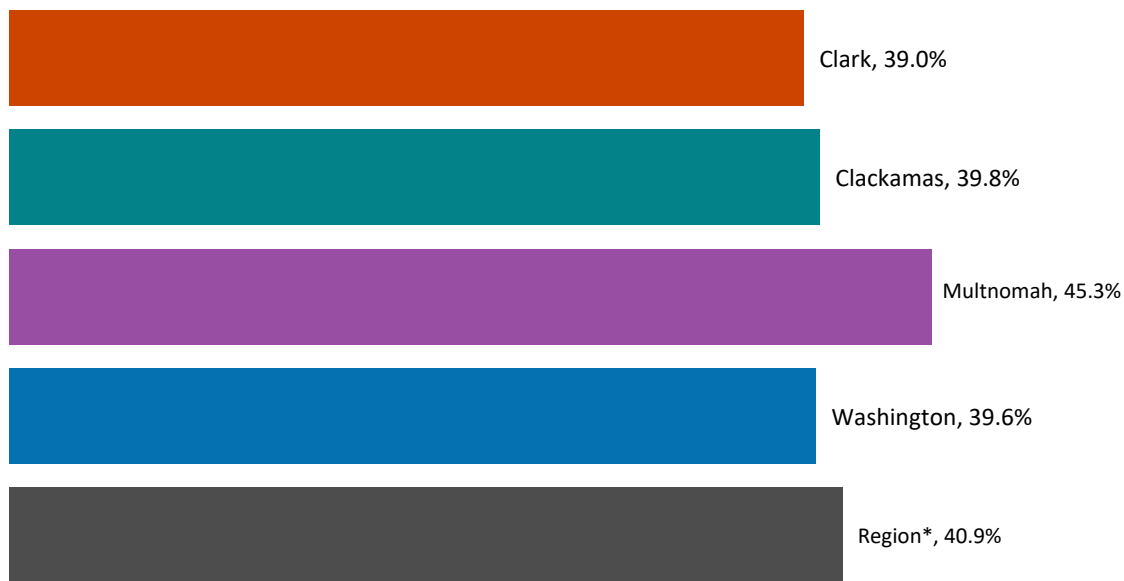
A pillar of a healthy community is access to affordable housing. While rent and the cost of living continue to rise in the United States, income and hourly wages remain stagnant.³⁵

Over 93% of housing units are occupied in the region.³⁶ Listening session participants highlighted challenges in attaining and maintaining adequate living conditions. Evictions and instability in housing, even in emergency housing, was a consistent theme among both town hall and listening session participants. Being denied housing due to immigration status and race/ethnicity was also cited as major issue among participants.

Unaffordable housing costs and rent hikes greatly contribute to the stress community members face.

Many community members in the region are housing insecure, and many more struggle to pay their rent. As shown in Figure 10, a higher percentage of households in Multnomah County were paying 35% or more of their income on rent compared to the rest of the region.

Figure 10. Percent of Households Paying 35% or More of their Household Income on Rent, by County and Region.



Source: American Community Survey 5-year estimate 2012-2016.

*Regional percentages calculated by unweighted averages.

Affordable Housing (continued)

The issue of the houseless crisis³⁷ arose as two distinct concerns for participants, often expressed simultaneously:

1. The fear of community safety due to the amount of houseless people in their neighborhoods, and
2. The fear many community members face of being one step away from houselessness themselves due to lack of financial security and stability in their housing.

Listening session participants with mental health concerns said that case workers are pivotal to solving the housing crisis, and for addressing mental health issues that can lead to eviction, but that hospitalization is the main route to gain access case workers. Youth who are LGBTQ+ and housing insecure described the need for more resources available for adults over the age of 25, especially housing and day-time programs that kept them safe and connected to their community and [resources](#). Many described feeling adrift when they aged out of services for “youth”; this age gap disqualified many youth in need from access to services that they rely on to survive.

Among those who had stable housing, there were concerns about negligent landlords not addressing property maintenance, safety, and sanitation issues.

“[Housing sanitation and apartment management is] Impacting people’s physical, emotional, and mental wellbeing. It is stressful living in a neglected community”
– Listening Session Participant

Overall, town hall and listening session participants expressed the struggle to access resources that provided affordable housing, emergency shelters, assistance in paying utility bills, and wished for these topics to be higher priorities in their communities.

See the next page for more about houselessness in the region. For more information about the social determinants of health shaping the region, see [Appendix C](#).

Houselessness in the Quad-County Region

According to the U.S. Department of Housing and Urban Development, the number of individuals experiencing houselessness in Oregon and Washington have increased in recent years: by 12.8% in Oregon from 2007 to 2018 and by 23.6% in Washington.ⁱ

Based on the “single night count” from January 2018, Oregon had an estimated 14,476 people experiencing houselessness statewide, and Washington had 22,304. In Oregon, more than half (64%) of individuals experiencing houselessness were staying in unsheltered locations, which was one of the highest rates in the country. Oregon also has one of the highest rates of unaccompanied youth experiencing houselessness in the country.

In the quad-county region, the numbers of people experiencing houselessness has increased in the past two years in Multnomah and Clark counties.

In Oregon, about 30% of people experiencing houselessness in the state are in Multnomah County.ⁱⁱ

- Multnomah County had about 4,177 experiencing houselessness in January 2017.
- Clackamas County had 497 in 2017, a slight increase from 494 in 2015.
- Washington County had 544 individuals experiencing houselessness, a decrease from 2015.

Based on the January 2019 point-in-time count in Clark County, 958 people were experiencing houselessness, which is a 21% increase from the 795 people in January 2018.ⁱⁱⁱ

- About half (487) of these people were sleeping unsheltered (for example, sleeping in tents, cars, the street, or other places where people are not meant to sleep), while 471 had shelter of some sort (sleeping in an emergency shelter or transitional housing).

Other notes of interest:

- About 9% of people experiencing houselessness in Oregon are veterans, according to the 2017 point-in-time report.^{iv}
- In Clark County, about 6% of those experiencing houselessness are adult survivors of domestic violence, according to the 2019 point-in-time report.^v
- In the Springwater Trail report from Clackamas County, people experiencing houselessness who were living on the trail reported they felt, “isolated from family, but connected to ‘street family.’”

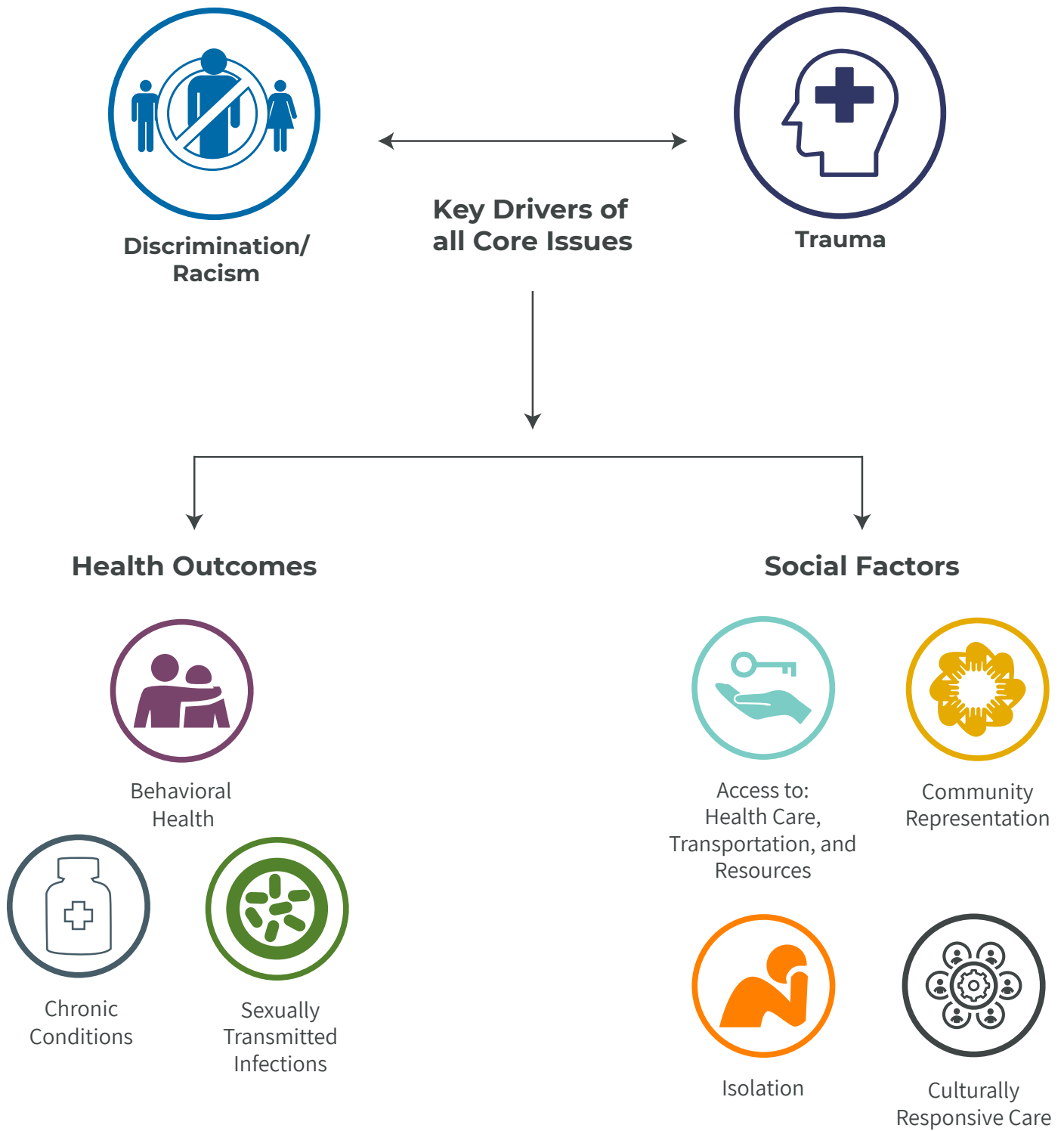
ⁱ U.S. Department of Housing and Urban Development. The 2018 Annual Homeless Assessment Report to Congress. December 2018. <https://files.hudexchange.info/resources/documents/2018-AHAR-Part-1.pdf>

ⁱⁱ Oregon Housing and Community Services. 2017 Point-in-Time Estimates of Homelessness in Oregon. <https://www.oregon.gov/ohcs/ISD/RA/2017-Point-in-Time-Estimates-Homelessness-Oregon.pdf>

ⁱⁱⁱ Council for the Homeless. 2019 Point-in-time count of people experiencing homelessness in Clark County. <https://www.councilforthehomeless.org/data-system-numbers/>

^{iv} Oregon Housing and Community Services. 2017 Point-in-Time Estimates of Homelessness in Oregon. <https://www.oregon.gov/ohcs/ISD/RA/2017-Point-in-Time-Estimates-Homelessness-Oregon.pdf>

^v Council for the Homeless. 2019 Point-in-time count of people experiencing homelessness in Clark County. <https://www.councilforthehomeless.org/data-system-numbers/>



Core Issues

Core Issues

A host of issues impacts the health of communities in the quad-county region. Yet nine issues consistently emerged in feedback from community members and community organizations and from data sources. HCWC designated these nine as the core issues, central to the needs of the region as supported by data collected and analyzed for this needs assessment.

In considering programs and actions to address the issues, discrimination and racism and trauma should be acknowledged, addressed and understood as a part of all programing and projects. HCWC is committed to health equity and understands that it cannot be achieved if acknowledging and addressing discrimination, racism, and trauma are not central to programs and initiatives to improve the health of the region.

The other core issues are broken into two categories, as shown below:

- **Key Drivers of all Core Issues**
 - o Discrimination and Racism
 - o Trauma
- **Health Outcomes**
 - o Behavioral Health
 - o Chronic Conditions
 - o Sexually Transmitted Infections
- **Social Factors**
 - o Access to: Health Care, Transportation and Resources
 - o Community Representation
 - o Culturally Responsive Care
 - o Isolation

It is important to note that the focus on these nine does not mean that other issues do not remain important issues in the community.



Discrimination and Racism

Discrimination and Racism

Discrimination: Socially structured action that is unfair or unjustified and harms individuals or groups. Occurs on both structural and individual levels.

Racism: “A system of structuring opportunity and assigning values based on the social interpretation of how one looks (which is what we call “race”), that unfairly disadvantages some individuals and communities, unfairly advantages other individuals and communities, and saps the strength of the whole society through the waste of human resources.” - APHA Past President Camara Jones, MD, PhD, MPH.

The HCWC region is home to diverse communities with their own strengths and challenges to address unique health needs. Many communities – LGBTQ+, rural, people living with disabilities, people living with mental health concerns, immigrants, refugees, and people of color – face greater challenges in accessing resources, health care, and attaining overall well-being, due to discrimination and racism.

Discrimination and racism across the region continue to hamper the health of community members. The policies and structures that are in place across the region limit the opportunities for some individuals. This is an overarching core issue, which must be considered in all programs to adequately address the other core issues. Addressing the other core issues in isolation will continue to perpetuate racist and discriminatory systems.

What's Being Done

HCWC members are supporting this core issue through:

- Consulting and partnering with community groups to address racism
- Participating in organizational equity, diversity, and inclusion work

- Conducting analysis with an equity lens
- Analyzing how experiences of racism exacerbate the impacts of ACEs in communities of color

“There is a lack of acknowledgment that racism is a chronic health issue.”
– Town Hall Participant

Impact of Discrimination and Racism on Health and Well-Being

Below is what community members said about discrimination and racism and how it has impacted their lives.

- Community members frequently cited the impact of racism on health and well-being. Due to historical trauma, the stress of microaggressions, violence, discrimination, and oppression, the effects of racism are a significant driver of racial and ethnic health disparities.
- Experiences of racism and collective historical trauma in institutional and health care settings have created a culture of distrust, where community members do not trust the institutions or systems to support their needs.
- The intersectionality between racism and systems (such as political and educational), representation in leadership, and opportunities for employment and advancement were highlighted as integral factors impacting health disparities.

Impact of Discrimination and Racism on Health and Well-Being (continued)

People experience significant stress, often because of discrimination, racism, and exclusion from the dominant culture due to their race/ethnicity, socioeconomic status, LGBTQ+ identities, disability status, and citizenship status. Participants cited racism as a driving factor for health inequity in communities of color, emphasizing ignorance, social media, and the political climate as drivers for their experiences.

“Hate crimes and fascist groups make a living environment feel unsafe. I definitely don’t feel safe when I hear that the Proud Boys are waltzing around downtown.”

– Listening Session Participant

The region has diverse populations, yet many service organizations have predominately white staff, which can hinder community members from receiving services due to a lack of cultural understanding.

- The larger systems (health care, especially) should be assets to health equity, but these systems were a hindrance to communities who felt they had limited knowledge about how best to navigate the system.

Neighborhoods and Daily Life

Listening session and town hall participants described how profiling, discrimination, and racism contributed to feeling unsafe in their neighborhoods (see [Neighborhood and Built Environment](#), on page 30 for more).

Communities of color, immigrants and refugees, and LGBTQ+ participants described fears and experiences of discrimination and profiling by the police, which leads them to feel unwelcome in certain areas, especially in their own neighborhoods. The impacts of gentrification on these communities, including a lack of culturally specific business owners, black-owned businesses, and being pushed out of neighborhoods that were historically a part of their communities and to the margins of the city, are large stressors. Gentrification, including the destruction of community centers and community gathering spaces, has left many people feeling ostracized in their own neighborhoods, workplaces, schools, and communities due to the lack of diversity.

- Participants directly linked experiences of profiling and discrimination with having limited access to housing security, job security, and other opportunities.

Being a part of neighborhoods, workplaces, schools, and communities where there was little diversity limits opportunities to advance for people of color.

Safety

Participants distrusted law enforcement, citing racial profiling and negative interactions their communities have had with the police. Participants described their fear of the police, racial profiling, and fears of deportation and Immigrant and Customs Enforcement as contributing factors to their community’s health and feeling unsafe.

Additionally, participants discussed an inability to exercise outdoors or let their kids play in the park, not only because of fear of deportation and racial profiling, but due to

Safety (continued)

other factors such as the large amounts of trash in their neighborhoods, vandalism, and drugs present in their community (see [Neighborhood and Built Environment](#), on page 30 for more).

Conversely, some listening session participants wanted an increased police presence as a solution to feelings of unsafety.

Representation

When people feel unrepresented by decision-makers, government, and organizations that serve their communities, the policies created do not align with community needs. Establishing institutional change and shared power in decision making could address this power imbalance. Communities emphasized making their voices known, both through voting and social media, to influence decision makers. See the [Community Representation](#) section for more.

These findings are consistent with other reports in the region (see the literature review in [Appendix F](#)). The reports noted that discrimination and racism impact all aspects of the lives of those who experience them. A lack of translation services, exclusion from decision-making processes, and stress were frequently noted as challenges to health. These challenges place a higher burden on communities of color and communities that do not identify with the dominant cultural, racial, and ideological identity of the region.

“We need more representation of our society in the city government.”
– Listening Session Participant

“The demographic makeup of people in leadership positions is a barrier; elected officials and other decision-makers don’t reflect the communities most impacted.”

– Town Hall Participant

Data Representation and Community Trust

Underrepresented communities, notably communities of color, LGBTQ+ community, immigrants and refugees, and women and children, all experience morbidities (rates of diseases), mortalities (deaths), and stressors that influence social determinants of health.^{38,39} Due to small population sizes, and mistrust of data collection processes, these communities are often misrepresented, inaccurately accounted for, or completely absent in quantitative data.

- Town hall participants wanted better tracking for outcomes in communities of color and encouraged more data collection to focus on qualitative data collection methods and community narrative.

Fears of surveillance and a lack of transparency in data are a hindrance to equitable data collection for immigrant communities, refugee communities, and communities of color. Historical misrepresentation, violence, profiling, and exploitation of these populations for the sake of scientific discovery^{40,41,42} means they are less likely to voluntarily self-disclose information because they mistrust researchers and the medical field. Within communities, there is a wariness of methods aiming to understand and address these disparities due to fear of how the data collected may be used.



Trauma

Trauma

Trauma was identified across the region as an underlying core issue affecting health and well-being of community members. Individuals and groups who have experienced trauma see increased risk of disease and death.⁴³ This is an overarching core issue, which must be considered in all programs to adequately address the other core issues.

What's Being Done

HCWC members are supporting this core issue through:

- Trauma-informed care
- Working to address trauma in schools
- Providing community trainings on adverse childhood experiences (ACEs) and resiliency
- Continued attention to the ways in which regulation can be triggering

Stress and Trauma as Determinants of Health

Experiences of toxic stress⁴⁴ and trauma over the course of life can hinder every aspect of health and wellbeing. The barriers to health and equity begin early in life and build into adulthood, and are tied to systemic, institutional, cultural, and social factors.⁴⁵

People who experience more adverse life events are at high risk for chronic conditions, housing insecurity, mental health concerns, and substance use disorders overall.⁴³

Additionally, childhood experiences of trauma, discrimination, racism, and biases produce a cycle of difficult circumstances—financial, social, psychological—that is difficult to break.⁴⁶

Adverse Childhood Experiences

Trauma and toxic stress experienced in childhood have long-lasting effects into adulthood. ACEs include all types of abuse or neglect, and other potentially traumatic experiences that happen to a person before age 18. ACEs correlate directly with poorer health outcomes including substance abuse, STIs, suicide attempts, and chronic diseases (such as heart disease).⁴⁷

People with high ACE scores experience greater levels of physical, sexual and verbal abuse throughout their life.⁴⁸ They are more likely to experience economic insecurity (i.e., having to go without needed food, clothing, transportation, and stable housing); higher rates of homelessness; and partner abuse.⁴⁹

ACEs are tied to systemic, institutional, cultural, and social factors.⁵⁰

- Many reports suggested that more studies should focus on life-course theory (see [Glossary](#) for definition) to examine how trauma, life experiences, and stressors influence health and well-being over time.^{51,52,53}

Historical, Generational Trauma

Trauma experienced throughout one's life can also be tied to historical trauma. Many generations of people from communities marginalized by the dominant culture have been subjected to long-term mistreatment and abuse, which correlates with a higher disease burden and greater health disparities.⁵⁴ When generations of families experience significant trauma and toxic stress, this can cause poorer health in future generations due to actual genetic changes and the ongoing stress of their social environments.⁵⁵

For many, the opportunity to access appropriate, safe, and [culturally relevant](#) health care; education; food; and employment requires relying on institutions that historically have not been a safe space for communities of color, the LGBTQ+ community, women, and survivors of abuse. Community members expressed this during listening sessions and wanted to see more efforts to competently address underlying trauma, life experiences, and stressors that influence health and well-being.

As with [Social Determinants Of Health](#), it should be noted that while experiences of stress and trauma in childhood and adulthood can influence health outcomes, the impact of adverse life experiences can be mitigated by resilience, community support, policies, and resources.

- Trauma-informed policies, health care, and resources can better help to address these issues and can serve as a protective factors to toxic stress and trauma's impact on health.⁵⁶



Behavioral Health

Health Outcome

Definition of Behavioral Health

Behavioral health includes mental and emotional health. Behavioral health conditions include anxiety, depression, substance use disorders, and many others.

What's Being Done

HCWC members are addressing this core issue through:

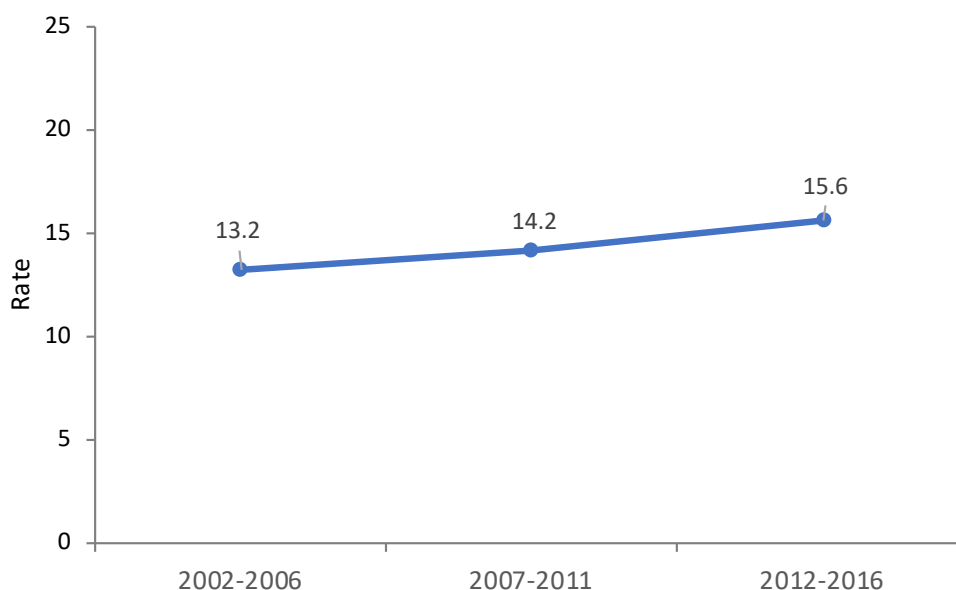
- Implementing universal depression screenings
- Supporting the Unity Center for Behavioral Health
- Conducting opioid prevention work
- Implementing drug takeback programs
- Forming suicide prevention coalitions
- Working on various housing initiatives, including Housing Is Health that was informed by [previous HCWC CHNA work](#).

Depression and Suicide: Adults

Meeting behavioral health needs is critical, particularly with the high rates of depression and suicide in the region. Across the region almost a quarter (24.1%) of the population has been diagnosed with depression.⁵⁷

Figure 11 shows the suicide mortality rate for adults in the region (based on BRFSS data).

Figure 11. Adult Mortality Rates – Suicide.



All rates are per 100,000 population and are age-adjusted to the 2000 U.S. standard population. Source: Community Health Assessment Tool (CHAT), Oregon Public Health Assessment Tool (OPHAT).

Depression and Suicide: Youth

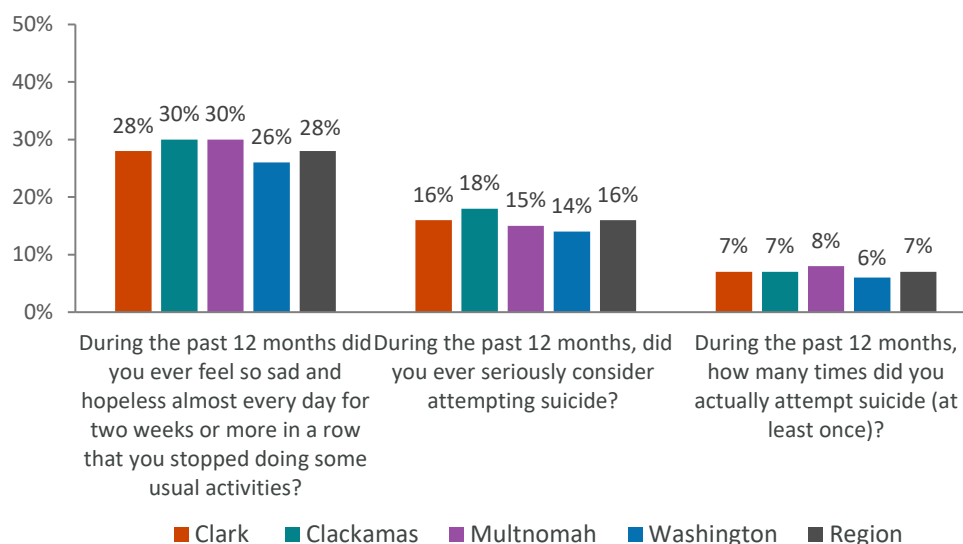
Suicide is the third leading cause of death for youth between the ages of 10 and 24. More youth survive suicide attempts than die by suicide.⁵⁸ Nationally, 16% of students reported seriously considering suicide; 13% created a plan; and 8% reported trying to take their own life in the 12 months prior to taking the survey.⁵⁸

Results from the 2017 Healthy Teens Survey in Oregon and the 2016 Healthy Youth Survey

in Washington are similar to those reported nationally (see Figures 12–14).

In the quad-county region, 28% of students in eighth grade reported feeling sad or hopeless for two or more weeks in a row and that this prevented them from doing their usual activities. Also, 16% of eighth grade students indicated that they had considered attempting suicide in the past 12 months.

Figure 12. Youth (Grade 8): Depression and Suicide.



Source: 2017 Oregon Healthy Teens Survey⁵⁹ and the 2016 Washington Healthy Youth Survey.⁶⁰

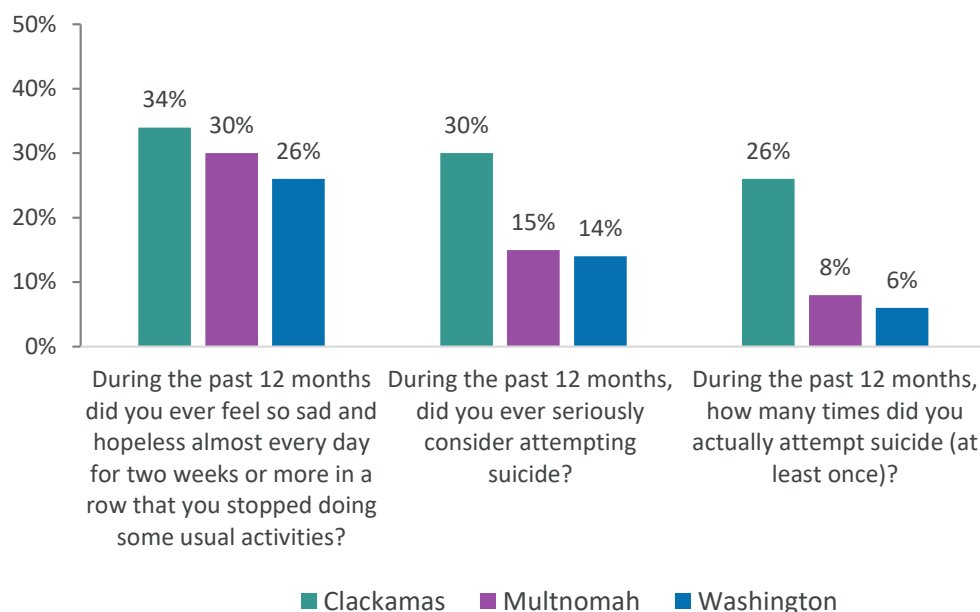
Figure 13. Youth (Grade 10): Depression and Suicide in Clark County.



Source: 2016 Washington Healthy Youth Survey.

Depression and Suicide: Youth

Figure 14. Youth (Grade 11): Depression and Suicide in Clackamas, Multnomah, and Washington Counties.

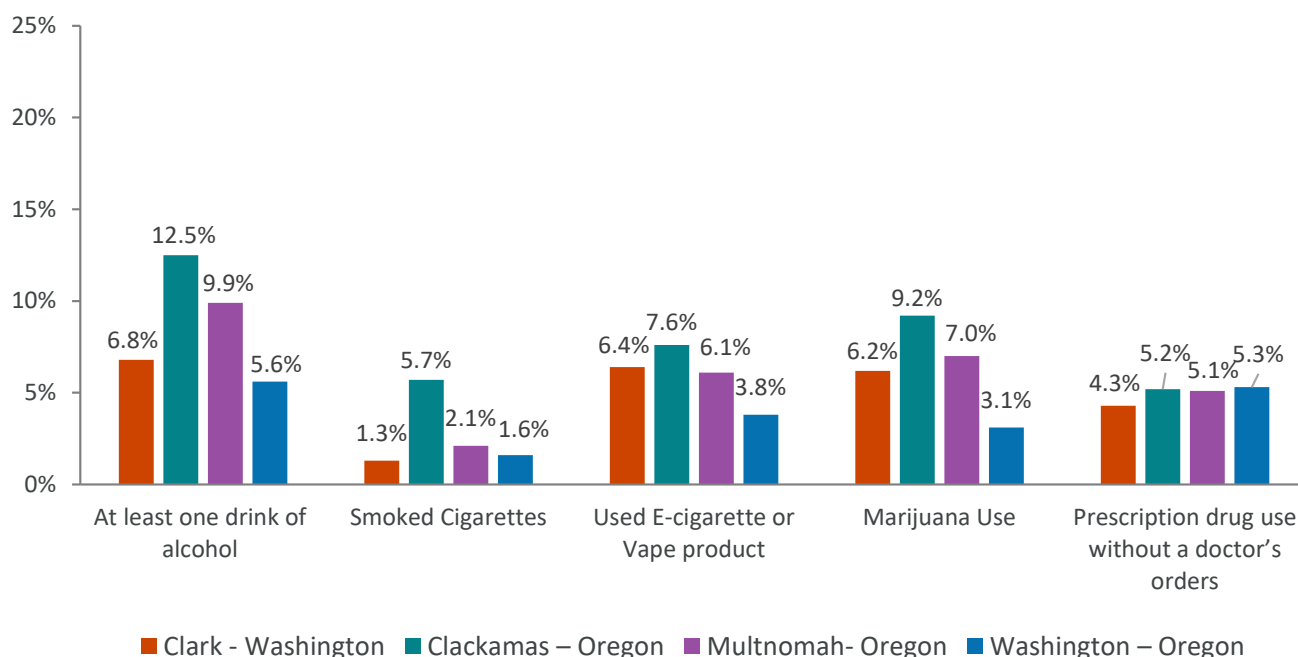


Source: 2017 Oregon Healthy Teens Survey.

Substance Use by Teens

Many listening session participants worried that their children were using substances. Figure 15 shows the percentage of teens who reported drinking alcohol, smoking cigarettes, vaping, using marijuana, or taking prescriptions without a doctor's orders in the last 30 days.

Figure 15. Percent of Teens (8th Grade) who Used Substances in the Last 30 Days.



Source: 2017 Oregon Healthy Teens Survey and 2016 Washington State Healthy Youth Survey.

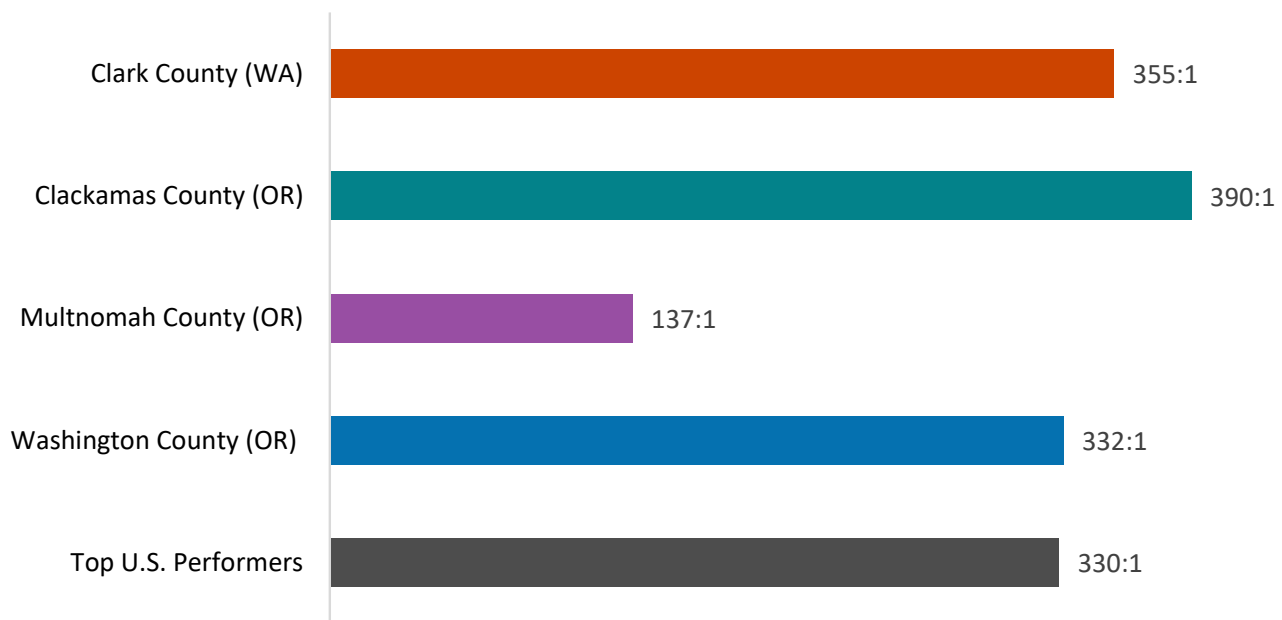
Access to Behavioral Health Care

Peoples' limited access to behavioral health care providers makes this core issue challenging to address. Community members also want culturally relevant behavioral health services and easier access to services even if they do not have health insurance (see [Access to Health Care](#)).

The ratio of mental health providers to the population varies substantially, with the highest concentration of providers in Multnomah County, as shown in Figure 16.

Town hall participants highlighted the importance of addressing stigmas associated with mental health treatment and advocating for greater emphasis on preventive care and screening for mental health conditions. Family, community members, and friends were important sources of connection and social support, and participants wanted more access to mental health resources such as greater numbers of providers, school-based interventions, and family-focused programs.

Figure 16. Ratio of Population to Mental Health Providers.



Source: County Health Rankings 2018.

The need for culturally and linguistically competent behavioral health services was frequently discussed by both town hall and listening session participants. Listening session participants discussed the lack of mental health providers who look like them or identified with their identities and experiences (see [Culturally Responsive Care](#) for more). This disconnect between the providers and participants' experiences made accessing mental health care challenging.

Participants also emphasized the importance of ensuring access to mental health services and resources for residents who may not have health insurance.

“There aren’t a lot of therapists who look like us.”
– Listening Session Participant

“We need a Starbucks on every corner, but for mental health.”
– Listening Session



Chronic Conditions

Health Outcome

Chronic Conditions: Definition

Chronic diseases are conditions that last one year or more and require ongoing medical attention and/or limit activities of daily living.⁶¹ Risk factors for chronic disease include:

- Tobacco use
- Secondhand smoke
- Poor nutrition
- Lack of physical activity
- Excessive alcohol
- Other substance use

What's Being Done

HCWC members are addressing this core issue through:

- Nutrition and chronic condition self-management classes
- Partnering with community-based organizations to support healthy lifestyles
- Tobacco prevention programs
- Healthy food access
- Public policies that address the leading causes of death and injury

Chronic Condition Prevalence in the Quad-County Area

Increased rates of chronic conditions put strain on the health care delivery and public health systems, taking away resources from other areas.

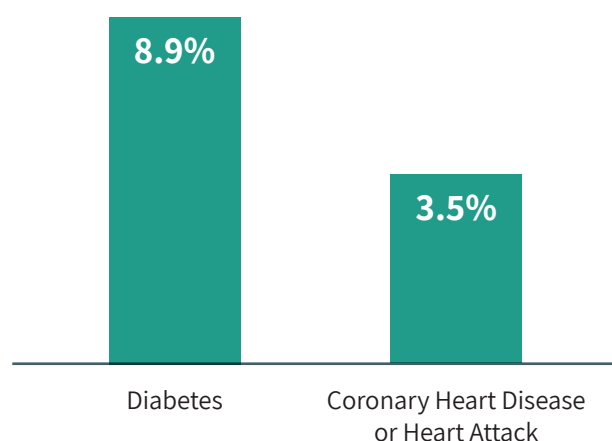
HCWC identified the following four conditions as significant conditions affecting the health of the region, with communities of color having higher rates of the conditions than their white counterparts.

- Heart disease
- Diabetes
- Hypertension
- Liver disease

For county-specific chronic disease rates, see [Appendix G](#).

One measure of the prevalence of chronic disease is the Behavioral Risk Factor Surveillance System (BRFSS) that collects data from U.S. residents on their chronic health conditions through phone surveys (see Figure 17).

Figure 17. Self-Reported Prevalence of Two Chronic Diseases in Quad-County Area: 2012 – 2015.



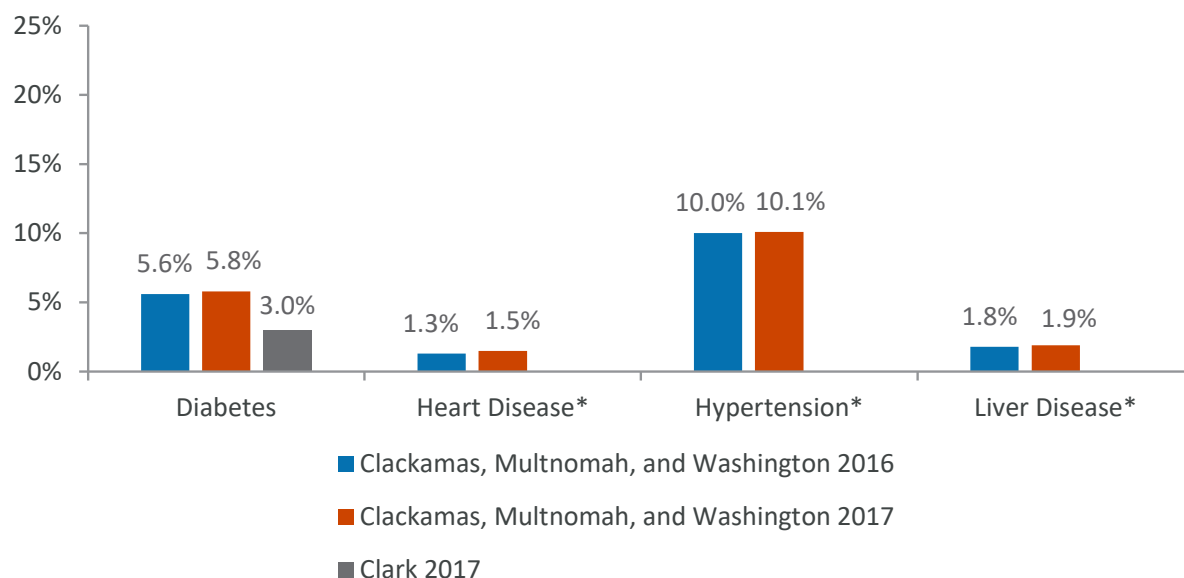
Note: N = 15,527 to 16,779

Source: Behavioral Risk Factor Surveillance System (2012–2015).

Chronic disease prevalence in the region was also identified through data provided on Medicaid members who received services in 2016 and 2017 through Health Share of Oregon and in 2017 from people who were insured by Apple Health in Clark County.

Figure 18 shows the rates for heart disease, diabetes, hypertension, and liver disease in the region.

Figure 18. Chronic Disease Prevalence by County.



*Data not available for Clark County.

Note: 2016 Oregon N = 299,119; 2017 Oregon N = 280,812. Clark County is based on population estimates.

Source: Health Share of Oregon and Health Washington Dashboard.

The prevalence of the chronic conditions was highest for the following Health Share of Oregon members who receive services through Medicaid:

Diabetes	Heart Disease	Hypertension	Liver Disease
- Asian (12%) - Black (9-10%)	- Black (3%) - Pacific Islander (2%) - White (2%)	- Asian (17-18%) - Black (17%) - White (13-14%)	- American Indian (2%) - Asian (2%) - Black (2%) - White (2-3%)

The prevalence of the chronic conditions was highest for the following Apple Health of Washington members who receive services through Medicaid:

Diabetes (Clark County only)
- American Indian/Alaska Native: 5% - Asian: 4% - Native Hawaiian/Pacific Islander: 4%

Town hall participants discussed how comprehensive, accessible health care and access to peer navigators and community health workers (see page 56) could have a positive influence on reducing the prevalence

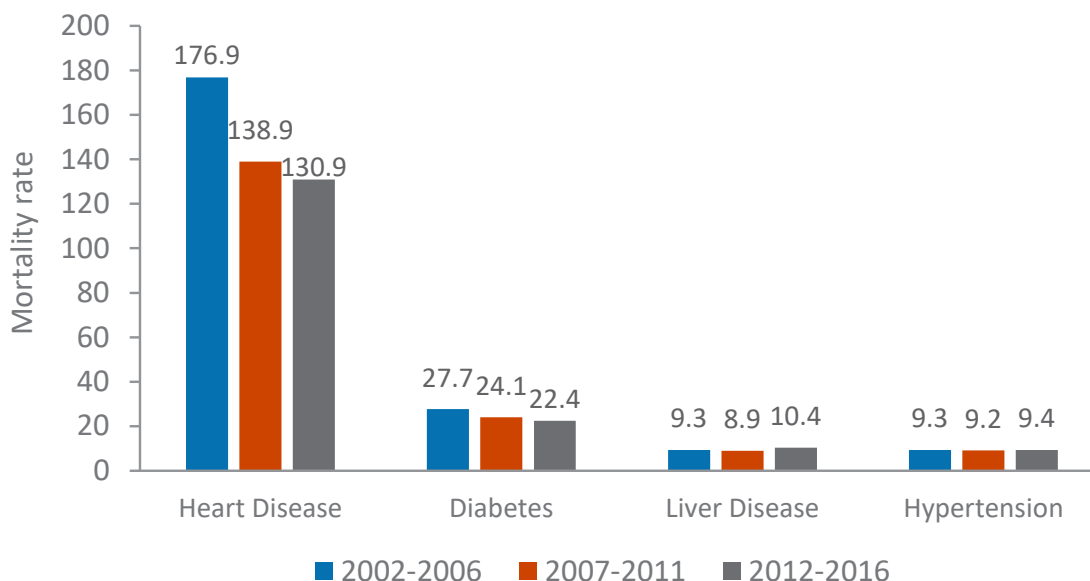
of chronic conditions in the region. While listening session participants did not frequently address the chronic conditions by name, such as diabetes and heart disease, they discussed belonging to communities that needed more preventive resources and education to improve chronic condition self-management.

Many participants indicated that their community was in poor health and their interest in multi-generational lifestyle change programs conveyed their concerns and desire to prevent chronic conditions (see [Access to Health Care on page 56](#)).

Mortality Rate

The mortality rate is the number of deaths per 100,000 people in a defined population over a specific time period. Figure 19 shows the mortality rates for each of the four chronic conditions that were identified as regional issues.

Figure 19. Overall Mortality Rates for Quad-County Region.



Note: All rates are per 100,000 population and are age-adjusted to the 2000 U.S. standard population.
Source: Community Health Assessment Tool (CHAT), Oregon Public Health Assessment Tool (OPHAT).

HCWC also examined mortality rates by race:

- **Heart disease:** highest for the black, Native American, Pacific Islander, and white populations
- **Diabetes:** highest for the black, Pacific Islander, and Native American populations
- **Liver disease:** highest for the Hispanic, Pacific Islander, and Native American populations
- **Hypertension:** highest for the black and Pacific Islander populations

Figures 20–26 show the mortality rates of the leading causes of death (the mortality rate is the number of deaths per 100,000 people in the defined population). See [Appendix G](#) for mortality rates by county.

Figure 20. Mortality Rate for Four Chronic Conditions: Asian.

Chronic Condition	Mortality Rate
Heart Disease	74.2
Diabetes	20.0
Liver Disease	2.2
Hypertension	6.7

Figure 21. Mortality Rate for Four Chronic Conditions: Black.

Chronic Condition	Mortality Rate
Heart Disease	152.1
Diabetes	60.9
Liver Disease	9.8
Hypertension	24.8

Chronic Diseases and Other Conditions in Emergency Departments

Chronic disease accounts for two-thirds of emergency medical conditions and roughly 80% of all health care costs. Regional emergency department (ED) discharge data from the calendar year 2016 were analyzed to identify whether ED utilization differed by age and insurance type. See [Appendix E](#) for these data.

Figure 22. Regional Mortality Rate for Four Chronic Conditions: Hispanic.

Chronic Condition	Mortality Rate
Heart Disease	80.7
Diabetes	24.7
Liver Disease	15.0
Hypertension	6.2

Figure 23. Regional Mortality Rate for Four Chronic Conditions: Native American.

Chronic Condition	Mortality Rate
Heart Disease	167.6
Diabetes	48.9
Liver Disease	29.4
Hypertension	6.2

Figure 24. Regional Mortality Rate for Four Chronic Conditions: Pacific Islander.

Chronic Condition	Mortality Rate
Heart Disease	212.0
Diabetes	38.8
Liver Disease	17.6
Hypertension	30.3

Figure 25. Regional Mortality Rate for Four Chronic Conditions: Two or More Races.

Chronic Condition	Mortality Rate
Heart Disease	57.2
Diabetes	10.2
Liver Disease	5.8
Hypertension	8.1

Figure 26. Regional Mortality Rate for Four Chronic Conditions: White.

Chronic Condition	Mortality Rate
Heart Disease	134.5
Diabetes	21.6
Liver Disease	10.7
Hypertension	9.3



Sexually Transmitted Infections

Health Outcome

Sexually Transmitted Infections (STIs)

Communicable diseases are infections, usually viral or bacterial, that are spread from person to person (see [Appendix E](#) and [Appendix G](#) for more data).⁶² Between 2007 and 2016, the incidence of some communicable diseases has increased in the quad-county region, including STIs.⁶³ Rates of chlamydia and gonorrhea have been increasing in the region, as shown below (Figure 27).

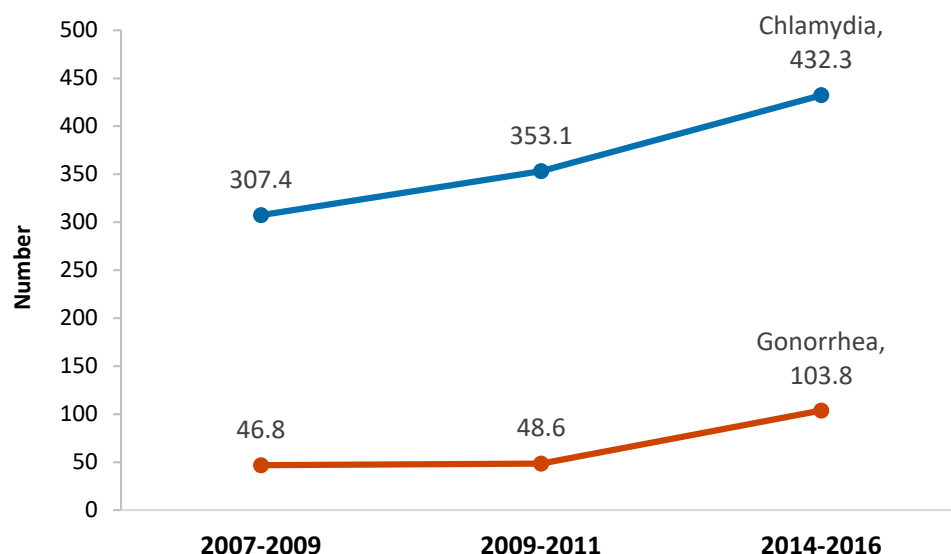
What's Being Done

HCWC members are addressing this core issue through:

- STI prevention, case investigations, contact tracing, treatment and partner therapy
- Sexual and reproductive health coalitions

While data on racial and ethnic differences in rates are available, they are not always reliable. Public health partners are working on improving the ability to collect and share more accurate data. Understanding the differences in racial and ethnic rates of STIs is key to developing and implementing targeted strategies for outreach and interventions.

Figure 27. Crude Incidence Rates* of Chlamydia and Gonorrhea in the Region.



*Crude incidence rates reflect the total number of cases diagnosed in a given time frame divided by the total population for that year and are expressed as a rate per 100,000.

Source: Community Health Assessment Tool (CHAT), Oregon Public Health Assessment Tool (OPHAT).

Chlamydia

Chlamydia is a common sexually transmitted disease that can be easily cured. If left untreated, chlamydia can make it difficult for a woman to get pregnant.⁶⁴

Gonorrhea

Gonorrhea is a sexually transmitted infection that can affect both men and women and cause infections in the genitals, rectum, and throat. It is a very common infection, especially among young people ages 15–24 years.⁶⁵ In the youth listening sessions, participants requested more comprehensive sex education and access to sexual health resources which shows this is a concern, even if the specific conditions were not mentioned.



Access to Health Care, Transportation, and Resources

Social Factor

Access to Health Care, Transportation, and Resources

Community members identified the need for better access to the health care system, including culturally responsive health care, and support for navigating the health care system, including a better understanding of insurance as key areas for more focus.

Across the region, community members identified transportation as both a need and a strength. Those who were closer to the central Portland metro area and had access to consistent public transportation noted it was a great strength. Those living further from the central area and in Clark County noted the need for more reliable public transportation. In both cases, community members noted there is continued difficulty in what they referred to as the “last mile” of getting from the transit stop to their destination, which can be a hinderance for people with physical challenges.

Resources were consistently brought up as a need in the region. The lack of access to financial resources and services, including access to safe and affordable housing, is a barrier to achieving optimal health in the region. Many community members noted that resources are available, but they are not aware of specifics about the resources or how to access them.

“I think my community would be more healthy if we were supported by good health insurance, good resources for jobs and education, and had cultural and social centers.”
- Listening Session Participant

What's Being Done

HCWC members are addressing this core issue through:

- Financial assistance programs for patients
- Expanded primary care clinics; improved patient navigation services
- Supporting school-based health centers
- Convening and facilitating collaboratives, such as the Reproductive Health Collaborative in Washington County
- Providing grants to community-based organization to support their work
- Participating in planning and discussion about transportation

Access to Health Care Services

Participants in town halls and listening sessions described many difficulties facing communities in accessing the health care system, including:

- [Geographic isolation](#) and [transportation](#)
- Language barriers
- Insurance coverage and cost
- System navigation
- A lack of providers
- Limited [culturally responsive care](#)
- Limited [behavioral health access](#)

A lack of providers and other challenges related to access may explain why some conditions, such as asthma, urinary tract infection, and depression, continue to be seen the emergency department (ED) rather than being treated in an outpatient setting. Data on ED use by insurance type does not indicate that people with any one type of insurance, or those who are uninsured, are utilizing these services more often than others. Across the region, some people face continual challenges in accessing routine care for treatable conditions; see [Appendix E](#), for rates of ED use by condition and insurance type.

Listening session participants suggested that the inability to build relationships with their primary care providers, due to language barriers, technology, affordability, and scheduling, resulted in more frequent emergency department and urgent care visits.

**“Funding often requires diagnosis (i.e., you can’t get paid until the person is sick enough).”
– Town Hall Participant**

Focused Prevention

Town hall and listening session participants described the lack of focus on prevention and “upstream” approaches as a serious impediment to improving health outcomes in the region (upstream means looking at the whole picture; in health care, it’s what has happened in a person’s life before they come to a clinic, hospital, or dentist). Participants pointed to higher rates of STIs, low vaccination rates (see [Appendix E](#)), cardiovascular conditions, and mental health conditions (including substance abuse) that could be improved with increased screening and prevention programs.

Challenges of System Navigation

Many listening session participants discussed the need for better access to care, and more aids for navigating the health care system. Even those who were insured experienced long wait times, difficulties scheduling appointments, and confusion about which part of their insurance covered needed services. And for many people, accessing available resources when they do not have a government-issued identification card is a challenge.

Challenges of System Navigation (continued)

Participants discussed how trauma and stress make it challenging to ask for, and receive, health care services. Immigrant participants noted that services are particularly difficult to access for senior members of their communities, due to language and cultural barriers (see [Culturally Relevant Care](#)).

“Health care isn’t a right here. There are a lot of situations where the community you live in dictates a lot of the resources you have access to.”

– Listening Session Participant

Participants also discussed how organizations lack the capacity to conduct thorough community outreach and are unable to help community members navigate services to reach the most suitable resources. Participants noted that services are fragmented among health sectors or are offered only through referrals.

“The wait time for any physical intervention has become a massive issue in lower income communities.”

– Listening Session Participant

Access to Resources Outside Traditional Health System

Listening session and town hall participants want access to more comprehensive, holistic, and integrated health care. They want access to alternative therapies such as acupuncture, massage therapy, counseling services, naturopathy, and chiropractic services that could be integrated into their existing health care plans.

Listening session participants noted that while the region is flush with alternative health care options, participants expressed feeling that these services were only for the wealthy. Low-cost or free clinics, as well as more options for those with Medicaid or Medicare coverage, would place these resources within the reach of the people who have traditionally been prevented from accessing them.

Access to Transportation

Transportation emerged as both a community strength and a community need during listening sessions. Participants who did not have limited physical mobility and living in an urban/metro area near bus and light rail lines described robust public transportation as a great asset. For many without a vehicle, public transportation in the metro area helped to connect them to resources, community spaces, grocery stores, and medical care, and helped to get them to work. The number of bus stops, frequency of stops, and Trimet's affordable low-income fare are all community assets.

For those outside a transportation hub area, lack of public transportation infrastructure in much of the region leaves residents without access to services, healthy foods, and quality housing.

“Transportation is a huge barrier to health and to connecting to resources.”
- Town Hall Participant

Listening session participants discussed the cost of transportation, travel time, and traumas or anxieties related to transportation as barriers. Additionally, they noted an inability to access the clinics they can afford, and that transportation is often unaffordable or unreliable, causing them to miss appointments, and potentially face financial penalties.

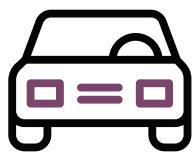
Town hall participants noted the detrimental effect a lack of reliable transportation options has on individual and community health, noting that individuals without reliable transportation are less likely to access preventive services.

Listening session participants wanted more places to be accessible by foot, particularly grocery stores, farmer's markets, and community events, and expressed that people living in their communities without a car were socially isolated.

The efficiency of having services available in one location, which was commonly cited by participants as the way services are provided in their neighborhoods, can be a barrier for rural residents or residents who live outside of inner-city hubs because they lack the ability to reach these service locations.⁶⁶ Participants noted that health care services are not available in many rural areas, and when services are available, they require a vehicle to get to them, which isolates community members who are not able to drive or do not have transportation (see [Isolation](#) for more).

Participants identified a need for more transportation services that can accommodate the geographic limitations faced by residents, such as mobile medical units providing outreach to people experiencing houselessness, or offering virtual appointments with providers.

Transportation



72.3%

Of most residents in the quad-county region commute to work by driving



11.1%

Multnomah County residents have the highest percentage of commuters using public transportation

The mean commute times for counties in the region are similar, with a mean time of **26.2 minutes** for the region.

Access to reliable transportation is crucial to economic stability and staying connected to community and resources, but this access is very dependent on:



Income



Location



Time Constraints

Figure 28. Commuting to Work by County.

Commuting to Work	Clark	Clackamas	Multnomah	Washington	Region*
 Car, Truck, or Van – drove alone	78.9%	76.8%	60.3%	73.2%	72.3%
 Car, Truck, or Van – carpooled	9.0%	9.3%	9.5%	10.4%	9.6%
 Public Transportation	2.3%	2.9%	11.1%	6.5%	5.7%
 Walked	1.9%	2.0%	5.4%	2.5%	2.9%
 Other Means	1.5%	1.6%	6.7%	1.9%	2.9%
 Mean Travel Time to Work (Minutes)	26	28	26.1	24.8	26.2

*Regional percentages calculated by unweighted averages.
Source: American Community Survey 5-year estimate 2012-2016.

Access to Resources

Existing Community Resources and Supports

Listening session and town hall participants described their communities as resilient, connected, and community-oriented. Participants described a wealth of resources that, if provided, can help people thrive economically.

Town hall and listening session participants described many valuable community resources for the houseless and housing insecure, including organizations that provide supplementary food and programs that assist with utility payments.

Participants mentioned the following as valuable assets to their communities:

- safe spaces at schools
- multicultural centers
- LGBTQ+ organizations
- community-based programs
- culturally specific programs
- resources for low-income families
- fundraising to help keep their communities clean and safe

Participants in both town halls and listening sessions described the importance of community spaces. These hubs provide space and connect community members, reducing isolation, and also provide opportunities to learn about available resources, including training and skill development supporting career growth and financial stability. Expansion of these valuable spaces, and the support services and opportunities for connection they bring, is a community priority.

Community health workers' engagement in communities was listed as a driving factor in increasing access to resources and improving health outcomes. Town hall and listening session participants described community health workers as an excellent bridge between community members and the health care

system, as well as other available resources (see for more about [Community Health Workers](#), page 70).

The resources that were most valued for their contribution to economic stability (see [Social Determinants of Health](#), page 18) via assistance with costs associated with health care were:

- low-cost health care clinics
- access to free or cost-reduced preventive care and health screenings
- affordable government insurance

Participants also mentioned the variety of resources available to assist them with job training, education and skill development, public transit costs, and food access, and resources that helped connect them to affordable housing. They described resources such as food banks, emergency shelters, low-cost clinics, and services that help to pay utility bills as necessary and beneficial, but desired more continuity in these services. (See [Social Determinants of Health](#), page 18, for more information about these areas.)

Community Needs

The areas for improvement that participants most often cited included:

- Access to financial counseling
- Acknowledgment of mental health concerns that can keep individuals in a cycle of poverty
- Greater emphasis on affordable, low-cost preventive care and screening of mental health conditions
- Increased capacity to provide emergency, temporary, and transitional shelter or alternative housing units to the many people in the region who are in need (see [page 33](#) for more information about houselessness in the region)

Community Needs (continued)

- No-cost, school-based interventions and family-focused community center programs to provide access to resources to help community members establish and achieve [economic stability](#)
- Access to mental health services and resources for residents who may not have health insurance, or who are culturally or geographically isolated (see [Isolation section, page 71](#), for more)
- More community representation (see [Community Representation, page 55](#), for more) in policymaking, government, and health care

Financial and Coordination Barriers

Both town hall and listening session participants frequently cited “siloe” organizational resources as a barrier that made it difficult for people to get connected to the available resources in the region.

Town hall participants included public health professionals, representatives of community-based organizations and community leaders. They frequently cited “siloe” organizational resources and funding strain in the region as they reflected on what was making their job difficult. The siloe nature of funding streams creates a lack of integration between health care and life needs, resulting in organizations treating symptoms rather than the whole.

Obtaining sufficient funding to serve the community is a large burden to organizations and adversely affects their ability to impact community health. Town hall participants described financial strain due to a culture of competition between organizations. When funding was provided, they noted that the funding was not sustainable, and most often focused on short-term or emergency services that did not address issues over time. Also, some town hall participants were unaware that resources were available that could potentially provide programs to supplement gaps in assistance.

“It is difficult to address the larger issues of disparities as an organization when you’re really only being funded and asked to address the small problems. That only becomes just a short-term bandage.”
- Town Hall Participant

Town hall participants referenced a lack of “upstream” program funding (for example, grants or other funding sources), making it difficult to address the needs of the community. Similarly, listening session participants expressed the need for more preventive resources, more collaborative resource hubs, and assistance focusing on the long-term needs instead of the most immediate or urgent concerns at immigrants’ and refugees’ point of arrival.

Coordination and Navigation

Participants also discussed how organizations lack the capacity to conduct thorough community outreach resulting in the inability to help community members navigate services to reach the most suitable resources.

Listening session participants noted that it was difficult for people to navigate all the services the organizations in their county could provide, and wished for more peer navigators and community health workers who could connect and educate them on what was available (see [Community Health Workers section](#) for more).

Town hall participants described a lack of awareness among organizations regarding each others’ scope and resources, with a solution being to form more partnerships between agencies to support the community’s health.

Parent and Child Resources

Participants expressed great concern that there are not enough resources available for parents and children, including childcare, safe play spaces, lifestyle coaching, drug use prevention, mental health services, and food assistance. Multi-generational and culturally specific resources to help parents succeed were often referenced by listening session participants, especially Hispanic/Latino participants (see [Community Representation section on page 65](#) for more details).

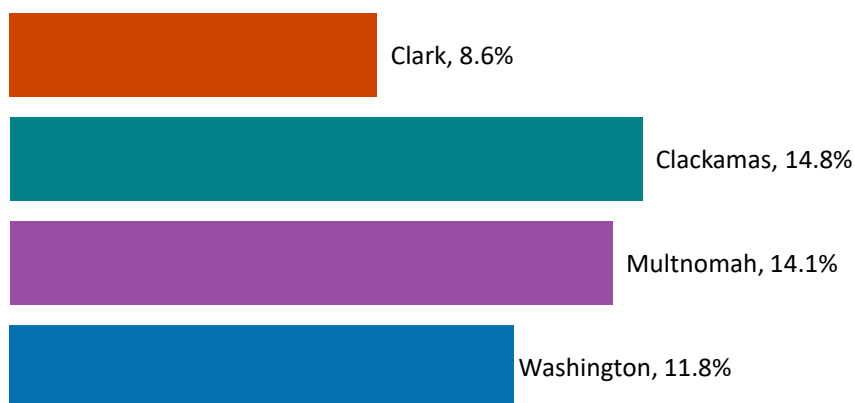
Food security remains an issue. Food deserts, defined as areas where residents live one mile from a grocery store (urban) or 10 miles from a grocery store (rural), contribute to the issue of adequate access to affordable, healthy foods. Many people living in rural parts of the region experience food insecurity and are in food deserts.⁶⁷

Figure 29 shows that a significant percentage of youth in the region reported experiencing food insecurity.

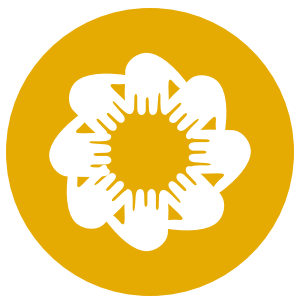
The health and safety of children, from access to safe outdoor recreation spaces to school programs that offer mental health services, was a high priority for listening session participants. Parents wanted resources to help engage their children in conversations about substance abuse (see [Behavioral Health section on page 43](#)), mental health, school safety, and bullying.

Parents who are immigrants and refugees, or those whose primary language is not English, expressed feeling isolated from technology, social media, and school influences that could be negatively impacting their children and wished for more parenting resources to help them learn how to monitor their children. (See [Language](#) and [Isolation](#) sections for more.)

Figure 29. Percent of Food Insecure Youth (8th Grade).



Sources: 2017 Oregon Healthy Teens Survey and 2016 Washington Healthy Youth Survey.



Community Representation

Social Factor

Community Representation: Definition

Community: A group of people with diverse characteristics linked by social ties, common perspectives, and who may be engaged in joint action in geographical locations or settings. Community can be defined in multiple ways depending on the people asked and what groups have in common.

What's Being Done

HCWC members are addressing this core issue through:

- Increasing workforce diversity
- Supporting networks of community-based organization leaders
- Including diverse community members on workgroups, committees, and coalitions

Lack of Community Representation

Communities of color consistently identified the need for increased community representation. These community members noted the influence that decision makers and policy play in the lives of their communities and the perceived lack of influence they have in making those decisions. Community members wanted to be at the table and have a voice when decisions about their communities are made. They also supported increased civic engagement through education and workshops about the electoral process to increase the number of community members who engage and vote.

Listening session participants in all four counties (most notably in rural communities and communities of color) discussed at length how the dominant population and politics of Portland shape laws, policies, and what the state focuses on. Some communities

within the Portland metro area described feeling like minority communities. They do not see their interests and needs reflected unless they align with the demographic majority of Portland. Participants discussed feeling they were not properly represented in the decision-makers, government, employers, and organizations that serve their community.

Due to this lack of representation, participants noted current policies regarding their communities were often outdated, or misinformed due to inaccurate data.

As a solution, community members discussed the need to establish institutional solutions and to have shared power in decision making. Community members desire greater cultural awareness in health care, and more culturally specific providers. There was an emphasis on communities making their voices known, both through voting and social media, to influence decision makers. Participants expressed being a part of neighborhoods, workplaces, schools, and communities where there was little diversity and limited opportunities to advance for people of color.

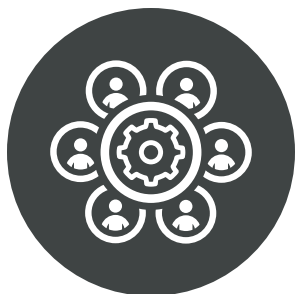
“We need more representation of our society in the city government.”

– Listening Session Participants

Community Spaces

Participants in town halls and listening sessions described their community spaces as hubs that connect them to support and provide a space to share resources and information with fellow community members. Community spaces were a source of economic stability, providing professional development training, culturally specific resources, job postings, and community programs to connect people to resources and trainings that would help establish or maintain financial security.

Participants described the benefit of having spaces supporting intersectional communities and community gathering places near their homes. They appreciated what was available, and they strived to expand the number of community hubs.



Culturally Responsive Care

Social Factor

Culturally Responsive Care: Definition

Health care that is responsive to the cultural needs of patients is critical to ensure that all community members live their fullest and healthiest lives. The current health care system is working to be responsive but has work to do to meet the needs of all patients. Specifically, community members wanted more providers who share their cultural background, more community health workers who can assist patients in navigating the system and living their healthiest lives, and information provided in more languages than English and Spanish.

What's Being Done

HCWC members are addressing this core issue through:

- Contracting with culturally specific providers
- Supporting the Oregon Community Health Workers Association
- Integrating traditional health workers into the health care delivery system
- Conducting internal training for providers and organization leaders
- Providing grants to community-based organizations to support culturally specific programs

“...lack of culturally responsive and affirming care, which in turn creates a culture of distrust and disdain towards health and institutions.”

- Town Hall Participant

Access to Culturally Responsive Care

Participants in town halls and listening sessions discussed how providers lack the bilingual and bicultural backgrounds necessary to serve all communities in the region, particularly in the mental health sector. They described limited culturally responsive services, culturally relevant information, and linguistic resources available across the region. In some areas of the region, this is particularly true, with community members who travel great distances to access services that are culturally and linguistically responsive.

Language

When self-reporting about health status, health behaviors, access to care, and timeliness of care, Hispanic adults who responded to a survey in Spanish were more likely to report worse health status. Compared with people who responded in English, they more often lacked health insurance, did not have a personal doctor, and postponed seeing a doctor because of the cost of care.⁶⁸ Older individuals with limited English proficiency are more likely to have no usual source of health care, report lower self-rated health, and report feeling sad most or all of the time compared with older individuals who only speak English.⁶⁹

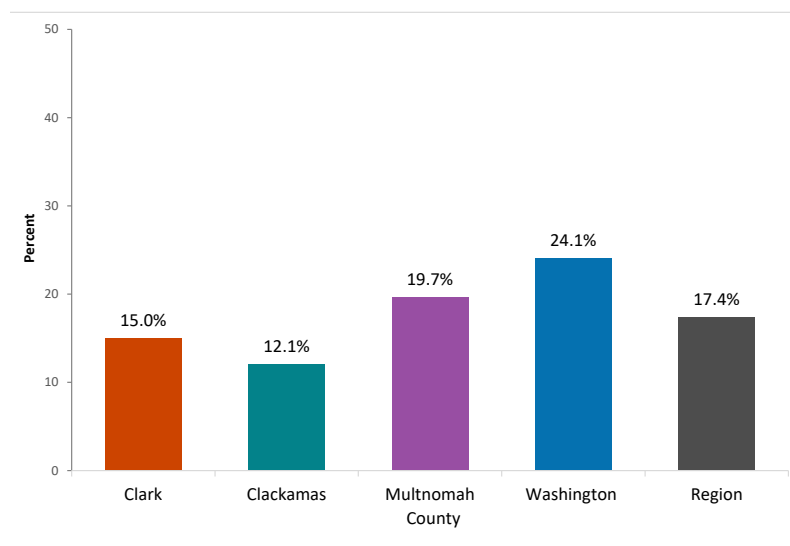
Participants from the Hispanic/Latino community described being turned away by health care providers because of discrimination due to lack of insurance and language barriers.

Participants cited language barriers and a lack of translators as significant challenges to health.

Language (continued)

Across the region, the percentage of the population that speaks a language other than English at home varies by county, with Washington County having the highest proportion at 24% (see Figure 30). Forty percent of listening session participants who completed a brief demographic survey reported speaking either English and another language, or a language other than English, at home.

Figure 30. Percentage who speak a language other than English at home.



Source: American Community Survey 5-year estimate 2012-2016.

Spanish-speaking listening session participants described being turned away by providers because they require non-English services, noting language barriers make everything in their lives more difficult. Other participants whose primary language was not English mentioned relying on their children or family members to be their translators, both because of a fear of inaccurate translation services, and a lack of trust that translators will maintain confidentiality within their larger community. Non-English-speaking participants emphasized the need for translators who were not fellow community members to help ensure privacy. The inability to access emergency services in languages other than English was noted as a specific challenge for non-English-speaking communities.

“There is a lack of culturally-specific and language-specific programs to improve adjustment and integration into the system.”
– Listening Session Participant

Also vital is empowering people by enabling communication in their own languages, creating space for cultural expression. Participants at the Iraqi/Syrian listening session noted the lack of certified training programs for Arabic-speaking community health workers as a challenge in increasing this workforce for their community.

Provider Education and Resources

There is a lack of provider education about how to work with people who are culturally different from them. A reliance on stereotypes, and a failure to address cultural aspects of health concerns such as nutrition or mental health, are associated with feelings of cultural insensitivity and a lack of trust in health institutions. Information and resources are often not available in non-digital form or are available only in English. Or, if materials are available in non-English languages, sometimes the translations are not good or accurate.

Lack of translation resources, targeted resources, and few community partnerships create even more barriers for racial and ethnic minority groups.

Community members advocated for more bilingual and bicultural providers, as well as community health workers (see sidebar), to facilitate connections, advocate for, and empower communities.

Participants want more culturally relevant, long-term services that focus on comprehensive, community-oriented programs emphasizing holistic health and preventive health care services (for more about this, see [Access](#) section). Also, community members noted the need for additional behavioral health services and supports across the region.

Community Health Workers

Participants noted that system navigation was a challenge for those from different cultural and linguistic backgrounds. More representation of minority populations within the organizations and among providers serving the region would go a long way to rectify these barriers to health and wellness. Community health workers and peer navigators are two resources that could improve access to non-traditional health services.

Community health workers frequently came up as a positive resource in many of the areas discussed in this report. They are highly valued and are a resource communities would like to have more access to. Community health workers help alleviate the navigation challenge, but more are needed in the diverse communities across this region. Participants see community health workers as invaluable in providing education and support to community members.



Isolation

Social Factor

Isolation

Isolation is a key determinant of health. It is different from loneliness, though they are often discussed together. In this report, isolation means either geographic, physical, and/or social isolation. It pertains to social contacts or network that can include family, friends, but also the broader environment through social activities. Isolation also means being geographically isolated (where you live is along way from other people, services). Isolation has particularly detrimental effects on low-income seniors who, in urban settings, tend to be clustered in areas with high proportions of low-income older adults.

Physical and cultural isolation were identified throughout the region as core issues, with rural community members noting the difficulty in accessing services in their communities and the need to travel long distances for services. Other communities, particularly immigrant communities, shared how social isolation from their homeland, friends, and families impacts their health.

Many community members shared their love of community spaces and organizations which bring them together with other people but wanted more spaces to share and learn together. For example, community members from across the region wanted more multi-cultural community centers and spaces.

What's Being Done

HCWC members are addressing this core issue through:

- Elder care being provided in homes
- Addressing social cohesion as a part of programming

Geographic Isolation and Transportation

Limited transportation options in some areas of the region were identified in town halls as a challenge to communities' access to resources and services. Town hall participants discussed

the disconnect between the location of services and where communities reside. The cost of transportation, time it takes to travel, and lack of access to transportation when community members did not own their own vehicles or reside in a population-dense transportation hub were also described as challenges by town hall participants. There is a need for services that can accommodate the limitations faced by communities, such as mobile medical units, to provide medical outreach for people experiencing houselessness or virtual appointments with providers.

Listening session participants echoed the challenges noted in the town halls of a robust public transit system in some areas of the region, but this needs improvement in rural communities. Additionally, listening session participants noted an inability to access the clinics they can afford, and that transportation is often unaffordable or unreliable, causing them to miss appointments and potentially face financial penalties.

Participants noted health care services are not available in rural areas, and when services are available, they require a vehicle to get to them, which isolates community members who are not able to drive or do not have transportation.

See [Access to Health Care, Transportation and Resources](#), page 56 for more about the challenges of lack of access to health care, resources, and transportation.

Social Isolation

Social isolation can occur in rural or urban areas. As described in the [Social Determinants of Health](#) section, poor family support, minimal contact with others, and limited involvement in community life are associated with increased disease and early death.



Looking Ahead

Looking Ahead

For the past three years, HCWC has partnered with people and organizations in the community and evaluated data to learn about the health and lived experiences of the quad-county region. This closing section contains the key takeaways from this work.

Community Strengths

Listening session and town hall participants described their communities as resilient, connected, and community-oriented.

Participants described a wealth of resources that, if provided, can help people thrive.

Town hall and listening session participants mentioned the following as community assets:

- Organizations providing resources for the houseless and housing insecure
- Resources for low-income families
- Organizations providing supplementary food
- Community organizations, such as those providing professional development training, culturally specific resources, job postings, and community programs
- Community health workers' engagement in their communities
- Multicultural centers
- Safe spaces at schools
- LGBTQ+ organizations
- Culturally-specific programs
- Fundraising to help keep their communities clean and safe

Resources such as **food banks, emergency shelters, low-cost clinics, and services** that help to pay utility bills are necessary and beneficial, but there is a need for more continuity in these services so community members can understand how to access these resources effectively. Community members described needing consistency in these support services rather than having them only on an emergency/episodic basis.

Transportation was another strength and need identified through town halls and listening sessions. Those who live closer to central public transportation noted it was a great strength, while those outside of Portland metro area—especially those in rural areas—emphasized lack of transportation options as an area for improvement.

Calls to Action

HCWC identified nine core issues needing attention in the quad-county region, with discrimination, racism, and trauma as the overarching issues that must be considered when addressing the other core issues.

Discrimination and Racism

Discrimination and racism adversely affect all areas of people's lives and health, and the health of their communities.

Communities that are not white and not of the dominant culture have faced extensive discrimination and racism at every level, historically and today, in both overt and implicit ways, from education to employment and income levels to housing security and health.

Communities of color have higher rates of chronic diseases and poorer health outcomes compared with other groups. Experiences of racism and collective historical trauma in institutional settings, including health care, have created a culture of distrust. Misunderstandings and poor communication contribute to a lack of trust in institutions that are supposed to address and support their needs.

Lack of Safety

Communities of color, immigrants and refugees, and LGBTQ+ participants described fears and experiences of discrimination and racial profiling by the police, which leads them to feel unwelcome in certain areas, including their own neighborhoods. There is also fear of deportation by the Immigration and Customs Enforcement agency.

Additionally, participants discussed an inability to exercise outdoors or let their kids play in the park, not only because of fear of deportation or racial profiling, but due to factors such as large amounts of trash in their neighborhoods, vandalism, and presence of drug use in their community.

Gentrification

Gentrification significantly impacts communities and displaces community members. Many who originally occupied neighborhoods have been pushed out of their historic communities. This disrupts communities, businesses, relationships, and other sources of support as people are forced to the margins of an area—or out of their communities altogether. This displacement is one of many significant community stressors. (See Housing below, under Access to Resources.)

Lack of Representation

People want to see more of themselves and their communities reflected in the institutions that are supposed to be there to serve them, including local government, health care providers, and community organizations.

Lack of Representation and Accurate Data

Fears of surveillance and a lack of transparency in data hinder equitable data collection for immigrant communities, refugee communities, and communities of color.

Communities of color, the LGBTQ+ community, immigrants and refugees, and women and children all experience morbidities (rates of diseases), mortalities (deaths), and stressors that influence social determinants of health.

Due to small population sizes, and mistrust of data collection processes, these communities are often misrepresented, inaccurately accounted for, or completely absent in quantitative data.

- Better tracking for outcomes in communities of color is needed, as well as focus on qualitative data collection methods and community narratives (for example, listening to community members describe their experiences).

Challenges for Immigrants and Refugees

Participants in the listening sessions for immigrants and refugees described experiencing financial challenges due to discrimination and cultural misunderstandings, such as absence of credit history to assist in financial endeavors. Although many came to the United States with transferrable job skills and education from their home countries, their credentials were not transferrable. This hurdle often required finances to fund additional education or a switch in careers.

Trauma

Toxic stress and trauma affect every aspect of a person's health and well-being. These issues often begin in childhood and frequently continue through to adulthood, affecting the health and well-being of many in the region.

Generational trauma and toxic stress are often not well understood in dominant culture communities and can be dismissed or ignored. In fact, generational trauma can often cause actual genetic changes for those who experience it, leading to higher risk of chronic health conditions, housing insecurity, mental health issues, and substance use disorders. It is important to note that childhood experiences of trauma, discrimination, racism, and biases produce a cycle of difficult circumstances—financial, social, and psychological—that is difficult to break.

More awareness and understanding of how trauma impacts people's lives is needed in all areas of health care, as well as in the larger community narrative and understanding.

Areas for improvement:

- Trauma-informed policies, health care, and resources can serve as protective factors to counteract the impact of toxic stress and trauma on health.
- Support for policies and programs that provide “wraparound” services (holistic, family-driven) to families and other impacted populations.

Health Outcomes

Behavioral Health

Participants often mentioned the lack of mental health providers who look like them or identified with their identities and experiences (see Discrimination and Racism and Culturally Responsive Care). This disconnect between the providers' and participants' experiences made accessing mental health care challenging.

Areas for improvement:

- Ensuring access to mental health services and resources for residents who may not have health insurance
- Greater access to mental health resources, such as more providers, school-based interventions, and family-focused programs
- Greater emphasis on preventive care and screening for mental health conditions
- Addressing stigmas associated with mental health treatment
- Culturally and linguistically competent mental health services (see more areas for improvement under below)

Chronic Conditions

Chronic disease accounts for two-thirds of emergency medical conditions and roughly 80% of all health care costs.

Participants frequently mentioned how comprehensive, accessible health care and access to peer navigators and **community health workers** (see below) could help reduce chronic conditions in the region.

Areas for improvement:

- Access to comprehensive health care
- More peer navigators and community health workers
- More preventive resources and education to improve chronic condition self-management
- Multi-generational lifestyle change programs

Sexually Transmitted Infections

Rates of two STIs, chlamydia and gonorrhea, have increased in the quad-county region.

Areas for improvement:

- More comprehensive sex education and access to sexual health resources (mentioned by youth during listening sessions)
- Of note, this issue was addressed more directly by youth and hardly mentioned in adult listening sessions. There may be opportunity here to raise awareness and/or address a barrier/embarrassment factor that prevents it from being overtly introduced in a group session (where that was not the main topic).

Social Factors

Access: Health Care, Transportation and Resources

Access to Health Care

Even though most of the quad-county region has health insurance coverage, community members face challenges related to coverage and cost. Over 10% of the population in every county reported not being able to access health care services due to cost.

Areas for improvement:

- Access to comprehensive, holistic, and integrated health care
- Access to alternative therapies such as acupuncture, massage therapy, counseling services, naturopathy, and chiropractic services
- More peer navigators and community health workers
- Improving health literacy: poor general literacy often means poor health literacy, which puts people at risk for mismanaging medications and misunderstanding treatment protocols

Access to Transportation

For many residents without a vehicle, public transportation in the Portland metro area helped to connect them to resources, community spaces, grocery stores, and medical care, and helped to get them to work. However, for those living outside a transportation hub, the lack of public transportation reduced their access to medical services, healthy food, and quality housing, among other things important to healthy living.

Areas for improvement:

- Multiple services in one location (e.g., health care and complementary support services)
- More public transportation options (see Isolation below for more)

Access to Resources

Areas for improvement related to community resources, funding:

- More and consistent/reliable funding for community-based organizations
- More collaborative resource hubs
- Increased awareness of available community resources (both for community members and between community service provider organizations)
- Assistance navigating various, often disconnected, resources—more **peer navigators and community health workers**

Areas for improvement related to housing:

- Increased emergency, temporary, and transitional shelter or alternative housing
- Financial counseling
- Addressing underlying issues that have contributed to a person's unstable housing situation, including
 - Economic instability
 - Discrimination and racism
 - Past trauma
 - Mental health issues
 - Other health conditions

Areas for improvement related to economic stability:

- Access to financial counseling and job assistance
- No-cost, school-based interventions and family-focused community center programs to provide access to resources to help community members establish and achieve economic stability
- Investment in community-centered small businesses, particularly family-oriented and culturally specific businesses, which will encourage economic growth and financial security for all community members.

Areas for improvement for children and families:

- Safe outdoor recreation spaces
- Resources to help engage children in conversations about substance abuse, mental health, school safety, and bullying

Areas for improvement for immigrants and refugees:

- Addressing long-term needs, not just the immediate needs of immigrants and refugees

Areas for improvement for "transitional age" youth:

- More services for transitional age youth
- Daytime programs for youth who are housing insecure

Community Representation

Areas for improvement:

- Institutional solutions and shared power in decision making (their voices being heard, having input on policy, etc.)
- Greater cultural awareness in health care and more culturally specific providers (see below)
- More spaces supporting intersectional communities and community gathering places near their homes

Culturally Responsive Care

Areas for improvement:

There is a need for more **bilingual and bicultural providers** and **community health workers** to facilitate, advocate for and empower communities.

Other ways for care to become more culturally responsive include:

- More culturally relevant, long-term services that focus on comprehensive, community-oriented programs emphasizing holistic health and preventive health care services
- Access to emergency services in languages other than English
- Culturally and linguistically competent mental health services
- Accurate translations of informational materials in non-English languages
- Certified training programs for Arabic-speaking community health workers
- Multi-generational and culturally specific resources to help parents succeed

Isolation

Physical and cultural isolation was identified throughout the region as a core issue, with rural community members noting the difficulty in accessing services in their communities and having to travel long distances for services.

Geographic isolation

For those living in rural communities, as well as those who may live in urban areas but face limitations in accessing services.

Areas for improvement:

- More mobile medical units
- Options of virtual appointments
- More medical outreach (for example, to those experiencing houselessness)

Social isolation

Areas for improvement:

- More social outreach
- Shared community spaces and resources



References

References

- ¹ World Health Organization. Definitions of equity and health equity. <https://www.who.int/healthsystems/topics/equity/en/>
- ² Coalition of Communities of Color and Portland State University. Communities of Color in Multnomah County: An Unsettling Profile. 2010. <http://allhandsraised.org/content/uploads/2012/10/AN20UNSETTLING20PROFILE.pdf>
- ³ Office of Disease Prevention and Health Promotion. HealthyPeople.gov. Social Determinants of Health. <https://www.healthypeople.gov/2020/topics-objectives/topic/social-determinants-of-health>
- ⁴ Diagnosing Discrimination: Stress from Perceived Racism and the Mental and Physical Effects. <http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.922.1787&rep=rep1&type=pdf><http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.922.1787&rep=rep1&type=pdf>
- ⁵ Jones, CP. Confronting Institutionalized Racism. <http://racialequitytools.org/resourcefiles/jonesc2.pdf>
- ⁶ Semuels A. *The Atlantic*. The Racist History of Portland, the Whitest City in America. <https://www.theatlantic.com/business/archive/2016/07/racist-history-portland/492035/>
- ⁷ Imarisha W. Oregon Humanities' Conversation Project with support from Portland State University's Black Studies Department. Why Aren't There More Black People in Oregon: A Hidden History. Oregon Black History Timeline – Audio Commentary. 2013. <https://www.youtube.com/watch?v=fo2RVQunsZ8>
- ⁸ House JS. Social isolation kills, but how and why? *Psychosom Med*. 2001;63:273-274.
- ⁹ Kawachi IK, Bruce P, Glass R. Social capital and self-rated health: A contextual analysis. *Am J Public Health*. 1999;89:1187-1193.
- ¹⁰ Robert Wood Johnson Foundation and University of Wisconsin Population Health Institute. 2018 County Health Rankings & Roadmap. <http://www.countyhealthrankings.org/app/oregon/2018/measure/factors/140/description>
- ¹¹ Robert Wood Johnson Foundation. Can Early Childhood Interventions Improve Health and Well-Being? 2016. <https://www.rwjf.org/en/library/research/2016/03/can-early-childhood-interventions-improve-life-outcomes-.html>
- ¹² Ansell, S. Achievement Gap. Education Week. Published Sept. 2004; updated July 2011. <http://www.edweek.org/ew/issues/achievement-gap/>
- ¹³ National Education Association. Students Affected by Achievement Gaps. <http://www.nea.org/home/20380.htm>
- ¹⁴ Oregon Department of Education.
- ¹⁵ American Community Survey 5-Year estimate (2012–2016).
- ¹⁶ Oregon Department of Education. <https://www.oregon.gov/ode/reports-and-data/Pages/default.aspx>
- ¹⁷ Washington Office of Superintendent of Public Instruction (OSPI) (<http://www.k12.wa.us/>)
- ¹⁸ Nielsen-Bohlman L, Panzer AM, Kindig DA, editors. Health literacy: a prescription to end confusion. National Academies Press; 2004.
- ¹⁹ American Community Survey 5-year estimate, 2012-2016.
- ²⁰ Andrulis DP, Brach C. Integrating literacy, culture, and language to improve health care quality for diverse populations. *Am J Health Behav*. 2007;31(Suppl 1): S122-S133.
- ²¹ Kripalani S, Henderson LE, Chiu EY, Robertson R, Kolm P, Jacobson TA. Predictors of medication self-management skill in a low-literacy population. *J Gen Intern Med*. 2006;21(8): 852–56.
- ²² Berkman ND., Sheridan SL, Donahue KE, et al. Health literacy interventions and outcomes: an updated systematic review. 2011;1–941. Report no.: 199.
- ²³ Williams MV, Baker DW, Honig EG, Lee TM, Nowlan A. Inadequate literacy is a barrier to asthma knowledge and self-care. *Chest*. 1998;114(4):1008–15.
- ²⁴ Tracking Oregon's Progress: A Focus on Income Inequality. 2015. https://www.oregoncf.org/Templates/media/files/reports/top_indicators_2015.pdf
- ²⁵ Women's Foundation of Oregon. Count Her In: A Report about Women and Girls in Oregon. 2016. <https://womensfoundationoforegon.org/uploads/CountHerInreport.pdf>
- ²⁶ Andrew S. London. Work-Related Disability, Veteran Status, and Poverty: Implications for Family Well-Being. 2011. <https://doi.org/10.1080/10875549.2011.589259>
- ²⁷ Coalition of Communities of Color, an Unsettling Profile, Coalition of Communities of Color and Portland State University. 2010.
- ²⁸ IRCO Community Needs Assessment, Immigrant and Refugee Community Organization, 2017.
- ²⁹ Lee Badgett MV, Durso LE, Schneebaum A. The Williams Institute. *New Patterns of Poverty in the Lesbian, Gay, and Bisexual Community*. 2013. <https://williamsinstitute.law.ucla.edu/wp-content/uploads/LGB-Poverty-Update-Jun-2013.pdf>
- ³⁰ Women's Foundation of Oregon. *Count Her In: A Report about Women and Girls in Oregon*. 2016.

References

- ³¹ Lantz PM, Pritchard A. Socioeconomic Indicators That Matter for Population Health. *Prev Chronic Dis*. 2010 Jul; 7(4): A74. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2901572/>
- ³² Drewnowski A, Rehm CD, Solet D. Disparities in Obesity Rates: Analysis by Zip Code Area. *Social Science & Medicine*. 2007 Dec.; Vol. 65; 12:2458-2463. <https://www.sciencedirect.com/science/article/abs/pii/S0277953607003905>
- ³³ U.S. Environmental Protection Agency. Health Effects Notebook for Hazardous Air Pollutants. <https://www.epa.gov/haps/health-effects-notebook-hazardous-air-pollutants>
- ³⁴ Dubowsky SD, Suh H, Schwartz J, Coull BA, Gold DR. Diabetes, Obesity, and Hypertension May Enhance Associations between Air Pollution and Markers of Systemic Inflammation. *Environ Health Perspect*. 2006 Jul; 114(7): 992–998. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC1513328/>
- ³⁵ DeSilver D. Pew Research Center. For most U.S. workers, real wages have barely budged in decades. Aug. 2018. <https://pewrsr.ch/2nkN3Tm>
- ³⁶ ACS 2016 5-Year Estimates – “Percent of housing units occupied per county.”
- ³⁷ Office of the Governor, Kate Brown. State of Oregon. Housing Policy Agenda: Housing Stability for Children, Veterans, and the Chronically Homeless and Increased Housing Supply for Urban and Rural Communities. August 2018. <https://www.oregon.gov/gov/policy/Pages/housing.aspx>
- ³⁸ Women’s Foundation of Oregon. *Count Her In: A Report about Women and Girls in Oregon*. 2016.
- ³⁹ Coalition of Communities of Color and Portland State University. *Communities of Color in Multnomah County: An Unsettling Profile*. 2010.
- ⁴⁰ CDC. The Tuskegee Timeline. <https://www.cdc.gov/tuskegee/timeline.htm>
- ⁴¹ Beskow LM. Lessons from HeLa Cells: The Ethics and Policy of Biospecimens. *Annual Review of Genomics and Human Genetics*. Aug. 2016; Vol. 17:395-417. First published online as a review in advance on March 3, 2016: <https://doi.org/10.1146/annurev-genom-083115-022536>; now available on Annual Reviews: <https://www.annualreviews.org/doi/full/10.1146/annurev-genom-083115-022536>
- ⁴² Washington H. *Medical Apartheid: The Dark History of Medical Experimentation on Black Americans from Colonial Times to the Present*. Harlem Moon, the Doubleday Broadway Publishing Group, New York. 2006. <https://books.google.com/books?id=apGhwRt6A7QC&lpg=PP1&dq=spectulum%20creation%20and%20slaves&pg=PP1#v=onepage&q&f=false>
- ⁴³ Sotero M. A Conceptual Model of Historical Trauma: Implications for Public Health Practice and Research. *Journal of Health Disparities Research and Practice*. Vol. 1, No. 1; 93-108. 2006. https://papers.ssrn.com/sol3/papers.cfm?abstract_id=1350062
- ⁴⁴ Center on the Developing Child, Harvard University. Toxic Stress. <https://developingchild.harvard.edu/science/key-concepts/toxic-stress/>
- ⁴⁵ Causal Mechanisms and Multidirectional Pathways Between Trauma, Dissociation, and Health. 2008. Kendall-Tackett, Klest. Volume 10, Issue 2.
- ⁴⁶ Center for Outcomes Research and Education, Providence Health & Services. *Foster Care: Life Course Experiences, Health, and Health Care*. 2017. http://res.cloudinary.com/bdy4ger4/image/upload/v1513104656/Foster_Care_Study_Final_Report_z9ki9.pdf
- ⁴⁷ Middlebrooks JS, Audage NC. The Effects of Childhood Stress on Health Across the Lifespan. Atlanta (GA): Centers for Disease Control and Prevention, National Center for Injury Prevention and Control. 2008. http://health-equity.lib.umd.edu/932/1/Childhood_Stress.pdf
- ⁴⁸ Center for Outcomes Research and Education, Providence Health & Services. *Foster Care: Life Course Experiences, Health, and Health Care*. 2017.
- ⁴⁹ Middlebrooks JS, Audage NC. The Effects of Childhood Stress on Health Across the Lifespan. Centers for Disease Control and Prevention, National Center for Injury Prevention and Control. 2008.
- ⁵⁰ Center for Outcomes Research and Education, Providence Health & Services. *Foster Care: Life Course Experiences, Health, and Health Care*. 2017.
- ⁵¹ Coalition of Communities of Color and Portland State University. *Communities of Color in Multnomah County: An Unsettling Profile*. 2010.
- ⁵² Providence Center for Outcomes Research and Education. *Foster Care: Life Course Experiences, Health, and Health Care*. 2017. http://res.cloudinary.com/bdy4ger4/image/upload/v1513104656/Foster_Care_Study_Final_Report_z9ki9.pdf

References

- ⁵³ Shonkoff JP, Garner AS, Siegel BS, Dobbins MI, Earls MF, Garner AS, McGuinn L, Pascoe J, Wood DL. The Committee on Psychosocial Aspects of Child and Family Health; Committee on Early Childhood, Adoption, and Dependent Care; and Section on Developmental and Behavioral Pediatrics. The Lifelong Effects of Early Childhood Adversity and Toxic Stress. *American Academy of Pediatrics*. 2012; Vol. 129, Issue 1. <http://pediatrics.aappublications.org/content/129/1/e232.short>
- ⁵⁴ Sotero M. A Conceptual Model of Historical Trauma: Implications for Public Health Practice and Research. *Journal of Health Disparities Research and Practice*. Vol. 1; 1:93-108. 2006. https://papers.ssrn.com/sol3/papers.cfm?abstract_id=1350062
- ⁵⁵ Toyokawa S, Uddin M, Koenen KC, Galea S. How does the social environment 'get into the mind'? Epigenetics at the intersection of social and psychiatric epidemiology. *Social Science & Medicine*. 2012; Vol. 74:1. <https://www.sciencedirect.com/science/article/abs/pii/S0277953611006332>
- ⁵⁶ Horner G, Davis C, Sherfield J, Wilkinson K. Trauma-Informed Care: Essential Elements for Pediatric Health Care. *Journal of Pediatric Health Care*. Vol. 33; 2:214–221.
- ⁵⁷ Behavioral Risk Factor Surveillance System (BRFSS).
- ⁵⁸ CDC. Suicide Among Youth. <https://www.cdc.gov/healthcommunication/toolstemplates/entertainmented/tips/SuicideYouth.html>
- ⁵⁹ Oregon Public Health Division. Oregon Healthy Teens Survey: 2017. <https://www.oregon.gov/oha/PH/BIRTHDEATHCERTIFICATES/SURVEYS/OREGONHEALTHYTEENS/Pages/2017.aspx>
- ⁶⁰ Washington State Department of Social and Health Services. Washington State Healthy Youth Survey 2016. <https://www.doh.wa.gov/Portals/1/Documents/Pubs/160-193-HYS-AnalyticReport2016.pdf>
- ⁶¹ CDC. National Center for Chronic Disease Prevention and Health Promotion. About Chronic Diseases. Last reviewed: May 2019. <https://www.cdc.gov/chronicdisease/about/index.htm>
- ⁶² World Health Organization. Infectious diseases: https://www.who.int/topics/infectious_diseases/en/
- ⁶³ Oregon Public Health Assessment Tool (OPHAT) and Community Health Assessment Tool (CHAT)
- ⁶⁴ CDC. Chlamydia fact sheet. Last reviewed: Nov. 4, 2016. <https://www.cdc.gov/std/chlamydia/stdfact-chlamydia.htm>
- ⁶⁵ CDC. Gonorrhea fact sheet. Last reviewed: Jan. 29, 2014. <https://www.cdc.gov/std/gonorrhea/stdfact-gonorrhea.htm>
- ⁶⁶ Hastings P. Report urges Clark County to help aging population stay connected with community. *The Columbian*. January 2019. <https://www.columbian.com/news/2019/jan/16/report-urges-clark-county-to-help-aging-population-stay-connected-with-community/>
- ⁶⁷ U.S. Department of Agriculture. Food Access Research Atlas. Last updated: May 2017. <https://www.ers.usda.gov/data-products/food-access-research-atlas/go-to-the-atlas/>
- ⁶⁸ DuBard CA, Gizlice Z. Language spoken and differences in health status, access to care, and receipt of preventive services among U.S. Hispanics. *Am J Public Health*. 2008;98(11): 2021–2028. doi:10.2105/ajph.2007.119008
- ⁶⁹ Ponce NA, Hays RD, Cunningham WE. Linguistic disparities in health care access and health status among older adults. *J Gen Intern Med*. 2006;21(7):786–91.



Appendices

Appendix A: HCWC Leadership and Workgroups

Appendix B: Methodology

Appendix C: Additional Social Determinants of Health Information

Appendix D: Listening Session Demographic Information

Appendix E: Health Indicators

Appendix F: Literature Review

Appendix G: County-Specific Data

- Clark County
- Clackamas County
- Multnomah County
- Washington County

Appendix A: HCWC Leadership Group and Workgroups

This report was prepared by Comagine Health (formerly HealthInsight) convener staff: Meghan Haggard, Maria Danna, Jennifer Hendrickson and Karen Drill. Special thanks to the Data Workgroup participants Eva Hawes, Erin Jolly, Kathleen Lovgren, Chris Goodwin, Kristine Rabbii, Maria Tafolla, Marilou Carrera, Anna Menon, Katherine Galian, Diana Netter, Jesse Gelwicks, and Dr. Frank Franklin, who volunteered to provide feedback on initial drafts.

Acknowledgements

Each organization and individual listed below provided important contributions to this HCWC 2019 Community Health Needs Assessment. Their efforts, expertise and commitment to communities they serve made this report possible.

Community Partners

Town Hall Organization Participants

ASAC	Oregon AIDS Education & Training Center
City of Lake Oswego	Oregon Community Health Workers Association
Clackamas Behavioral Health Division	Oregon Dairy and Nutrition Council
Clackamas County Aging Services Advisory Council	Oregon Food Bank
Clackamas County Community Action Board	Oregon Health Equity Alliance
Clackamas County Disaster Management	Oregon Office on Disability and Health
Clackamas County Public Health Division	Oregon Oral Health Coalition
Clackamas County Social Services	Planned Parenthood
Clackamas Workforce	Project Access NOW
Clark County Community Services	Providence ElderPlace
Clark County Public Health	Providence Health and Services
Coalition of Community Health Clinics	Quest Center for Integrative Health
Kaiser Permanente	Society of St. Vincent de Paul
Legacy Health	Vibrant Future Coalition/NW Family Services
Micronesian Islander Community	YMCA of Columbia Willamette
NAYA Family Center	
Northwest Family Services	

Community Listening Session Hosts

Adelante Mujeres

AntFarm

Cascade AIDS Project – Aging Well

Central City Concern

Community Partnership for Affordable
Housing

Estacada Community Center

Faith Organization in Multnomah County

Friendly House

Individual Facilitators, Arabic Community

Individual Facilitator, Farmworkers

Iraqi Society of Oregon

Latino Network

Momentum Alliance

NAMI, Clackamas County

Outside In

Pacific Islander Coalition

SW WA Accountable Community of Health

Veterans of Foreign Wars

Workgroups

The collaborative worked together in a variety of areas on this project. HCWC has deep appreciation for all member organization staff who volunteered their time and expertise to help tell part of the community story. Listed below are the workgroups that were part of the collaborative.

Communications Workgroup

- Chris Goodwin, Clark County Public Health
- Gianoux Knox, Oregon Health & Science University (OHSU)
- Philip Mason, Clackamas County Health, Housing and Human Services
- Rachel Burdon, Kaiser Permanente
- Brian Willoughby, Legacy Health
- Gerald Ewing, Tuality Healthcare
- Rebecca Naga, Health Share of Oregon

Stakeholder Engagement Workgroup

- Ed Hoover, Adventist Health Portland
- Susan Berns-Norman, Clackamas County Health, Housing and Human Services
- Kirsten Ingersoll, Clackamas County Health, Housing and Human Services
- Erin Jolly, Washington County Public Health
- Michael Anderson-Nathe, Health Share of Oregon
- Mariotta Gary-Smith, Health Share of Oregon
- Daesha Ramachandran, Health Share of Oregon
- Kristen Brown, Providence Health and Services
- Maria Tafolla, Health Share of Oregon (and also a member, formerly of FamilyCare)
- Kamar Haji-Mohamed, Family Care (prior to closing)

Data Workgroup

- Anna Menon, Clackamas County Health, Housing and Human Services
- Ayni Amir, IRCO
- Celia Higuera, Oregon Community Health Workers Association (ORCHWA)
- Chris Goodwin, Clark County Public Health
- Claire Smith, Multnomah County Health Department

- Diana Netter, Legacy Health
- Erin Jolly, Washington County Public Health
- Eva Hawes, Washington County Public Health
- Dr. Frank Franklin, Multnomah County Health Department
- Gianou Knox, OHSU
- Jesse Gelwicks, Kaiser Permanente
- Joseph Ichter, Providence Health and Services
- Katherine Galian, Clark County Public Health
- Kathleen Lovgren, Clark County Public Health
- Kristine Rabii, Tuality Healthcare
- Maria Tafolla, Health Share of Oregon
- Marilou Carrera, Oregon Health Equity Alliance
- Mary Rita Hurley, Our House of Portland
- Peter Morgan, Adventist Health Portland

HCWC Leadership Group Members 2018–2019

- Daesha Ramachandran, Health Share of Oregon
- David Hudson, Clark County Public Health
- Dawn Emerick, Clackamas County Health, Housing and Human Services
- Dr. Jennifer Mensik, Oregon Health and Science University
- Ed Hoover, Adventist Health Portland
- Dr. Frank Franklin, Multnomah County Health Department
- Gianou Knox, Oregon Health & Science University
- Jessica Guernsey, Multnomah County Health Department
- Jewell Sutton, Tuality Healthcare
- Joe Ichter, Providence Health and Services
- Kamesha Robinson, Legacy Health
- Kim Leathley, Tuality Healthcare
- Lauren Foote-Christensen, Legacy Health
- Maria Tafolla, Health Share of Oregon
- Meghan McCarthy, PeaceHealth SW Medical Center
- Michael Anderson-Nathe, Health Share of Oregon
- Molly Haynes, Kaiser Permanente
- Pamela Mariea-Nason, Providence Health and Services
- Pei-Ru Wang, Multnomah County Health Department
- Peter Morgan, Adventist Health Portland
- Phytusin Myint, Washington County Public Health
- Rujuta Goankar, Kaiser Permanente
- Tricia Mortell, Washington County Public Health

Descriptions of Leadership Group and Workgroups

Leadership Group

The Leadership Group is the steering committee and main decision-making body for the HCWC. It has final say on budget decisions and other issues that affect work scope and deliverables. The Leadership Group is comprised of one to two members from each organization that are either direct decision-makers for their organization, or who have a direct report line to those in the organization with that authority. They come to the table to oversee the process, vet new opportunities, solve problems, and ensure the process meets the needs of the collaborative while keeping its focus on the community.

Subgroups are formed to participate in more hands-on portions of the community health needs assessment creation and work.

Data Workgroup

The Data Workgroup is in charge of telling the data story. It was decided early on that the qualitative and quantitative data would be done concurrently to ensure the goal of raising community voice was achieved.

This group developed data frameworks, made decisions regarding scope and worked with all other groups to ensure an equity lens was rigorously applied to the process. Members also participated in developing Town Hall and Listening Session frameworks and processes.

Communications Workgroup

This group was started at the beginning of cycle three to develop communications for suggested use regarding cycle two's 2016 report. The group's charge was to focus on key messaging and develop preliminary presentations and talking points for circling back to the community. Additionally, they developed summaries of information from the 2016 report for suggested use for internal and external stakeholders (key points).

Late in the cycle, this group merged with the Stakeholder Engagement Workgroup since these two workgroups no longer needed to be separate once the Cycle Two circle back was completed.

Now merged with the Stakeholder Engagement Workgroup, this group focused on developing outreach and presentation materials that may be needed/requested by the community when the Cycle Three report is completed.

Stakeholder Engagement Workgroup

This Workgroup's main charge is to circle back with the community member organizations and community members touched in the previous cycle to ensure they were aware the report was published, address any questions, and make presentations to groups who were interested in knowing more.

Significant time, outreach, and effort were involved. This group also took the initial PowerPoint framework created by the Communications Workgroup and added to it based on experience and feedback. Scripting was added, and workgroup members often presented to CBOs and/or supported other presenters. See merged charter beginning on following page.

Table A-1. Data Workgroup Plan for Operationalizing Equity.

CHNA Development Phases	Because we recognize...	We will strive to...	By...
Governance & Decision Making	• That decision-making power is not always explicitly articulated • We must operate in an open and transparent manner to safeguard and deepen the trust of all stakeholders in the system, as well as to foster accountability	• List organizations with decision-making power • Name constraints/limitations of decision-making power • Ensure every community member who participates in work groups has the same decision-making power as other workgroup members	• Defining terms (i.e., power) frequently and how they influence the group
Community & Stakeholder Engagement	• That historical abuses and mistrust of health care and research institutions influence how people may participate (or not) in the HCWC • Community members are often asked to volunteer their wisdom and lived experience and that this information is not an accessory but central to a community needs assessment • Community and individual participation is critical to eliminating health disparities, and that active participation may necessitate going beyond invitation and encouragement	• Design intentional strategies to engage communities and demonstrate the integrity and transparency embedded in our core values. • Compensate community members for their participation on the work groups • Actively review potential barriers to participation, assess low turnout events • Discuss experiences of inclusion in engagement process with community leaders	• Inviting more community members to the Data Workgroup at every step • Compensating community members for their input • Considering meeting time and attendance • Investigating why current community members are not attending Data Workgroup meetings

Methods development	Continuous data collection, including stratification by racial and ethnic subgroups, and other disparity variables is one way to monitor disparities and to adapt strategies to address them.	- Articulate clear and transparent methods that are designed to enable iterative, rapid adaptation, and incremental evolution to meet current and future needs of stakeholders. - Routinely and systematically integrate demographic and social factors into all analytics and decision-making processes	- Developing methods that focus on strengths, not just needs. - Identifying and acknowledging limitations of methods. - Being clear about describing methods and how they were chosen.
Data collection	- That historically underrepresented communities experience interview fatigue. - Dominant culture institutions often possess or have access to considerable information about historically underrepresented/oppressed communities	- Seek to answer questions about the community from information that has already been shared in existing community reports. - Refrain from pulling data for the sake of it – we will have clear answers to the who, what, why.	- Identifying priority populations - Holding mutually beneficial Listening Sessions, e.g., providing opportunities for community organizations to learn about accessing funding. - Improving outreach and participation for a broader perspective and reach. - Using existing data (i.e., leading w/race). - Determining an inclusive data collection process.

Data analysis	• That dominant culture organizations prioritize numerical data.	• Integrate narrative and qualitative information and use it to inform quantitative data analysis	• Making data actionable and accessible • Mapping SDOH to Health Outcomes (including racism)
Development of final product	• All should benefit from the public good derived from the HCWC and that the HCWC Needs Assessment has not historically been designed to be useful for community members • Community engagement plays an essential role in operationalizing value • Accessibility cannot be determined by those providing access, but must be measured by those attempting to access. • The narratives we choose to create, share and perpetuate are products of power • Narratives of underrepresented communities often emphasize a deficit narrative	• Ensure accessibility will be executed in different ways to reach different audiences, understanding that diverse communities have different needs. • Contains information that is useful to multiple community stakeholders • Create a report that is easy to navigate and share • Create an online portal to selectively view information that is most important to the reader • Accessible in multiple languages and formats • Ensure community members participate in the development of the needs assessment narrative • Use language intentionally, focusing on an asset-based narrative	• Determining how to integrate SDOH, quantitative, and qualitative data together. • Identifying the audience and purpose of the report • Determining what an asset-based narrative look likes.

Dissemination	• That sometimes institutions fail to return to communities and share the final outcome of projects	• Present information from the report in person to groups in the community	• Exploring report dissemination avenues • Sharing data back with the community • Developing a presentation template (video, etc.)
---------------	---	--	--

Project Charter: HCWC Data Workgroup

OVERVIEW

Project title: Data Workgroup

Project: HCWC Member Institutions

Lead: Meghan Haggard (with support from workgroup members as appropriate)

Staff support: Maria Danna, Jennifer Hendrickson, Karen Drill and Zoe Larson

Kickoff date: March 21, 2017

DESCRIPTION

Project Aim and Goals:

- Develop a product timeline for 2019 Community Health Needs Assessment (CHNA) by September 30, 2017.
- Use a mixed methods data collection approach to gather and analyze information for the 2019 CHNA.
- Embed resonance checks with the community through qualitative data collection methodology.
- Collect and analyze data for the 2019 CHNA by February 2019.
- Collaborate with the Stakeholder Engagement Workgroup to build relationships with community-based partners through the 2019 CHNA. Combine group meetings as appropriate.
- Provide quarterly updates to the Leadership Group on progress.

Description:

The Data Workgroup is responsible for:

- Collecting, and informing the analysis of data for the 2019 CHNA cycle
- Ensuring processes and values align with the HCWC vision and mission, including the identification and analysis of Social Determinants of Health affecting community health outside of healthcare
- Leading the aggregation of information
- Identification of themes within the data
- Identification of priority health issues
- Development of a report outline

The Data Workgroup will consist of subject matter experts in qualitative, quantitative, and/or mixed methods data collection and analysis. The Data Workgroup will identify project team focus areas as needed throughout the process. Community members will be actively engaged in the process.

HealthInsight/Q Corp is responsible for report writing and editing.

The Data Workgroup will meet twice monthly for two hours per meeting, project teams will meet more frequently as needed.

*BOUNDARIES*Includes:

- CCOs, Hospitals, and Public Health have differing needs that should be reasonably addressed.
- Reasonable data collection from each HCWC partner to produce the 2019 CHNA.
- Coordination with other HCWC workgroups to complete the stated goals and objectives of the collaborative in creating the 2019 CHNA.

Excludes:

- This is a collaborative CHNA and will not meet all individual stakeholder needs.
- The process cannot address the needs of each organizational CHIP.

MAJOR TASK SCHEDULE

Note: Final project timeline will be collaboratively developed once workgroup has active project stakeholder participation. Dates listed are intended for discussion and revision.

Table A-2. Original Schedule for Major Tasks.

TASK	START	END
Update framework to be used for the data collection process	May 2017	June 2017
Complete a data gap analysis	June 2017	August 2017
Update or develop data collection protocols	July 2017	October 2017
Identify priority populations/areas for data collection	September 2017	October 2017
Collect and analyze data	November 2017	December 2018
Develop report framework	October 2018	December 2018
Review report drafts and provide feedback	January 2019	April 2019

*PROJECT TEAM***Table A-3. HCWC Project Team.**

FUNCTION	REPRESENTATIVE	ORGANIZATION
Project Facilitator/Lead	Meghan Haggard	HealthInsight/Q Corp
Project Staff	Maria Danna	HealthInsight/Q Corp
Project Staff	Jennifer Hendrickson	HealthInsight/Q Corp
Project Staff – Intern	Zoe Larson	HealthInsight/Q Corp
Project Analyst	Karen Drill	HealthInsight/Q Corp Consultant
	Anna Menon	Clackamas County Public Health
	Celia Higuera	Oregon Community Health Workers Association
	Chris Goodwin	Clark County Public Health
	Claire Smith	Multnomah County Public Health
	Dianna Netter	Legacy
	Dr. Daesha Ramachandran	Health Share
	Erin Jolly	Washington County Public Health
	Eva Hawes	Washington County Public Health
	Dr. Frank Franklin	Multnomah County Public Health
	Gianou Knox	Oregon Health & Science University
	Jesse Gelwicks	Kaiser Permanente
	Joseph Ichter	Providence Health & Services
	Katherine Galian	Community Action
	Kathleen Lovgren	Clark County Public Health

	Marilou Carrera	Oregon Health Equity Alliance
	Mary Rita Hurley	Our House of Portland
	Peter Morgan	Adventist Health

Project Charter: HCWC Communications/Stakeholder Engagement Workgroup

OVERVIEW

Project title: Communications and Stakeholder Engagement Workgroup

Project sponsor: HCWC member institutions

Co-chair(s): Ed Hoover, Chris Goodwin

Staff support: Maria Danna and Jennifer Hendrickson, HealthInsight

Kickoff date: July 16, 12:30-1:00 p.m.

DESCRIPTION

Project Aims and Goals

- To begin, in Cycle 3, so prepare for the other goals and aims listed once the report is released
- To organize key communication points for internal and external partners regarding the HCWC CHNA to our Collaborative members. Those members will take that information to their individual organizations to get approval and use as determined by their processes [Communications/Marketing/Legal/Other departments] (as done in Cycle 2)
- To develop any communications needed for further community engagement and/or follow up post Town Halls and Listening Sessions
- To build and strengthen community relationships and connections through collecting, organizing and packaging information
- To build systems and structures for sharing 2019 CHNA information with the community
- To develop a system to organize, track, disseminate, and collect information from 2016 and 2019 cycles
- To learn from this process and determine areas where there are gaps to address
- To support the work of the Data Workgroup and the larger collaborative as applicable

Description

Two groups were combined for the last half of the Cycle 3 work (Communications and Stakeholder Engagement Workgroups (SEW)). This was done as the circle back from Cycle 2 (2016 CHNA) was completed by the SEW and the SEW's future work had synergistic overlap with the Communications Workgroup.

This combined group is responsible for:

- Reporting back to community stakeholders our findings from Cycle 3 CHNA and how our stakeholders are using this information to inform their community and public

- health work via CHIPs (Community Health Improvement Plans) or other work
- Building and maintaining community relationships for the next cycle (Cycle 4 CHNA)
- Developing Leadership Group presentations to external stakeholders regarding the HCWC Collaborative and the CHNA (Cycle 3/2019) as requested by community partners and organizations
- Key communication recommendations/highlights from the 2019 CHNA (Cycle 3) -- internal and external stakeholder communication (for use/review by Collaborative member communications departments)
- Other communications functions as determined appropriate by the Leadership Group
- Collaboration with other workgroups as relevant

Project Risks

- Low engagement by workgroup members
- Not enough input from appropriate stakeholders
- Lack of ability for all 12 organizations to agree on sharing or using communications pieces created
- Timeline constraints
- Lack of representation of different HCWC entity types
- Product inaccessible to the communities we reach out to

Boundaries

Includes:

- Stakeholder groups surveyed and interviewed in HCWC CHNA cycle
- Stakeholder groups TBD/outreach for 2019 cycle
- Evaluation of community stakeholder input (dissonance, areas of concern, etc. to inform 2019 process).

Concern: CCOs, Public Health, and Hospitals have differing needs that should be reasonably addressed.

Excludes:

- The Stakeholder Engagement and Communications Workgroup will not be the only members responsible for presentations and feedback collection

Concern: Cannot address the needs of each organizational CHIP.

This is a collaborative CHNA, and will not meet all individual stakeholder needs.

Appendix B: Methodology

This appendix contains HCWC’s overall approach to this study, as well as summaries of our methodology for each area of data collection for this assessment:

Overall Methodology	B-2
Town Hall Methodology.....	B-2
Listening Session Methodology	B-5
Population Health Methodology	B-11
Hospital Discharge Data Methodology	B-13
Coordinated Care Organization Methodology	B-16

Overall Methodology

The HCWC Data Workgroup implemented a mixed methods approach to data collection and analysis, which prioritized community voice and input in the assessment model.

Town Hall Methodology

In June 2018, HCWC hosted a series of Town Hall events across the quad-county region. These events were designed to bring together community leaders and representatives from community-based organizations, to provide feedback on early data findings and illicit conversations about communities to target for listening session outreach. Below are the methods used to collect and analyze the data from these events.

Methods for collecting data

The HCWC Data Workgroup guided the development of the event structure and format. The group decided to host one three-hour meeting in each of the HCWC region counties with invited participants to meet the following goals:

- Gather reactions from community stakeholders to numerical data to include in the CHNA
- Develop a list of considerations for current or future cycles of the CHNA
- Identify a list of populations HCWC should connect with to collect additional information in smaller focus group setting

During the event, participants reviewed numerical data during a gallery walk and then returned to preassigned tables to discuss a series of questions. Gallery walk data was presented on posters and an HCWC representative explained the poster to the participants during a rotation.

Each table discussion was facilitated by a trained HCWC representative and notes were taken by the facilitator on flip charts. Each facilitator was provided just-in-time training in the one hour prior to the event. All written information from the events was collected by the conveners, this included the facilitator flip chart notes and the activity sheets that participants completed identifying assets and barriers.

Methods for analyzing data

All written data from each event was transcribed by convener staff. The information collected from each table was transcribed and coded separately to identify both similarities and differences between tables in the analysis.

Once transcription was complete, the convener staff used a consensus coding model and the qualitative analysis software NVivo to code the data into thematic categories. The data analyzed came from notes taken during the sessions. Two independent coders used a collaborative, open-coding process to analyze the data and ensure reliability (Harry, Sturges, & Klingner, 2005). After the coders came to consensus on the themes, they presented them to

convener staff to ensure the findings resonated with all staff members' experience of the town halls. Once themes were consensus coded, the coders went back to refine the coding to pull out specific participant examples and quotes to contextualize the themes.

Code List (Top 6):

- Siloed Organizational Resources and Funding Strain
- Obtaining Status, Security, Opportunity
- Lack of Cultural Competency
- Mental Health
- Racism
- Transportation

Data limitations

The data collected was limited to amount of information that was collected by each table facilitator, as well as the conversation had by the attendees. There is a selection bias in those who chose to attend the event and provide feedback. While table facilitators were trained and asked to moderate the conversation and allow for all voices to be heard equally, it is impossible to tell if this occurred.

Documentation

Table B-1 shows a sample agenda from one of the events.

Table B-1. Sample Event Agenda.

Time	Topic	Lead
1:05-1:40	Welcome & Introduction	HCWC Representative from County
1:40-2:45	Data Gallery • Attendees will move through the posters with their table group	Poster Facilitators
2:45-3:50	Table Group Discussion • Small group discussion to answer structured questions	Table Facilitators
3:50-4:00	Thank you & Closing • Please complete the evaluation!	HCWC Convener

Discussion questions

Question 1: Based on your understanding of the poster information, what does the data tell us? What does the data not tell us?

Question 2:

Part 1: Please pick an issue of concern (with barriers) in your community (it can be one you think is surfaced by the data, or not surfaced by the data). ***Follow instructions on guide. You can do as many of these as you have time to fill out during the allotted time. One item per activity sheet.***

Part 2: Please pick an issue of concern (with assets) in our community (it can be one you think is surfaced by the data, or not surfaced by the data). ***Follow instructions on guide. You can do as many of these as you have time to fill out during the allotted time. One item per activity sheet.***

Question 3: What support do you need to connect communities with resources and/or what is making your job difficult?

Question 4: For our community member listening sessions, what *specific communities* do you recommend outreach to?

What specific questions do you recommend we ask these community members? (Hopefully in ways, or about things, they haven't been asked before. *Are there issues hidden by data and standard interview/group session questions that we can help bring to light?*)

Listening Session Methodology

In October through December 2018, HCWC hosted 18 listening sessions across the quad-county region. These events were designed to bring together community members to provide feedback on their lived experience. Below are the methods used to collect and analyze the data from these events.

Methods for collecting data

The Data Workgroup guided the development of the event structure and format. The group decided to host listening sessions with priority populations that were identified based on feedback from the town halls, the groups reached during the previous CHNA cycle, and members knowledge and connections with communities that are not typically heard from during outreach exercises.

After the identification of priority populations, Data Workgroup members worked to reach out to organizations across the region that work with the populations. After outreach occurred, and organizations expressed interest in hosting a session, the conveners contracted with the organizations and scheduled the sessions.

Each session was based on the same format, using the facilitation guide outlined below. Hosting organization were asked to provide a facilitator for the session and Data Workgroup members and convener staff supported them as co-facilitators and note-takers as needed. Data was captured at each session by the assigned note takers. Facilitators and note-takers were provided just-in-time training for their roles prior to the sessions.

Methods for analyzing data

All written data from each session was transcribed by convener staff. Each session was transcribed and coded individually before being recoded to identify regional themes.

Once transcription was complete, the convener staff used a consensus coding model and the qualitative analysis software NVivo to code the data into thematic categories. The data analyzed came from notes taken during the sessions. Two independent coders used a collaborative, open-coding process to analyze the data and ensure reliability (Harry, Sturges, & Klingner, 2005). After the coders came to consensus on the themes, they presented them to convener staff to ensure the findings resonated with all staff members' experience of the listening sessions. Once themes were consensus coded, the coders went back to refine the coding to pull out specific participant examples and quotes to contextualize the themes. The individual listening session reports were shared with each hosting organization, who shared the reports with participants, to ensure their experiences were captured. This feedback was incorporated into the listening session reports that followed.

Code list:

- Access to Health Care
- Community Spaces and Support
- Concerns for Safety
- Discrimination and Racism
- Family Welfare
- Financial Barriers
- Geographical and Cultural Isolation
- Language Barriers
- Representation
- Transportation

Data limitations

The data collected was limited to amount of information that was collected by note-takers, with some sessions having more robust notes available for analysis than others. Hosting organizations recruited participants and those who attended the session self-selected. Participants may have also be influenced to participate by the incentive which was provided (\$25 gift card).

Documentation

Table B-2 lists each of the 18 listening sessions, the host organization, date, county, and number of participants.

Table B-2. Listening Sessions.

Priority Population	Hosting Organization	Date of Session	County of Session	Participants
Elderly (65+) LGBTQ persons	Cascade AIDS Project – Aging Well	10/24/18	Multnomah	17
Middle Eastern	Iraqi Society of OR	10/27/18	Multnomah	16
People with Mental Health Concerns	NAMI Clackamas County	10/18/18	Clackamas	8
Youth of Color	Momentum Alliance	10/27/18	Multnomah	11
LGBTQ Homeless Youth	Outside In	10/24/18	Multnomah	12
Hispanic/Latinx	Adelante Mujeres	11/13/18	Washington	17
Elderly (65+) Low-Income	Friendly House	11/16/18	Multnomah	11
Farmworkers	Plaza Del Robles	11/16/18	Clackamas	10
People of Color with Housing Concerns	Central City Concern	11/17/18	Multnomah	19

Priority Population	Hosting Organization	Date of Session	County of Session	Participants
Slavic	Church	11/18/18	Clark	11
Rural	Southwest Washington ACH	11/19/18	Clark	10
Pacific Islander	Pacific Islander Coalition	11/26/18	Multnomah	16
Hispanic/Latinx	Latino Network	11/27/18	Multnomah	14
Arabic		11/30/18	Washington	9
Military Connected	Veterans of Foreign Wars	12/1/18	Washington	10
Elderly (65+) Rural	Estacada Community Center	12/5/18	Clackamas	6
Youth	AntFarm	12/5/18	Clackamas	10
Elderly Low-Income	Community Partnership for Affordable Housing	12/7/18	Washington	10

Facilitation guide

HCWC INTRODUCTION

Welcome and thank you for joining us for a Healthy Columbia Willamette Collaborative (HCWC) community Listening Session event. We are delighted to have you join us today as we work collectively to gather information for our 2019 Community Health Needs Assessment.

A little background on how we got here. In 2011, leaders from the hospitals systems and public health departments came together to figure out how to better collaborate to produce a regional Community Health Needs Assessment. When coordinated care organizations were formed in 2012, they joined the collaborative as well. These leaders include: Health Share, Providence, Kaiser Permanente, Legacy, OHSU, Adventist, Tuality, PeaceHealth and the Public Health Departments of Clackamas, Multnomah, Washington, and Clark Counties. Now in our third cycle, the collaborative has published two regional assessments of the health of our communities. In order to complete these assessments, we have looked at what the numbers tell us and what the community tells us.

We appreciate your willingness to participate and answer questions about your community experience. We recognize that you may be asked questions from different groups. Part of the goal of HCWC is to attempt to limit duplicative outreach. By working together as a collaborative, we strive to ensure your time is respected, questions are relevant, and information is collected and shared back in a coordinated and transparent manner.

The information from each of the completed regional Needs Assessments (CHNA's) has been used by HCWC member organizations to develop and implement improvement plans. For example, the 2016 CHNA information from last cycle established housing concerns as a high priority area of focus for HCWC member organizations. In fall of 2016, six health organizations participating in HCWC announced they would invest 21.5 million dollars towards the Housing is Health Initiative through Central City Concern.

The Housing is Health Initiative aided Central City Concern in building a new health care clinic and 379 units of new housing in North and East Portland. Prior to that, information from the first CHNA in 2013 identified opioids as an area of concern for the region. HCWC supported the establishment of a workgroup focused on opioids that has continued working across the region since that time.

SESSION INTRODUCTION

We are excited to hear from each of you about your experiences. By being here today and sharing your experiences, you are helping to improve the health of your community. We're hoping to learn about community experiences, so your concerns can be addressed by HCWC partners. Your voice matters. This information will be used by HCWC members and community partners, who will be developing strategies based off the information you provide to better serve your communities.

Please note that this session is being recorded by note-takers and the information gathered will be used by HCWC in the upcoming July 2019 Community Health Needs Assessment. We may capture direct quotes but those won't be tied to you personally. We are committed to sharing what we learn.

Okay, we have a little over an hour to talk. I'd like to start with a creative activity. Here's paper and crayons. Start by thinking about your community. People might think of "community" in different ways. Maybe it's family, or maybe it's neighbors, or maybe it's coworkers or friends. For the next 5 minutes, draw a picture that represents **your community**.

Pause, give people ~5 minutes to draw. Facilitator should draw too.

So let's go around in a circle—tell me your name, and tell us something about your drawing. I'll start.

Facilitator introduces self, models talking about community. Then everyone goes in a circle, introducing self and saying a few words about their community.

Thank you. So you all told us your name and told us something about how you see your community. That leads into what we're going to talk about next: the health of your community. This is going to be an informal discussion. We want to hear about your ideas, experiences and opinions. Everyone's comments are important. They might be similar or very different, but they all should be heard. The goal today is to hear from everyone.

CONTEXT

What we were hoping to talk about today is: **What makes a healthy community?**

PAUSE, for thought time, not answers. Be sure attendees understand that.

That's a difficult question, because it involves two ideas. First, there's **HEALTH**. What do we mean by health? Do we mean freedom from disease? Having enough to eat? Feeling generally good about life? Being financially healthy?

PAUSE, for thought time, not answers. Be sure attendees understand that.

Then there's the idea of **COMMUNITY**. What do we mean by community? Are we talking about each one of you, individually? Are we talking about your friends and family? Your neighborhood? Your church? Your racial or ethnic group? Your city or town? Maybe you feel part of multiple communities, or maybe you identify primarily with one community.

We're not going to define these things for you. They are for you to decide.

QUESTION 1: VISION. Now take a minute to think about your community or communities.

How can you tell if your community is healthy?

Probes:

What does health look like in your community?

What does health feel like in your community?

Maybe you feel part of multiple communities, does health feel or look the same in each one?

Instructions: Ensure participants know this is where we want discussion. Capture ideas on flip chart.

QUESTION 2: CHALLENGES. We've talked about what a healthy community looks like. Now let's talk about what's not there to support community health.

What gets in the way of your community being healthy?

Probes:

Can you give some examples of challenges your community faces?

Do you ever notice disparities, or unfairness, between what your community has and what other communities have or experience?

Instructions: Ensure participants know this is where we want discussion. Capture ideas on flip chart.

QUESTION 3: STRENGTHS. So, you've told us what a healthy community looks like and what the challenges are in your community. Let's explore this idea a little more. Communities have certain **resources** that can help them be healthy. It might be programs. It might be a park or a community center. It might be a really great teacher at your local school. It might be a local business or a local organization that helps people be healthy.

My question for you is:

What's currently working? What are the resources that currently help your community to be healthy?

Probes:

What are the strengths within your community?

If someone was new to your community, and looking for resources, where would you tell them to go?

How do these resources help your community to be healthy?

Instructions: Ensure participants know this is where we want discussion. Capture ideas on flip chart.

QUESTION 4: NEEDS. So, you've now shared with us what a healthy community looks like, as well as what the challenges and strengths are in your community. Now let's talk about how we can improve your community for the future.

What is needed? What more could be done to help your community be healthy?

Probes:

What are sources of stress or tension in your community?

What do you think is important to address to improve the health of your community?

Instructions: Ensure participants know this is where we want discussion. Capture ideas on flip chart.

Conclusion:

We've come to the end of our time together today. We greatly appreciate your contributions and sharing your thoughts, thank you again for participating in the session. As we mentioned at the beginning, HCWC will be compiling this information with other information to create a Community Health Needs Assessment which will be released in July 2019. HCWC is committed to sharing that report with participants through our organization. If you have any questions after this session, please let us know and we will connect with HCWC to get them answered.

Population Health Methodology

Overview

An important part of the CHNA is the collection and analysis of population morbidity and mortality burdens. To this end, the Data Workgroup developed a robust methodology for collecting and analyzing this data.

Methods for collecting data

Data was collected from the Oregon Public Health Assessment Tool (OPHAT), Community Health Assessment Tool (CHAT) - Washington, and the Oregon State Cancer Registry. The convener was granted direct access to OPHAT and CHAT through partnership agreements with Clackamas and Clark counties, respectively.

Cancer mortality and morbidity information is not available in OPHAT for Oregon counties, therefore the convener collected summarized data on cancer morbidity and mortalities for the Oregon counties from the Oregon State Cancer Registry.

The convener's data scientist collected the necessary data for analysis from each system:

- Mortality by race and ethnicity, per county
- Morbidity by race and ethnicity, per county
- Cancer mortality and morbidity by race and ethnicity, per county

Methods for analyzing data

The data scientist analyzed the data at both the county and regional level for multiple time periods, data was age-adjusted and analyzed by race and ethnicity when that information was available.

The Data Workgroup determined that one-year periods were not appropriate for analyzing Morbidity and Mortality. A five-year period was used for the mortality analysis (2012-2016) and a three-year period for the morbidity analysis (2014-2016). Periods were selected based on data available with more historical data being available for mortality analysis than for morbidities.

Age-adjusted rates are adjusted to the projected 2000 U.S. population. The weights have not been recalculated based on the actual 2000 Decennial Census population because the National Center for Health Statistics still uses the original weights.

The population weights by age group are show in Table B-3.

Table B-3. Population Weights.

Age Group	Weight
Under 1 year	0.013818
1 to 4 years	0.055316
5 to 14 years	0.145563
15 to 24 years	0.138646
25 to 34 years	0.135575
35 to 44 years	0.162614
45 to 54 years	0.134835
55 to 64 years	0.087249
65 to 74 years	0.066035
75 to 84 years	0.044841
85 years and over	0.015509

The age-adjusted rates were analyzed by race and ethnicity for mortalities: White Non-Hispanic; Black Non-Hispanic; Hispanic; Asian Non-Hispanic; Pacific Islander Non-Hispanic; Native American Non-Hispanic; and Two or More Races Non-Hispanic. The White Non-Hispanic population was used as a reference population to determine statistical significance. Statistical significance was determined using a 95% Confidence Interval. The age-adjusted rates were also analyzed for disparities in sex using a rate ratio to determine statistical significance.

Data is suppressed based on the requirements of the data source, with data from OPHAT and CHAT suppressed when numerator is 5 or below and data from the Oregon State Cancer Registry suppressed when it is 10 or below.

Data limitations

Morbidity data is not available by race and ethnicity for Clark County, Washington. Race and ethnicity information was not consistently available between Oregon and Washington and, therefore, was not analyzed regionally for morbidities.

Hospital Discharge Data Methodology

Overview

The Data Workgroup determined that it was important to analyze data from each of the organization types participating in the collaborative to address issues that affect the health system. The Hospital Discharge files for each hospital were determined to be the best source of data about hospital access and usage by the community.

Sample

The descriptive analysis of emergency department (ED) and inpatient primary diagnoses included patient visits between January 1, 2016, and December 31, 2016, and was based on primary diagnosis at discharge. Patient-level hospital discharge data were provided to the convener from:

- Adventist Medical Center Portland
- Legacy Emanuel Medical Center
- Legacy Good Samaritan Medical Center
- Legacy Mount Hood Medical Center
- Legacy Salmon Creek Medical Center
- Kaiser Foundation Hospital Westside
- Kaiser Foundation Hospital Sunnyside
- Oregon Health & Science University
- PeaceHealth
- Providence Milwaukie Hospital
- Providence Portland Medical Center
- Providence St. Vincent Medical
- Providence Willamette Falls Medical Center
- Tuality

The ED and inpatient analytic samples overall and by county are provided in Tables B-4 and B-5, and only include patients with a primary diagnosis and insurance type reported at discharge.

Table B-4. Total ED Visits by County: 2016.

County	N	%
Clackamas	61,512	17.0%
Clark	71,934	20.0%
Multnomah	156,524	43.5%
Washington	70,165	19.5%
All	360,135	100.0%

Table B-5. Total Inpatient Stays by County: 2016.

County	N	%
Clackamas	19,838	14.2%
Clark	16,635	11.9%
Multnomah	52,068	37.4%
Washington	50,665	36.4%
All	139,206	100.0%

Methods for analyzing data

Descriptive analyses of emergency department utilization and inpatient utilization for a select list of conditions were based on patients' primary diagnosis at discharge.

The conditions analyzed were identified by reviewing the ambulatory care sensitive conditions that were analyzed in the previous CHNA and conditions which aligned with HCWC member priorities. The list was narrowed to the top 12 conditions of interest for this analysis.

The codes used for identifying the conditions were based on the CMS Chronic Condition Warehouse and HEDIS Value Sets for the identified conditions. Codes were reviewed by an ICD coding expert employed by the convener.

Data limitations

Data from Legacy hospitals and PeaceHealth did not include a unique identifier for each patient, the analysis included some duplicate records. The data was a point in time of usage of the emergency department and inpatient stays, data was not collected or analyzed regarding the usage of outpatient services for the chronic conditions identified.

Documentation

Table B-6 shows the ICD-10 codes used in data collection.

Table B-6. Code Set.

Conditions	ICD-10 Codes
Asthma	DX J44.0, J44.1, J44.9, J45.20, J45.21, J45.22, J45.30, J45.31, J45.32, J45.40, J45.41, J45.42, J45.50, J45.51, J45.52, J45.901, J45.902, J45.909, J45.990, J45.991, J45.998, J45.90
Chronic Heart Failure	I42.0, I42.1, I42.2, I42.3, I42.4, I42.5, I42.6, I42.7, I42.8, I42.9, I43, I50.1, I50.20, I50.22, I50.23, I50.30, I50.32, I50.33, I50.40, I50.42, I50.43, I50.810, I50.811, I50.812, I50.813, I50.814, I50.82, I50.83, I50.84, I50.89, I50.9
Chronic Liver Disease/Cirrhosis	K76.89, K76.9, K76.3, K76.0, K74.69, K74.60, K70.31, K70.30, K70.9, K70.2, K70.0, K75.89, K75.9, K75.0, K71.10, K71.9, K71.6, K70.10, K70.11, K73.0, K73.1, K73.2, K73.8, K73.9, K74.0, K74.1, K74.2, K74.3, K74.4, K74.5, K75.4, K71.6, K71.9, K75.0, K75.9, K75.89, K76.3, K76.9, K74.69
Chronic Obstructive Pulmonary Disease (COPD)	J410, J411, J449, J441, J440, J418, J42, J439, J479, J471, J449, J209, J210, J218
Depression	F31.30, F31.31, F31.32, F31.4, F31.5, F31.60, F31.61, F31.62, F31.63, F31.64, F31.75, F31.76, F31.77, F31.78, F31.81, F32.0, F32.1, F32.2, F32.3, F32.4, F32.5, F32.9, F33.0, F33.1, F33.2, F33.3, F33.40, F33.41, F33.42, F33.9, F34.1, F43.21, F31.30, F31.31, F31.32, F31.4, F31.5, F31.60, F31.61, F31.62, F31.63, F31.64, F31.75, F31.76, F31.77, F31.78, F31.81, F34.1, F43.21
Diabetes	E08.00, E08.01, E08.10, E08.11, E08.21, E08.22, E08.29, E08.311, E08.319, E08.321, E08.329, E08.331, E08.339, E08.341, E08.349, E08.351, E08.359, E08.36, E08.39, E08.40, E08.41, E08.42, E08.43, E08.44, E08.49, E08.51, E08.52, E08.59, E08.610, E08.618, E08.620, E08.621, E08.622, E08.628, E08.630, E08.638, E08.641, E08.649, E08.65, E08.69, E08.8, E08.9, E09.00, E09.01, E09.10, E09.11, E09.21, E09.22, E09.29, E09.311, E09.319, E09.321, E09.329, E09.331, E09.339, E09.341, E09.349, E09.351, E09.359, E09.36, E09.39, E09.40, E09.41, E09.42, E09.43, E09.44, E09.49, E09.51, E09.52, E09.59, E09.610, E09.618, E09.620, E09.621, E09.622, E09.628, E09.630, E09.638, E09.641, E09.649, E09.65, E09.69, E09.8, E09.9, E10.10, E10.11, E10.21, E10.22, E10.29, E10.311, E10.319, E10.3211, E10.3212, E10.3213, E10.3219, E10.3291, E10.3292, E10.3293, E10.3299, E10.3311, E10.3312, E10.3313, E10.3319, E10.3391, E10.3392, E10.3393, E10.3399, E10.3411, E10.3412, E10.3413, E10.3419, E10.3491, E10.3492, E10.3493, E10.3499, E10.3511, E10.3512, E10.3513, E10.3519, E10.3521, E10.3522, E10.3523, E10.3529, E10.3531, E10.3532, E10.3533, E10.3539, E10.3541, E10.3542, E10.3543, E10.3549, E10.3551, E10.3552, E10.3553, E10.3559, E10.3591, E10.3592, E10.3593, E10.3599, E10.36, E10.37x1, E10.37x2, E10.37x3, E10.37x9, E10.39, E10.40, E10.41, E10.42, E10.43, E10.44, E10.49, E10.51, E10.52, E10.59, E10.610, E10.618, E10.620, E10.621, E10.622, E10.628, E10.630, E10.638, E10.641, E10.649, E10.65, E10.69, E10.8, E10.9, E11.00, E11.01, E11.10, E11.11, E11.21, E11.22, E11.29, E11.311, E11.319, E11.3211, E11.3212, E11.3213, E11.3219, E11.3291, E11.3292, E11.3293, E11.3299, E11.3311, E11.3312, E11.3313, E11.3319, E11.3391, E11.3392, E11.3393, E11.3399, E11.3411, E11.3412, E11.3413, E11.3419, E11.3491, E11.3492, E11.3493, E11.3499, E11.3511, E11.3512, E11.3513, E11.3519, E11.3521, E11.3522, E11.3523, E11.3529, E11.3531, E11.3532, E11.3533,

Coordinated Care Organization Methodology

Overview

The Data Workgroup determined that it was important to analyze data from each of the organization types participating in the collaborative to address issues that affect the health system. Due to the mid-cycle closure of FamilyCare Coordinated Care Organization, that left Health Share of Oregon as the single entity from which to receive this data. Health Share hosts a data tool for their partners known as Bridge. Because Bridge 2.0 was still in development, data were requested directly from Health Share of Oregon.

Methods for collecting data

Aggregated, unduplicated data for Health Share of Oregon members were requested for the calendar years 2016 and 2017 using the same ICD-10 codes referenced earlier in Table B-6. Members were included in the aggregated file if the condition was diagnosed in any position on the claim (1–13) and occurred one or more times during the year of inquiry.

Member age was calculated at the end of each inquiry period (December 31 in 2016 and 2017). County, race, and gender were based on the most recently known value. Subpopulation data were suppressed if the count was low (< 10).

Methods for analyzing data

Data were analyzed descriptively by race and gender, comparing the calendar years 2016 and 2017.

Data limitations

The data did not allow for a lookback period and is a point-in-time count of certain conditions and should not be compared to previous analyses done by HCWC.

Appendix C: Social Determinants of Health – Additional Information

This appendix contains additional information about influencers of change in the quad-county region, and further information about education and literacy than what is included in the main report.

Influencers of Change	C-2
Events: one-time occurrences, such as natural disaster or passage of legislation.....	C-2
Behavioral health	C-2
Community representation and culturally responsive care	C-3
Isolation.....	C-3
Housing	C-4
Trends: Migration and gentrification	C-4
Other forces shaping quad-county region	C-5
Education and Literacy.....	C-6
Literacy.....	C-6
Early childhood education	C-6
High school graduation	C-7
Higher education.....	C-8

Influencers of Change

Issues affecting the quad-county region are driven by both local, state and nationwide issues and policies. This section attempts to identify and summarize some of these forces of change.

Events: one-time occurrences, such as natural disaster or passage of legislation

Elections, both nationally and at the state level, change policies and funding streams to address, support and move toward community solutions. In both states of the quad-county region, barriers to receiving health care are being addressed by coordinated care organizations (Oregon) and accountable communities of health (Washington) but challenges remain. In both states, even in this urban setting, the outlying rural areas experience isolating factors related to both community spaces and isolation.

Behavioral health

Behavioral health encompasses both mental health and substance use conditions. Behavioral health issues are a continuing need for both resources and coordination in the region. Efforts in the legislature, as well as in health care delivery systems, city and county supports, and community-based organizations continue. Oregon's recent passage of House Bill 4143 (HB 4143) requires a study of barriers to effective treatment for, and recovery from, substance use disorders including opioids and opiates. A report of recommendations is due to the legislature no later than June 30, 2018.¹

In Washington, SB 6491 aims to increase the availability of assisted outpatient behavioral health treatment. This bill, effective April 1, 2018, also covers many other aspects of crisis responder decisions and involuntary treatment.²

¹ Oregon State Legislature. 2018 Regular Session.

<https://olis.leg.state.or.us/liz/2018R1/Measures/Overview/HB4143>

² Washington State Legislature. SB 6491. 2017-2018.

<https://app.leg.wa.gov/bills/summary?BillNumber=6491&Year=2017>

Community representation and culturally responsive care

An issue continually raised during the HCWC listening sessions, as well as in other reports in the region (see the Literature Review in [Appendix D](#)), was the lack of adequate community representation, culturally responsive care, and community spaces. While no specific legislation addresses these issues at a granular level, various regional reports mention these priorities and the work being done to address these disparities by rethinking the systems and structures that created them. Communities have been invited into that conversation.³

Clark County and Washington State agencies also continue to focus on diversifying state staff to reflect the communities they serve. Continuing to improve and enhance the equity and inclusion mission by reflecting it in staff and values to better represent, understand, and serve communities.⁴ Culturally responsive care is one of the core issues identified in this report. While there is ongoing work this arena, the focus, formality, and rigor differ. It is a known gap and area for improvement in the quad-county region.

Isolation

Isolation can affect those living not just rural areas, but urban areas as well. Isolation can limit access to services, housing (due to availability, cost or access), transportation, and community places.

No specific legislation addresses all these issues in either state. In Oregon, House Bill (HB) 4130 established a grant program for the Department of Education to award grants to school districts for percentage of transportation costs when the district does not receive any amount from the State School fund related to transit activities. The goal is to have funding for educational transportation in challenged areas.⁵

HB 4010 established a task force to address racial disparities in home ownership – another isolation and equity issue.⁶ HB 4006 requires the Housing and Community Services Department to annually provide each city with populations greater than 10,000, data showing the percentage of renter households that are severely rent burdened.⁷

In Washington State, the Clark County Commission on Aging spent a year learning about local transportation and access for senior citizens. Lack of connectivity was an issue as people sought alternatives to driving that wouldn't limit their ability to go about their daily lives, maintain independence, and interact with their community. All recommendations are being evaluated.⁸

³ Oregon Metro. Strategic Plan to Advance Racial Equity, Diversity and Inclusion. June 2016.

<https://www.oregonmetro.gov/sites/default/files/2017/10/05/Strategic-plan-advance-racial-equity-diversity-inclusion-16087-20160613.pdf>

⁴ Washington State Department of Health. Diversity and Inclusion Council Strategic Plan. Jan.-Feb. 2018.

<https://www.doh.wa.gov/Portals/1/Documents/9400/Diversity%20and%20Inclusion%20Council%20Strategic%20Plan%202017-2018.pdf>

⁵ Oregon House Bill 4130. 2018 Oregon Legislative Session. <https://gov.oregonlive.com/bill/2018/HB4130/>

⁶ Oregon House Bill 4010. 2018 Oregon Legislative Session. <https://gov.oregonlive.com/bill/2018/HB4010/>

⁷ Oregon House Bill 4006. 2018 Oregon Legislative Session. <https://gov.oregonlive.com/bill/2018/HB4006/>

⁸ Hastings P. Report Urges Clark County to Help Aging Population Stay Connected to the Community. *The Columbian*. Jan. 2019. <https://www.columbian.com/news/2019/jan/16/report-urges-clark-county-to-help-aging-population-stay-connected-with-community/>

Housing

Housing continues to be an issue that continues to be addressed, focused on, financed, and collaborated on in the quad-county region. In Oregon, one recent bill, Senate Bill 608 (SB 608), passed in February 2019, makes Oregon the first state in the nation with statewide rent control.

Washington State passed House Bill 1570 concerning access to housing and assistance.⁹ This law became effective June 7, 2018.

Additionally, Washington passed SHB 2538, exempting Impact Fees for Low-Income Housing Development, by limiting the definition of “development activity” to exclude shelters for homeless and domestic violence victims for impact fee purposes.

Trends: Migration and gentrification

In both Oregon and Washington, migration and gentrification are ongoing issues. The State of Washington’s population grew by 1.6% as of April 2018. Migration accounted for 71% of the state’s population growth this year.¹⁰ Clark County, Washington, exceeded Multnomah County for new residents in 2017, growing by 1.95 percent.¹¹ Ranking sources vary, but Oregon and Washington continue to be in the top 10 “inbound states” in the nation (the most population influx/people moving there).¹² Oregon’s population increased more than 10% between 2000 and 2010, and the Portland Metro area continues to outpace the national average for population growth. As with Washington, the increased population can bring economic stability, but also exacerbate scarcity issues and vulnerabilities.

As regions with historically majority white populations (after settlement) and long histories of racism and discrimination, the increase in diversity is positive for the region. It also exacerbates the positive and negative economic factors the quad-county region is continually trying to tackle. It is an economic boon in some sectors, and increases the needs and impacts to others. Exploding growth has caused housing prices to increase past the reach of many community members, contributing to an increase in houselessness that continues to be a focus for health care delivery, public health, and legislative sectors.

Washington and Oregon continue to have higher than average unemployment and underemployment.^{13,14}

⁹ Washington State Legislature. HB 1570. 2017-2018.

<https://app.leg.wa.gov/billsummary?BillNumber=1570&Year=2017>

¹⁰ Washington State Office of Financial Management. Strong population growth in Washington continues. June 2018. <https://www.ofm.wa.gov/about/news/2018/06/strong-population-growth-washington-continues>

¹¹ Hastings P. Clark County outpaces Multnomah County for new residents. *The Columbian*. Mar. 2018. https://tdn.com/news/state-and-regional/clark-county-outpaces-multnomah-county-for-new-residents/article_81b6f1ad-ec21-5532-b2a0-e0bc99cfdcb4.html

¹² CNY Central. Movers study: New York ranks fourth in “Most Moved from States.” Jan. 2019. <https://cnycentral.com/news/local/movers-study-new-york-ranks-fourth-in-most-moved-from-states>

¹³ World Population Review. 2019. <http://worldpopulationreview.com/us-cities/portland-population/>

¹⁴ Washington State Office of Financial Management. Unemployment Rates: Washington and U.S. <https://www.ofm.wa.gov/washington-data-research/statewide-data/washington-trends/economic-trends/unemployment-rates>

Other forces shaping quad-county region

Natural events also impact lives in the Pacific Northwest. Droughts and other natural disasters affect all communities, especially vulnerable populations. The wildfire season along the West Coast continues to intensify each year at great cost to property, human lives/health, and natural areas. Wildfire smoke exacerbates health concerns and conditions, such as asthma, and flooding displaces many temporarily or permanently from their homes. Climate change patterns are predicted to continue creating more extreme weather patterns that will exacerbate many issues and make them a more constant than intermittent issue. The region continues to grapple with effective planning for predicted earthquakes of significant magnitude.

Education and Literacy

Education is a powerful driver of wellness and can improve health outcomes, health behaviors, and social outcomes into adulthood.¹⁵ Achievement gaps are evident in children as young as nine months old,¹⁶ suggesting that early childhood services and education are necessary to correct gaps.

This sentiment was echoed by participants in listening sessions who talked about wanting skills and education development to provide better employment opportunities for community members, especially those with limited access to housing or stable income. The education profile of the region includes early childhood education, language, literacy, high school graduation, and higher education.

Literacy

Literacy is related to multiple facets of health. Limited literacy is a barrier to health knowledge access, proper medication use, and utilization of preventive services.^{17,18,19} Individuals with limited literacy face additional difficulties following medication instructions, communicating with health care providers, and attaining health information which may have negative implications for health.²⁰

Regarding youth literacy in the region, 56% of students in all grades met the Oregon's English Language Arts standard in 2016–2017. In the same year in Washington's Clark County, 67% of Grade 10 students met the state's English Language Arts standard.

Early childhood education

Early childhood programs are critical for fostering the mental and physical development of young children. High-quality early childhood development and education programs include highly educated teachers, smaller classes, and lower child-staff ratios. These programs have been shown to increase a child's earning potential later in life and encourage and support educational attainment throughout childhood and into adulthood. Between 2012 and 2016, 6.5% of preschool age children were enrolled in nursery school or preschool across the region (note: this does not include day care or other sorts of child care; just preschools and nursery schools).

¹⁵ Robert Wood Johnson Foundation. Can Early Childhood Interventions Improve Health and Well-Being? Mar. 2016. <https://www.rwjf.org/en/library/research/2016/03/can-early-childhood-interventions-improve-life-outcomes-.html>

¹⁶ <http://allhandsraised.org/content/uploads/2012/10/AN20UNSETTLING20PROFILE.pdf>

¹⁷ Andrulis DP, Brach C. Integrating literacy, culture, and language to improve health care quality for diverse populations. *Am J Health Behav.* 2007; 31(Suppl 1): S122-S133.

¹⁸ Kripalani S, Henderson LE, Chiu EY, Robertson R, Kolm P, Jacobson TA. Predictors of medication self-management skill in a low-literacy population. *J Gen Intern Med.* 2006; 21(8): 852–56.

¹⁹ Berkman ND, Sheridan SL, Donahue KE, Halpern DJ, Viera A, Crotty K, Holland A. Health literacy interventions and outcomes: an updated systematic review. 2011; 1-941. Report no.: 199.

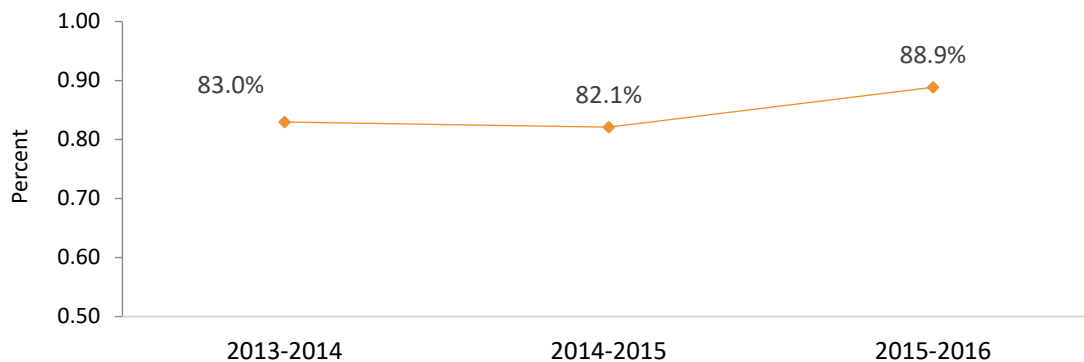
²⁰ Williams MV, Baker DW, Honig EG, Lee TM, Nowlan A. Inadequate literacy is a barrier to asthma knowledge and self-care. *Chest.* 1998; 114(4):1008–15.

High school graduation

Increased educational attainment provides individuals with the opportunity to earn a higher income and gain access to better living conditions, healthier foods, and health care services.²¹⁻²² Moreover, the employment prospects and lifelong earning potential are better for high school graduates.²³

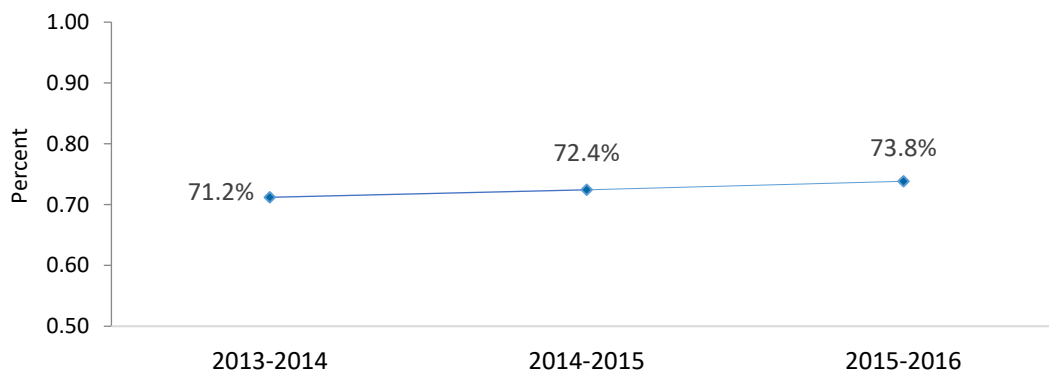
As shown in Figure C-1, five-year graduation rates in Clark County, Washington, have been increasing since 2013.

Figure C-1. Five-Year Graduation Rate in Clark County.



Source: Washington Office of Superintendent of Public Instruction.

Figure C-2. Four-Year Graduation Rate in Clackamas, Multnomah, and Washington Counties.



Source: Oregon Department of Education.

²¹ Ross CE, Wu CL. The links between education and health. *Am Sociol Rev.* 1995; 60(5):719–45.

²² Day JC, Newburger EC. The big payoff: educational attainment and synthetic estimates of work-life earnings. Special Studies. Current Population Reports. Washington (DC): U.S. Census Bureau; 2002. Report No.: P23-210.

²³ Levin H, Belfield C, Muennig P, Rouse C. The costs and benefits of an excellent education for all of America's children (Vol. 9): Teachers College, Columbia University New York; 2007.

Higher education

Higher education can lead to improved health and well-being through a positive impact on employment options, better-paying jobs with fewer safety hazards, and better access to housing.²⁴ Higher education also can lead to improved health and well-being.²⁵ Individuals with more education are less likely to report chronic conditions including heart disease, high blood pressure, diabetes, anxiety, and depression.²⁶

Across the quad-county region, nearly half of the population has at least an associate's degree and almost one quarter of the population has a bachelor's degree (see Table C-1).

Table C-1. Higher Education in the Region.

Degree	n	%
Associate	11,838	8.9%
Bachelor	78,748	23.9%
Graduate or professional degree	31,279	14.7%
Total	121,865	47.5%

Source: American Community Survey 5-Year estimate (2012–2016).

²⁴ Kawachi I, Adler NE, Dow WH. Money, schooling, and health: mechanisms and causal evidence. *Ann NY Acad Sci.* 2010; 1186(1):56–68.

²⁵ Cutler DM, Lleras-Muney A. Education and health: evaluating theories and evidence. No. W12352. Cambridge (MA): National Bureau of Economic Research; 2006.

²⁶ Cutler DM, Lleras-Muney A. Education and health: evaluating theories and evidence. No. W12352. Cambridge (MA): National Bureau of Economic Research; 2006.

Appendix D: Listening Sessions: Self-Reported Demographic Information

This appendix contains the demographics of the HCWC listening session participants, presented below as they were self-reported by the participants.

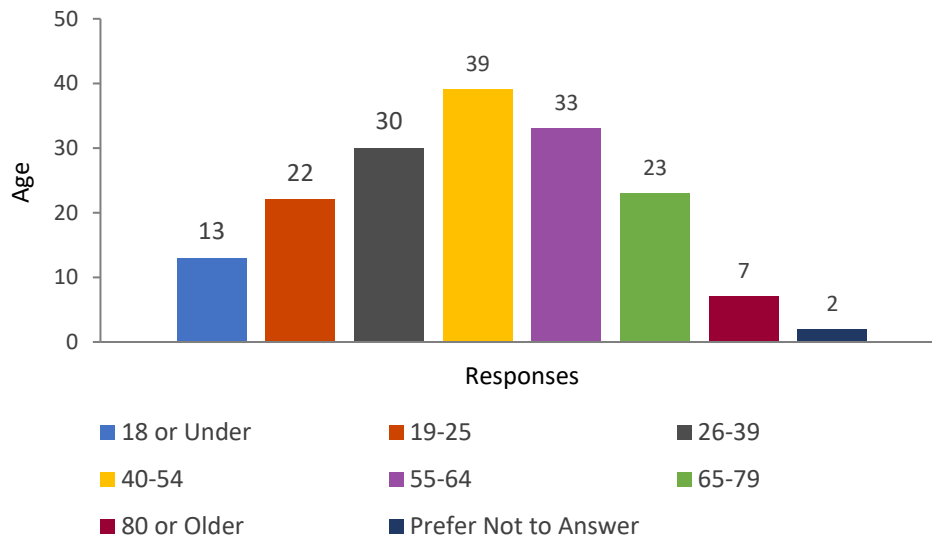
Table D-1 shows participants' gender identities.

Table D-1. Participants' Gender Identity (N=170).

Gender Identity	Responses
Male	85
Female	71
Non-Binary	4
Two-Spirit	2
Female, Trans	2
Gender Non-Conforming	1
Trans	1
Male, Non-Binary, Two-Spirit	1
Trans, Non-Binary, Other: Black	1
Other: Agender	1
Other: Why	1

Below are the participants' age groups (also shown in Figure D-1):

- 18 or Under 13
- 19–25 22
- 26–39 30
- 40–54 39
- 55–64 33
- 65–79 23
- 80 or older 7
- Prefer not to answer 2
- Blank 1

Figure D-1. Participants' Ages, by Group (N=170).*

*There was one blank response.

The following tables show sexual orientation, ethnicity, racial groups, birthplace, and primary language (Tables D-2 to D-6).

Table D-2. Sexual Orientation (N=170).

Sexual Orientation	Responses*
Asexual	4
Bisexual	5
Gay	15
Gay, Bisexual, Pansexual, Heterosexual, Asexual	1
Gay, Queer	1
Heterosexual	83
Heterosexual, Asexual, Questioning or Unsure	1
Lesbian	2
Lesbian, Queer	1
Other	8
Other: Demi-everything	1
Pansexual	3
Prefer Not to Answer	14
Queer	4
Queer, Asexual	1
Questioning or Unsure	2

*There were 24 blank responses.

Table D-3. Ethnicity (n=170).

Ethnicity	Responses*
Hispanic	39
Non-Hispanic	111

*There were 20 blank responses.

Table D-4. Racial Groups (N=170).

Racial Group	Responses*
African American	15
African (Black)	4
African American, African (Black)	1
African American, Other, Unknown	1
All	1
American Indian	6
American Indian, African American	2
American Indian, African American, Other White, Other Asian, Other: Mongolian	1
American Indian, Hispanic or Latino Mexican, Japanese, Other Pacific Islander, African American, Western European	1
American Indian, Hispanic or Latino Mexican, Other White	1
American Indian, Indigenous Mexican, Central American or South American, Hispanic or Latino Mexican, Other Asian	1
American Indian, Indigenous Mexican, Central American or South American, Hispanic or Latino Mexican, Western European, Northern African	1
American Indian, Indigenous Mexican, Central American or South American, Hispanic or Latino Mexican, Unknown	1
American Indian, Other Pacific Islander, Western European	1
American Indian, Western European, Eastern European	1
Caribbean	1
Declined to answer	2
Eastern European	3
Filipino/a	1
Filipino/a, Native Hawaiian	1
Filipino/a, Samoan	1
Hispanic or Latino Central American, African American, Western European	1
Hispanic or Latino Mexican	20
Hispanic or Latino Mexican, Western European	2
Hispanic or Latino South American	1
Indigenous Mexican, Central American or South American	1
Indigenous Mexican, Central American or South American, Hispanic or Latino Mexican	8

Racial Group	Responses*
Indigenous Mexican, Central American or South American, Hispanic or Latino Mexican, Native Hawaiian, African (Black), Other White	1
Japanese	1
Middle Eastern	13
Native Hawaiian	1
Northern African	1
Other Asian	2
Other Asian, Middle Eastern	3
Other Black: Black American	1
Other Hispanic or Latino, African American, African (Black), Eastern European	1
Other Pacific Islander, Western European	1
Other White	13
Samoan	2
Samoan, Other Pacific Islander	1
Unknown	1
Vietnamese	1
Vietnamese, African American, Western European, Eastern European	1
Vietnamese, Western European	1
Western European	23
Western European, Other White	5
Western European, Slavic	1
White	3

*There were 13 blank responses.

Table D-5. Birthplace (N=170).

Birth to age 16 location	Responses*
Inside the U.S.	116
Outside the U.S.	44
Prefer not to answer	2
The colonized country of Hawaii	1

*There were 7 blank responses.

Table D-6. Primary Language (N=170).

Primary Language Spoken at Home	Responses*
Arabic	14
Arabic, Other	2
English	101
English, Arabic	2
English, Arabic, Other: Kurdish	1
English, Other: Somali	1
English, Russian, Arabic	1
English, Spanish or Spanish Creole	5
English, Tagalog	2
English, Vietnamese	1
Japanese	1
Other	2
Other: Samoan	1
Spanish or Spanish Creole	28
Spanish or Spanish Creole, Mixteco	1
Vietnamese	1

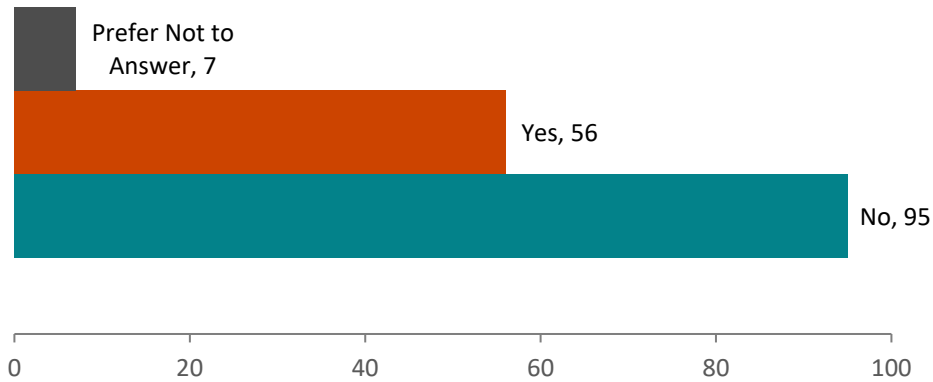
*There were 6 blank responses.

Table D-7 shows participants' veteran status, Figure D-2 shows disability status, and Figure D-3 shows education level.

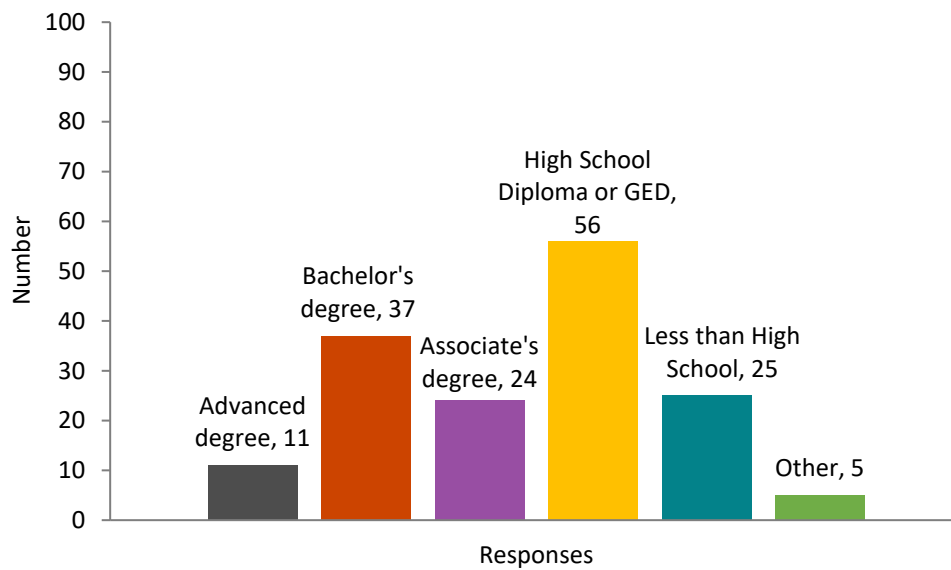
Table D-7. Veteran Status (N=170).

Veteran	Responses*
No	138
Yes	20
Prefer not to answer	1

*There were 11 blank responses.

Figure D-2. Disability Status (N=170).*

*There were 12 blank responses.

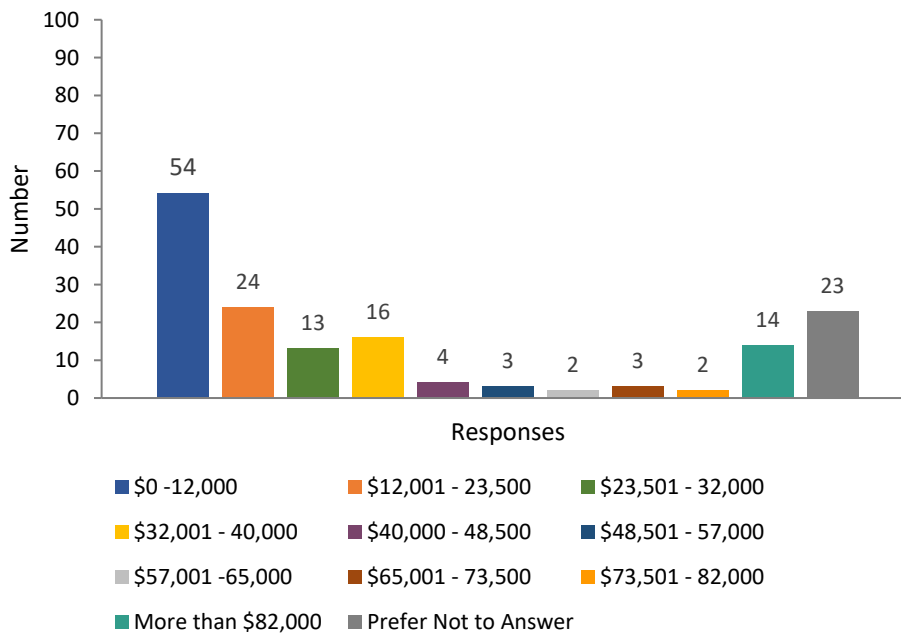
Figure D-3. Education Level (N=170).*

*There were 12 blank responses.

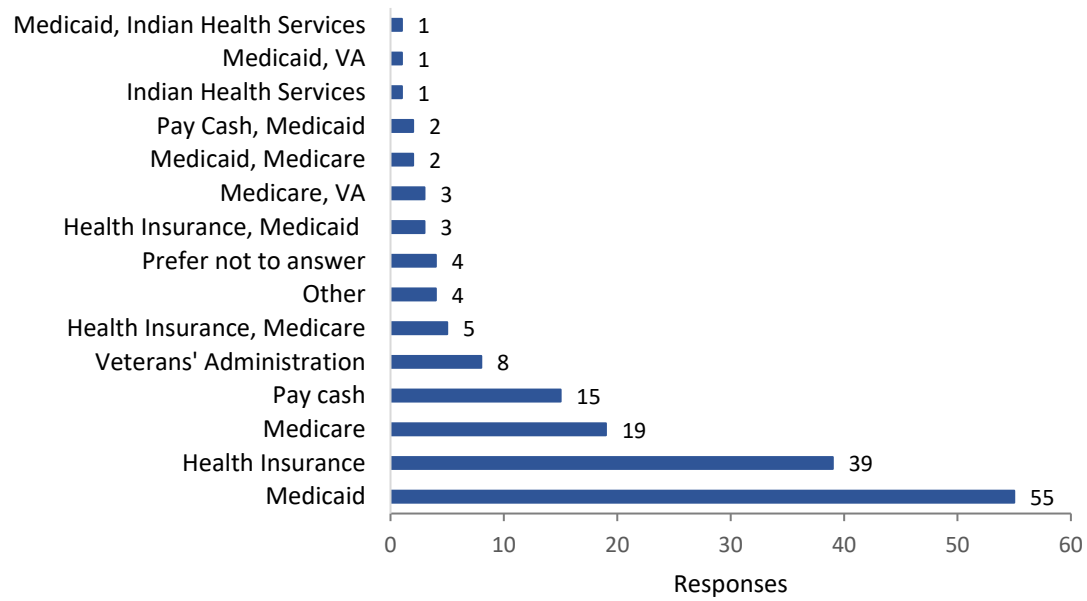
Below are the household income ranges for participants (also shown in Figure D-4):

• \$0 –12,000	54	• \$57,001–65,000	2
• \$12,001–23,500	24	• \$65,001–73,500	3
• \$23,501–32,000	13	• \$73,501–82,000	2
• \$32,001–40,000	16	• More than \$82,000	14
• \$40,000–48,500	4	• Prefer Not to Answer	23
• \$48,501–57,000	3	• Blank	12

Figure D-4. Household Income (N=170).*



*There were 12 blank responses.

Figure D-5. Types of Insurance (N=170).*

*There were 8 blank responses.

Appendix E: Additional Health Data

This appendix contains additional data not included in the main report.

Provider Ratios by County.....	E-2
Insurance Coverage.....	E-3
Vaccinations.....	E-4
Influenza.....	E-4
Diphtheria, Tetanus, and Pertussis (DTaP)	E-4
Communicable Diseases	E-6
Chronic Disease and Other Conditions in Emergency Departments	E-8
Insurance type by age	E-8
Chronic disease and other conditions by insurance type	E-10
Chronic diseases and other conditions for inpatients	E-11

Provider Ratios by County

Data from County Health Rankings shows that across the United States, the top-performing counties have a primary care provider to population ratio of 1:1,030. Only one county in the quad-county region, Multnomah, has a better ratio than that, with Clark County having significantly fewer primary care providers per population.

Table E-1. Ratio of Primary Care Physicians to Population.

County	Ratio
Clark, WA	1:1527
Clackamas, OR	1:1128
Multnomah, OR	1:712
Washington, OR	1:1092
Top U.S. Performers	1:1030

Source: County Health Rankings 2018.

Similar ratios are found with dentists across the region. With only Multnomah and Washington counties having a better dentist to population ratio than the top-performing U.S. counties.

Table E-2. Ratio of Dentists to Population.

County	Ratio
Clark, WA	1:1502
Clackamas, OR	1:1287
Multnomah, OR	1:1055
Washington, OR	1:1089
Top U.S. Performers	1:1280

Source: County Health Rankings 2018.

Insurance Coverage

Table E-3. Percentage of Population with Health Insurance.

County	Percent
Clark, WA	90.7%
Clackamas, OR	91.9%
Multnomah, OR	89.6%
Washington, OR	90.5%
Region	90.5%

Source: American Community Survey 5-year estimate 2012–2016.

Table E-4. Percentage of Population Under 18 without Health Insurance.

County	Percent
Clark - Washington	4.1%
Clackamas – Oregon	3.9%
Multnomah- Oregon	3.0%
Washington – Oregon	3.8%
Region	3.6%

Source: American Community Survey 5-year estimate 2012–2016.

As shown below, over 10% of the population in every county reported not being able to access health care services due to the cost.

Table E-5. Percentage of population unable to see a health care provider in the last year due to cost.

County	Percent
Clark - Washington	11.1%
Clackamas – Oregon	13.2%
Multnomah- Oregon	14.3%
Washington – Oregon	12.4%
Region	12.8%

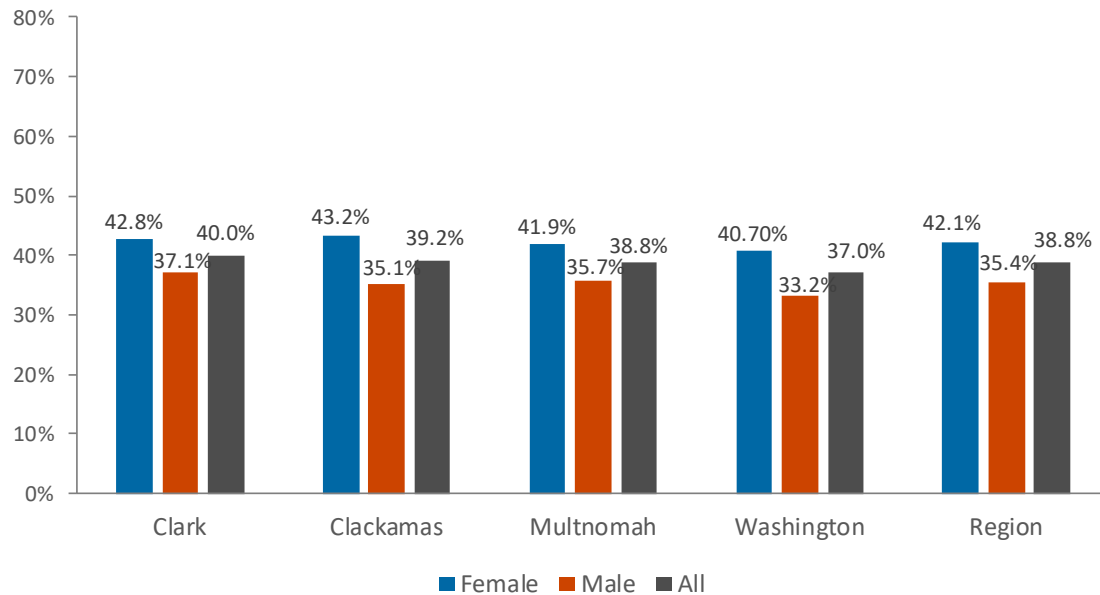
Source: BRFSS, 2012–2015.

Vaccinations

Influenza

As shown in the chart below, nearly 40% of population in the quad-county reported being vaccinated for influenza, with more females than males reporting vaccination—42% and 35%, respectively, for the region.

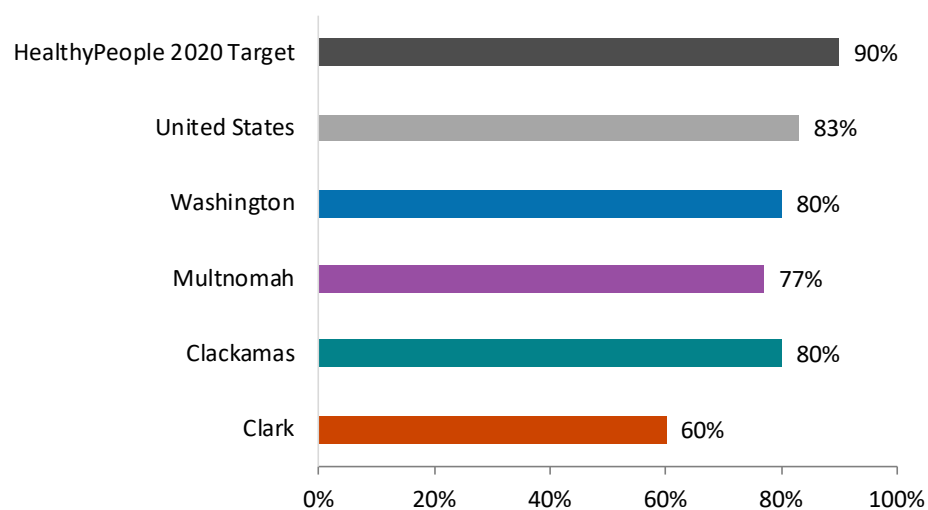
Figure E-1. Influenza Vaccination by Sex.



Source: BRFSS (2012–2015).

Diphtheria, Tetanus, and Pertussis (DTaP)

The percentage of children who are receiving the recommended four doses of the DTaP vaccine varies across the quad-county region, with all counties falling well below the HealthyPeople 2020 target (see Figure E-2).

Figure E-2. Children who Received Four Doses of DTaP.

Note: Oregon age = 2 years; Washington age = 19–35 months.

Communicable Diseases

Communicable diseases are infections, usually viral or bacterial, that are spread from person to person. Figures E-3–E-5 present the crude incidence rates for the 10 most common communicable diseases in the region, grouped by their level of prevalence in the region.

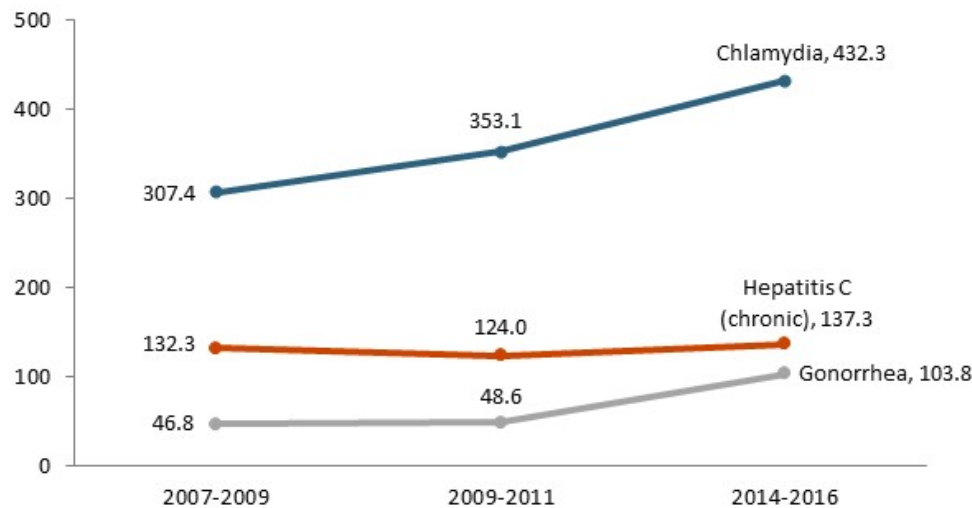
Between 2007 and 2016, the incidence of the following communicable diseases **increased**:

- **Chlamydia** (a sexually transmitted disease)
- **Gonorrhea** (a sexually transmitted disease)
- **Campylobacteriosis** (a foodborne illness or contaminated water)
- **Giardiasis** (an infection in the small intestine from contaminated food or water)
- **Pertussis** (whooping cough)

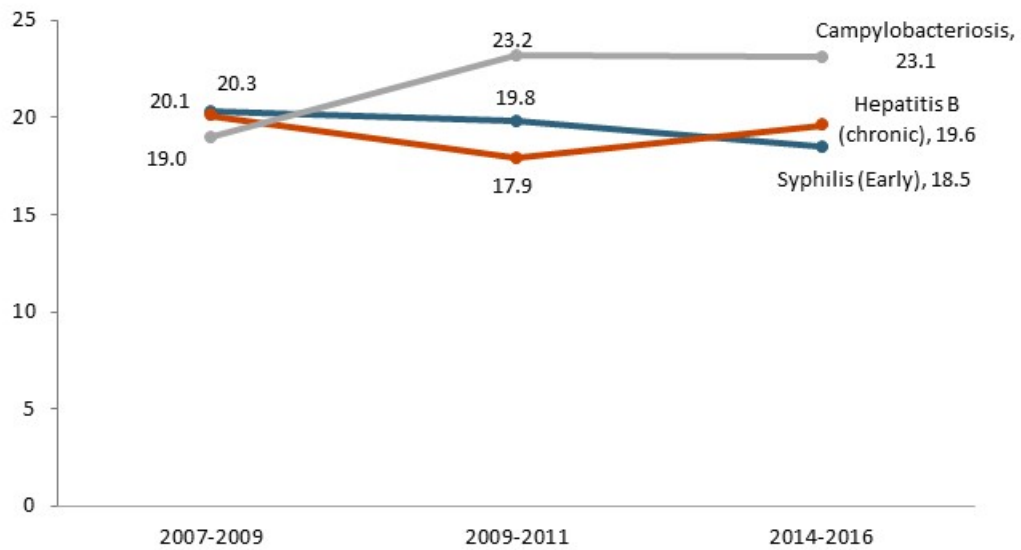
During the same period, focusing the incidence of the following communicable diseases **decreased**:

- **Hepatitis B** (chronic inflammation of the liver transmitted through infected blood, unprotected sex, unsterile or contaminated needle, and from an infected woman to her newborn during childhood)
- **HIV/AIDS**

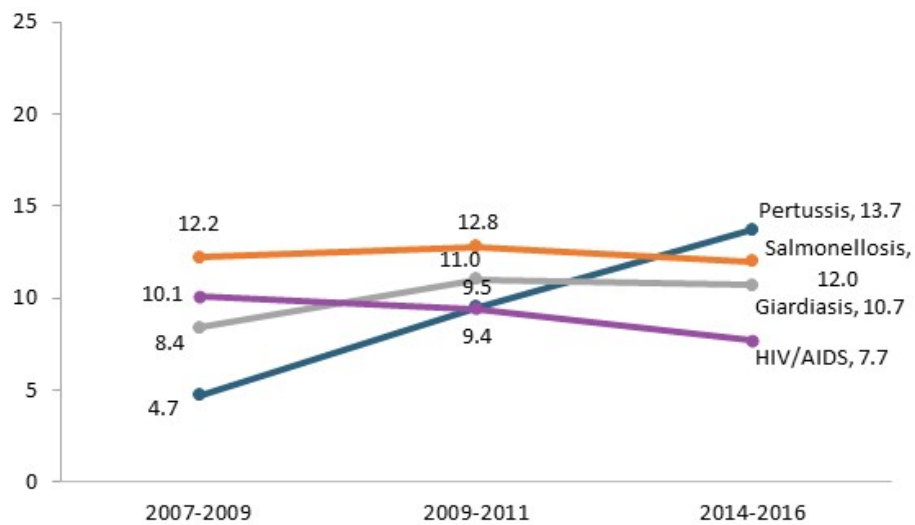
Figure E-3. Communicable Diseases with the Highest Prevalence.



Source: Oregon Public Health Assessment Tool (OPHAT) and Community Health Assessment Tool (CHAT).

Figure E-4. Communicable Diseases with Moderate Prevalence.

Source: Oregon Public Health Assessment Tool (OPHAT) and Community Health Assessment Tool (CHAT).

Figure E-5. Communicable Diseases with Lower Prevalence.

Source: Oregon Public Health Assessment Tool (OPHAT) and Community Health Assessment Tool (CHAT).

Chronic Disease and Other Conditions in Emergency Departments

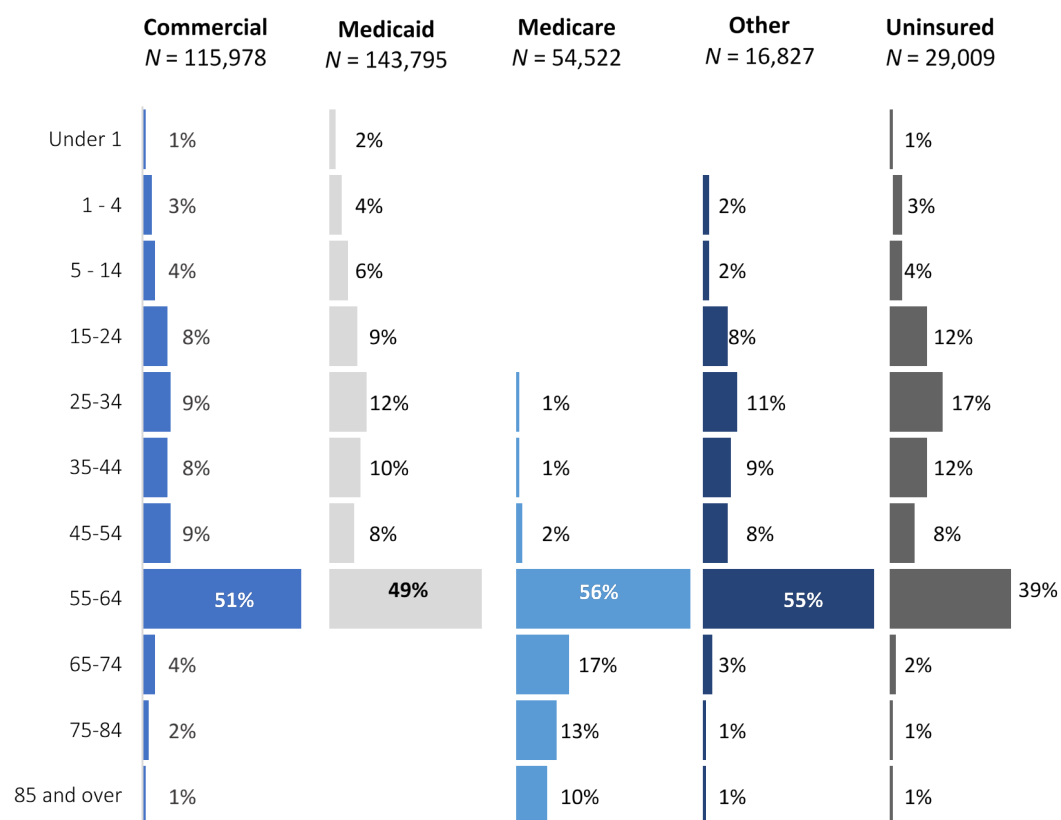
Chronic disease accounts for two-thirds of emergency medical conditions and roughly 80% of all health care costs. The analysis of emergency department (ED) chronic conditions included visits between January 1, 2016, and December 31, 2016, and is based on patients' primary diagnosis at discharge. Because data from Legacy hospitals and PeaceHealth did not include a unique identifier for each patient, the analysis included some duplicate records.

Patient-level hospital discharge data were provided by:

- Adventist Medical Center Portland
- Legacy Emanuel Medical Center
- Legacy Good Samaritan Medical Center
- Legacy Mount Hood Medical Center
- Legacy Salmon Creek Medical Center
- Kaiser Foundation Hospital Westside
- Kaiser Sunnyside Medical Center
- Oregon Health Sciences University
- PeaceHealth
- Providence Milwaukie Hospital
- Providence Portland Medical Center
- Providence St. Vincent Medical
- Providence Willamette Falls Medical Center
- Tuality

Insurance type by age

As shown in Figure E-6, about half of insured ED patients were between the ages of 55 and 64. The majority of patients who were uninsured were under 55 years old (57%).

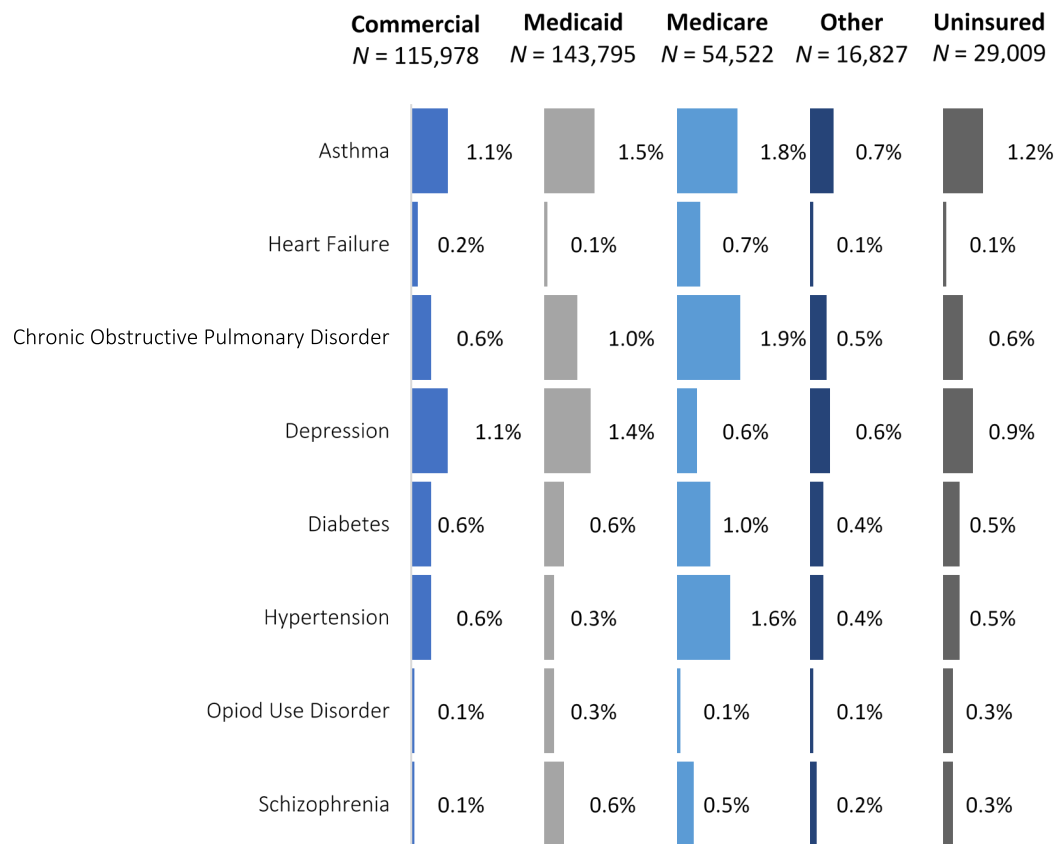
Figure E-6. Emergency Department Patients by Insurance Type and Age Group.

Source: Hospital Discharge Data 2016.

Chronic disease and other conditions by insurance type

As shown in Figure E-7, patients tended to use the ED for asthma, chronic obstructive pulmonary disorder, and depression. Patients with insurance coverage through Medicare were diagnosed at discharge with heart failure, diabetes, and hypertension more frequently than patients covered by other insurance types.

Figure E-7. Emergency Department Utilization for Chronic Conditions.



Source: Hospital Discharge Data 2016.

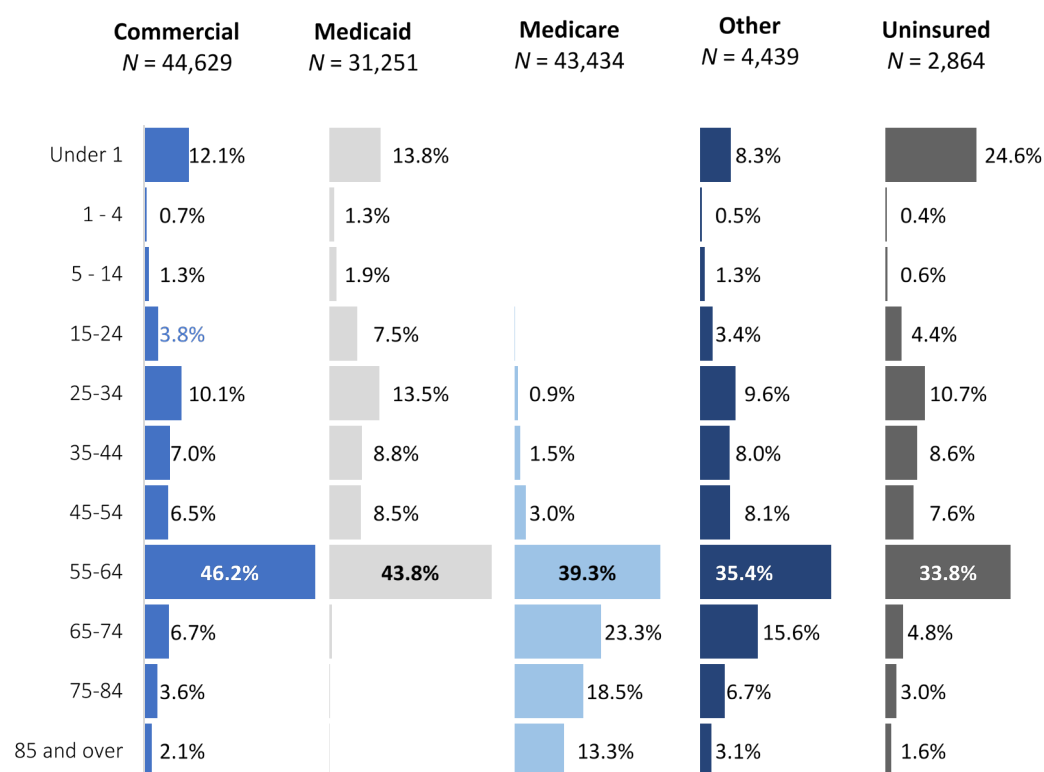
Chronic diseases and other conditions for inpatients

Regional inpatient discharge data from the calendar year 2016 was analyzed to identify if inpatient utilization differed by age and insurance type. Next, the same data were analyzed to assess the degree to which chronic conditions varied by insurance type.

Insurance type by age

As shown in Figure E-8, the greatest number of patients seen as inpatients for chronic conditions were insured by either commercial insurance or Medicare. Most insured patients discharged from inpatient units were between the ages of 55 and 64. The next most frequent age range was between 25 and 34 years old.

Figure E-8. Inpatient Stays by Insurance Type.

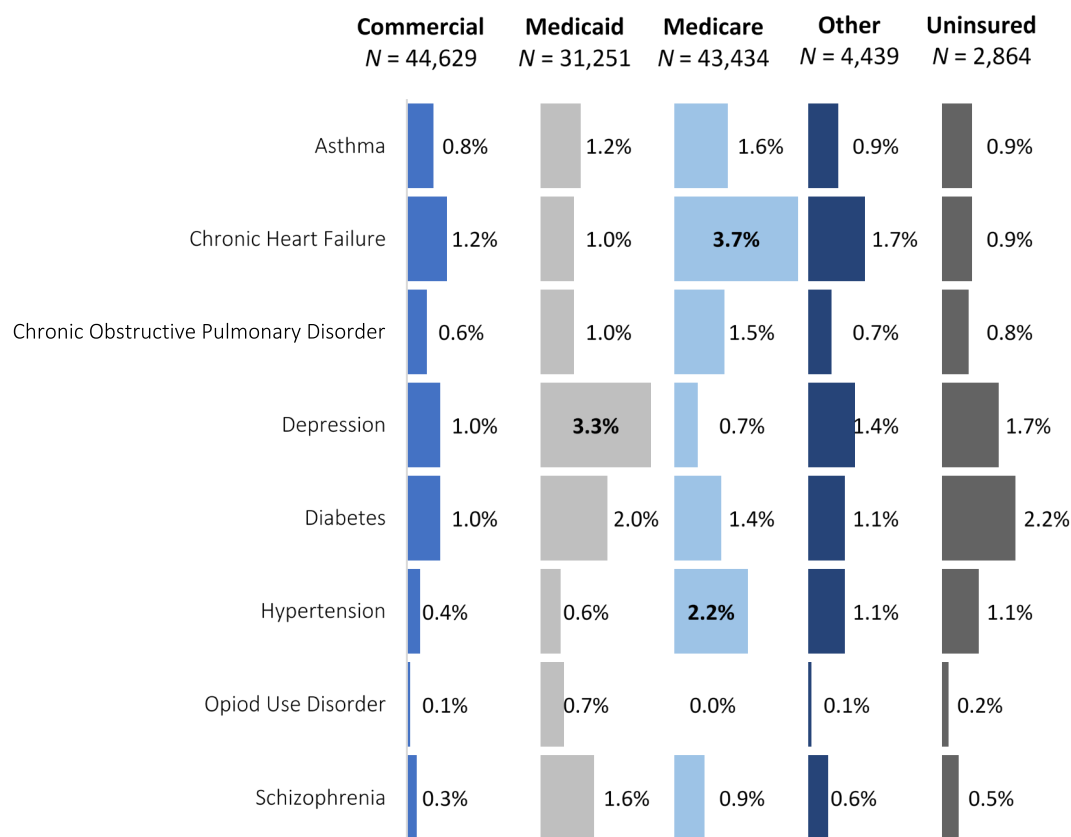


Source: Hospital Discharge Data 2016.

Chronic diseases and other conditions by insurance type

As shown in Figure E-9, people tended to be in inpatient units for heart failure, depression and diabetes. Those with insurance coverage through Medicare were diagnosed with chronic heart failure, chronic obstructive pulmonary disorder and hypertension at a greater frequency than people covered by other insurance types.

Figure E-9. Primary Diagnosis when Discharged from an Inpatient Stay.



Source: Hospital Discharge Data 2016.

Appendix F – Literature Review

HCWC Document Review Summary	F-2
Quality of Life in Communities of Color	F-2
Immediate Needs Versus Long-Term Needs.....	F-2
Surveillance and Data Transparency.....	F-2
Life Course Theory and Adverse Childhood Experiences (ACEs)	F-3
Housing Insecurity and Houselessness	F-3
Gender and Barriers to Success	F-3
Education and Employment Gaps.....	F-3
Policy and Action: Concluding Remarks.....	F-4
Reports Reviewed	F-5

HCWC Document Review Summary

The emergent themes and conclusions in this document review summarize the findings that were salient between the primary and secondary reviewers. This summary is broken down into categories based on emergent themes, reflecting both the similarities and differences found among the reports.

The reports covered in this review are listed at the end. These reports were selected by the HCWC Data Workgroup and cover a range of communities living in the HCWC counties.

Quality of Life in Communities of Color

Every document reviewed for this report discussed the many ways that racism impacts all aspects of life, health, and resources for communities of color. The many cultural barriers of access to healthcare, housing, and food security were highlighted throughout the reports. As summarized in many of the themes below, communities of color suffer disproportionately to their white counterparts in all issues highlighted by the reports: gender disparities, houselessness rates, experiences in foster care, incarceration rates, education access, and unemployment rates.

One takeaway is that more culturally specific providers and culturally specific social services need to be operationalized in order to rectify the disparities we see in the HCWC counties. This needs to be implemented on a policy level, and accompanied by actionable steps that can be taken by providers, community leaders, educators, and other outreach groups to operationalize policy level changes.

Immediate Needs Versus Long-Term Needs

Refugee and immigrant communities expressed the need for services linked to longer-term pathways of improving living standards, while still maintaining the immediate basic needs. Communities felt as if the majority of the focus of outreach efforts and resources were on point-of-arrival and not over time.

There is not much longitudinal data available to track immigrant/refugee outcomes, with most focused on status upon arrival.

Surveillance and Data Transparency

Surveillance is a hindrance to equitable data collection for immigrant communities, refugee communities, and communities of color. Much of what the review analyzed was prefaced with the statement that communities of color are less likely voluntarily self-disclosure data due to mistrust. Historical misrepresentation, violence, profiling, and discrimination of these populations has led to this mistrust of the government and much data collection.

Life Course Theory and Adverse Childhood Experiences (ACEs)

ACE scores are acknowledged in many of the reports, noting that the barriers to health and equity begin early in life and build into adulthood, and are tied to systemic, institutional, cultural, and social factors. Adults who had been through the foster care system as children had higher ACE scores and reported high levels of physical, sexual and verbal abuse. Difficult experiences continued into adulthood; economic insecurity (having to go without needed food, clothing, transportation, and stable housing); higher rates of homelessness and partner abuse. Many reports suggested that more longitudinal studies focusing on emergent issues for populations should be focused on a life course theory to examine how trauma, life experiences, and stressors influence health and well-being.

Housing Insecurity and Houselessness

When surveyed for the Springwater Corridor report, the common reasons that houseless individuals cited for their circumstances were: job loss (unemployment rate for sample was 91%), eviction, substance use, physical illness, domestic violence, mental health, loss of benefits, and rent increase.

On a policy front, greater outreach capacity is needed. More shelter and transitional housing types need to be developed for chronically houseless. Increased capacity to provide emergency, temporary, and transitional shelter or alternative housing.

Gender and Barriers to Success

Several reports mentioned the difficulties of assessing gender gaps as the majority of the accessible data sources provide only gender-blind data. Highlighting the issue of disparities between men and women in outcomes and longitudinal data is difficult to access due to the bias of the collectors and methods. Further parsing this out, the reports lack adequate information on communities who have gender identities outside of the Male/Female gender binary. The reports in the review do not adequately cover LGBTQ+ communities, which reflects the lack of intersectionality of available data. Systemic sexism and racism are intertwined. Intersectional minorities (e.g., transwomen of color) have disproportionate barriers to success. Women of color experience more violence (sexual and physical), higher poverty rates, and are more likely to lack economic security (having to go without needed food, clothing, transportation, and stable housing).

Education and Employment Gaps

Achievement gaps (beginning as an opportunity gap) are evident in children as young as 9 months old. These education gaps are correlated to unemployment. Communities of color experience higher rates of unemployment than their white counterparts (in Multnomah

County, unemployment is 35.7% higher for people of color). With unpaid care labor and the cost of caregiving being some of the least affordable in the nation, women struggle with a larger unemployment gap than their male counterparts. The achievement gaps can be attributed to the themes found in the reports above: economic insecurity, discrimination, lack of resources, language barriers, and lack of role models who come from similar backgrounds. Thus, a broad community approach is necessary to create lasting improvements. Skills need to be fostered in this setting for future success, and early childhood services and education are necessary to correct gaps.

Policy and Action: Concluding Remarks

While the reports all agree on the multiple gaps and disparities in the health and well-being of the populations in the four HCWC counties, the changes the reports suggest in order to address, improve, and provide outreach to these communities varies in specificity. The various suggestions on how to improve outcomes touch on the shortcomings of the current data collection methods and quantitative analysis. These data collection methods don't capture complexities and intersectionality of multiple identities or specific populations. Community-specific needs and priorities were stressed as action items, as well as more focus on first-hand narratives and qualitative research that more accurately captures priority populations' experience and identities. All reports acknowledged the visibility of these issues in mainstream social media, as well as ongoing advocacy efforts.

While there have been some baseline improvements, the quad-county region has much work to do to be comparable to other counties across the nation. Policy efforts should focus on housing stability, psychosocial support, partnerships between agencies to support physical/mental health of priority populations. Overall, the reports lack concrete action that should be taken to rectify these issues.

Reports Reviewed

- 1. Foster Care: Life Course Experiences, Health, and Health Care**
Providence Center for Outcomes Research and Education, 2017
HCWC counties included: Washington, Multnomah, Clackamas
[Web link](#)
- 2. Count Her In: A Report about Women and Girls in Oregon**
Women’s Foundation of Oregon, 2016
HCWC counties included: Washington, Multnomah, Clackamas
[Web link](#)
- 3. State of Black Oregon**
Urban League of Portland, 2015
HCWC counties included: Washington, Multnomah, Clackamas
[Web link](#)
- 4. Springwater Corridor Survey of Houselessness**
Clackamas County Health, Housing & Human Services
HCWC counties included: Clackamas
[Web link](#)
- 5. Coalition of Communities of Color, an Unsettling Profile**
Coalition of Communities of Color and Portland State University, 2010
HCWC counties included: Washington, Multnomah, Clackamas
[Web link](#)
- 6. IRCO Community Needs Assessment**
Immigrant and Refugee Community Organization (IRCO), 2017
HCWC counties included: Washington, Multnomah, Clackamas
[Web link](#)
- 7. State of Our Children & Families Report (SW Washington)**
Support for Early Learning & Families (SELF), 2017
HCWC counties included: Clark
[Web link](#)
- 8. Risk and Protection Profile for Substance Abuse Prevention in Clark County**
Washington State Department of Social & Health Services, 2017
HCWC counties included: Clark
[Web link](#)

Appendix G: County-Specific Data

1. Clark County
2. Clackamas County
3. Multnomah County
4. Washington County

G.1. Clark County Overview

Demographics	G.1-3
Mortality Rate	G.1-4
Chronic Disease in the Clark County Medicaid Population.....	G.1-5
Communicable Disease	G.1-7

Demographics

Table G.1-1 includes basic demographic characteristics of the Clark County population: number of people, ages, racial/ethnic identity, disability status, immigration status, language, and sex.

Table G.1-1. Selected Demographic Characteristics in Clark County: Total Population: 450,893.

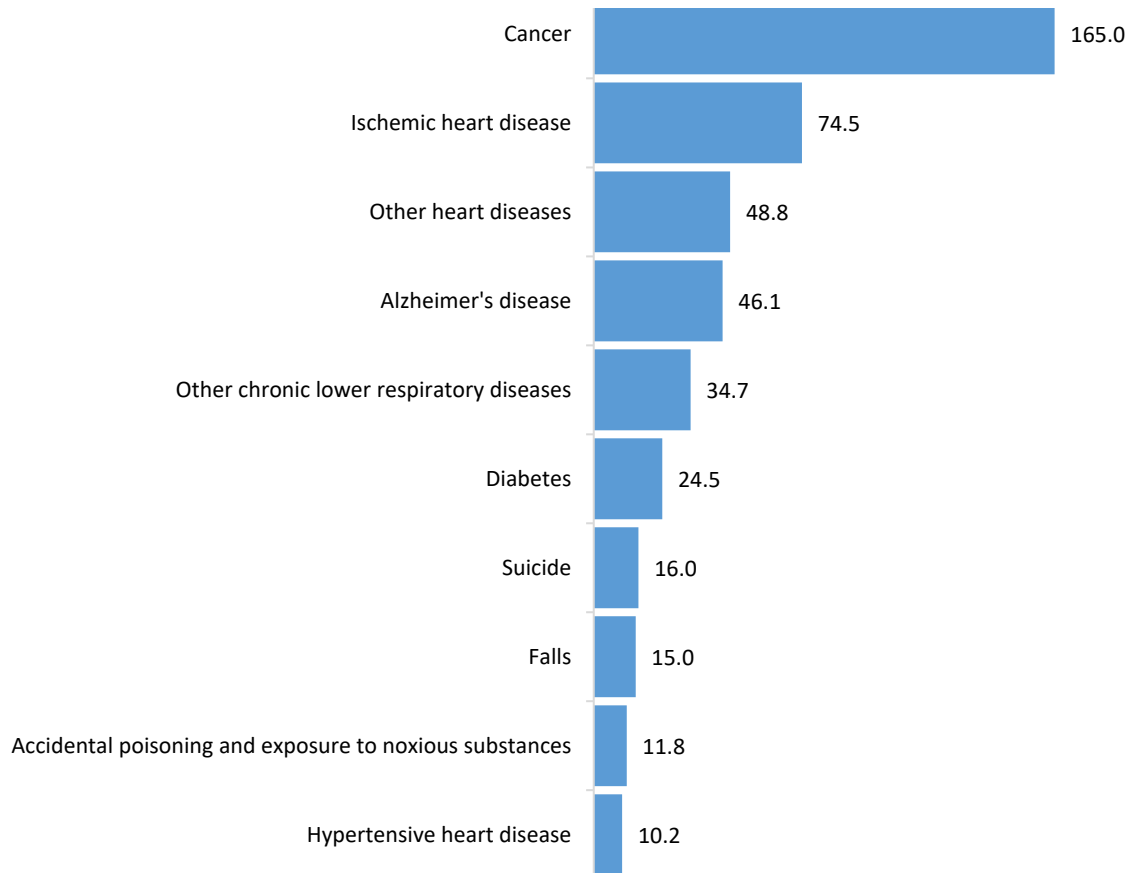
Demographic characteristic	% of Population
Gender	
Male	49.4%
Female	50.6%
Age	
Median age (years)	37.8
Under 5 years	6.4%
5 to 19 years	21.1%
20 to 44 years	32.2%
45 to 64 years	26.6%
65 years and older	13.7%
Race/ethnicity	
American Indian and Alaska Native	0.6%
Asian	4.3%
Black or African American	1.9%
Hispanic or Latino (of any race)	8.7%
Native Hawaiian and Other Pacific Islander	0.8%
Two or more races	4.6%
White	84.6%
With a disability	12.6%
Foreign born	10.4%
Language other than English spoken at home	15.0%

Source: American Community Survey 5-year estimates 2012–2016.

Mortality Rate

The mortality rate is the number of deaths per 100,000 people in a defined population over a specific time period. Figure G.1-1 shows the mortality rates of the leading causes of death in Clark County between 2012 and 2016.

Figure G.1-1. Clark County Mortality Rates 2012–2016.



Note: All rates are per 100,000 population and are age-adjusted to the 2000 U.S. standard population. Source: Community Health Assessment Tool (CHAT).

Chronic Disease in the Clark County Medicaid Population

Medicaid is the second largest source of health insurance in the United States after employer-provided insurance and historically has covered low-income children and parents, pregnant women, and people with disabilities.¹ Data on the estimated percentage of Medicaid recipients with asthma, depression, and diabetes in Clark County were downloaded from the Healthier Washington Dashboard.²

The following tables present the percentage estimates for the Medicaid population in Clark County diagnosed with asthma, depression, and diabetes by race (Tables G.1-2–G.1-8) and gender (Tables G.1-9–G.1-10) in 2017.

Table G.1-2. Clark County Medicaid Population 2017: Asian.

Condition	Percentage
Asthma	2%
Depression	5%
Diabetes	4%

Source: Healthy Washington Dashboard.

Table G.1-3. Clark County Medicaid Population 2017: Black/African American.

Condition	Percentage
Asthma	4%
Depression	8%
Diabetes	3%

Source: Healthy Washington Dashboard.

Table G.1-4. Clark County Medicaid Population 2017: Caucasian

Condition	Percentage
Asthma	3%
Depression	11%
Diabetes	3%

Source: Healthy Washington Dashboard.

¹ Centers for Medicare & Medicaid Services. 2013 CMS Statistics. U.S. DHHS, Baltimore, MD; 2013.

² <https://www.hca.wa.gov/about-hca/healthier-washington/data-dashboard>

Table G.1-5. Clark County Medicaid Population 2017: Hispanic.

Condition	Percentage
Asthma	3%
Depression	2%
Diabetes	3%

Source: Healthy Washington Dashboard.

Table G.1-6. Clark County Medicaid Population 2017: Native American.

Condition	Percentage
Asthma	4%
Depression	12%
Diabetes	5%

Source: Healthy Washington Dashboard.

Table G.1-7. Clark County Medicaid population 2017: Native Hawaiian and Pacific Islander³

Condition	Percentage
Asthma	3%
Depression	11%
Diabetes	3%

Source: Healthy Washington Dashboard.

Table G.1-8. Clark County Medicaid Population 2017: Race Not Provided.

Condition	Percentage
Asthma	2%
Depression	4%
Diabetes	2%

Source: Healthy Washington Dashboard.

Table G.1-9. Clark County Medicaid Population 2017: Female.

Condition	Percentage
Asthma	3%
Depression	12%
Diabetes	3%

Source: Healthy Washington Dashboard.

Table G.1-10. Clark County Medicaid Population 2017: Male.

Condition	Percentage
Asthma	2%
Depression	7%
Diabetes	3%

Source: Healthy Washington Dashboard.

³ Native Hawaiian and Pacific Islander are combined on the Healthier Washington Dashboard.

Communicable Disease

Communicable diseases are infections, usually viral or bacterial, that are spread from person to person. The following table (G1.11) presents the age-adjusted incidence rates for the 10 most common communicable diseases in Clark County across three time periods.

Table G.1-11. Top 10 Communicable Diseases in Clark County.

Rank	Communicable Disease	2007–2009	2009–2011	2014–2016
1	Chlamydia	271.7	347.0	411.5
2	Gonorrhea	36.8	37.7	68.7
3	Herpes initial genital infection	17.2	19.3	46.9
4	Pertussis	5.8	16.2	34.4
5	Campylobacteriosis	15.5	23.4	17.7
6	Salmonellosis	15.0	16.9	13.7
7	Giardiasis	8.4	11.1	7.5
8	<i>E. Coli</i>	3.2	5.6	7.4
9	Late latent syphilis	0.4	1.3	4.2
10	Suspected Rabies Exposure	0.0	0.1	2.9

Note: All rates are per 100,000 population and are age-adjusted to the 2000 U.S. standard population.

G.2. Clackamas County Overview

Demographics	G.2-2
Mortality Rate	G.2-3
Chronic Disease in the Clackamas County Medicaid Population	G.2-4
Asian.....	G.2-4
Black/African American.....	G.2-5
Caucasian	G.2-6
Hispanic.....	G.2-7
Native American.....	G.2-8
Race Not Provided	G.2-9
Female.....	G.2-10
Male	G.2-11
Communicable Disease	G.2-12

Demographics

Table G.2-1 shows basic demographic characteristics of the Clackamas County population: number of people, age, racial/ethnic identify, disability status, immigration status, language, and sex.

Table G.2-1. Selected Demographic Characteristics in Clackamas County (Total Population=394,967).

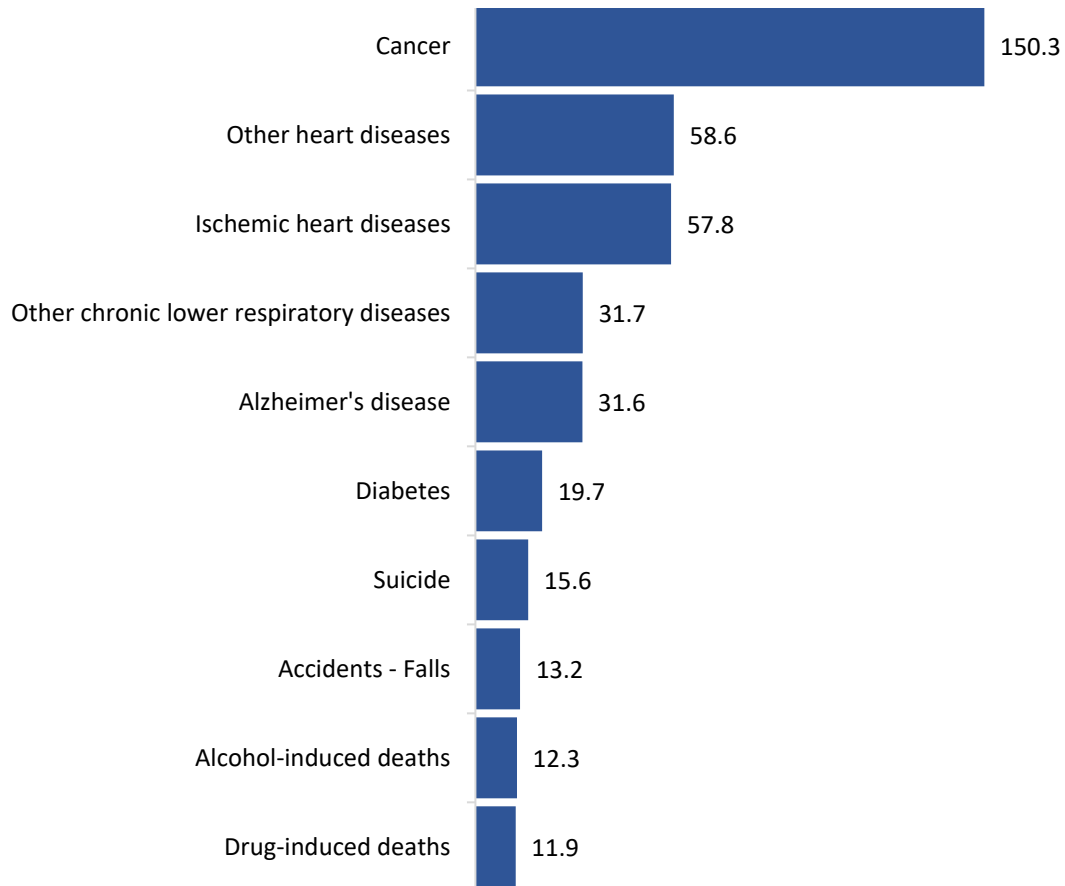
Demographic Characteristic	% of Population
Gender	
Male	49.2%
Female	50.8%
Age	
Median age (years)	41.4
Under 5 years	5.5%
5 to 19 years	19.1%
20 to 44 years	30.3%
45 to 64 years	29.0%
65 years and older	16.1%
Race/ethnicity	
American Indian and Alaska Native	0.7%
Asian	4.1%
Black or African American	0.9%
Hispanic or Latino (of any race)	8.2%
Native Hawaiian and Other Pacific Islander	0.3%
Two or more races	3.4%
White	89.0%
With a disability	11.9%
Foreign born	8.0%
Language other than English spoken at home	12.1%

Source: American Community Survey 5-year estimates 2012–2016.

Mortality Rate

The mortality rate is the number of deaths per 100,000 people in a defined population over a specific time period. Figure G.2-1 shows the mortality rates of the leading causes of death in Clackamas County between 2012 and 2016.

Figure G.2-1. Clackamas County Mortality Rates 2012–2016.



Note: All rates are per 100,000 population and are age-adjusted to the 2000 U.S. standard population. Source: Oregon Public Health Assessment Tool (OPHAT).

Chronic Disease in the Clackamas County Medicaid Population

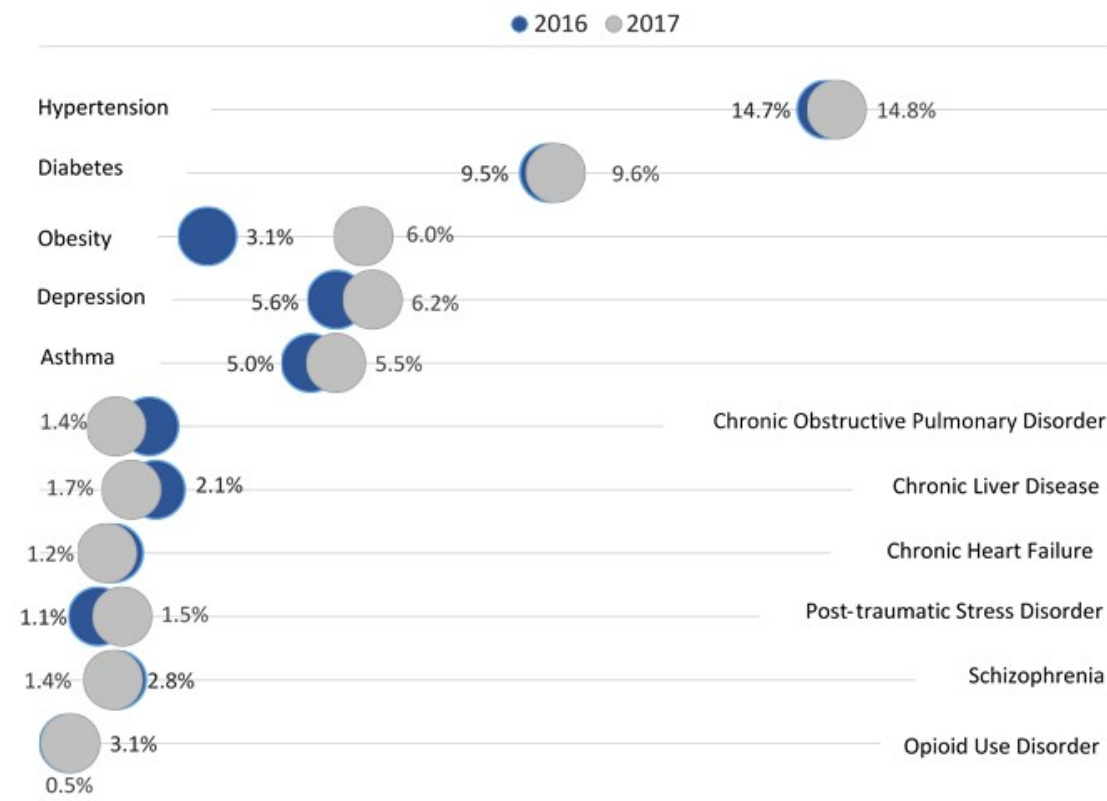
Medicaid is the second largest source of health insurance in the United States after employer-provided insurance and historically has covered low-income children and parents, pregnant women, and people with disabilities.¹

In Clackamas County, Medicaid beneficiaries are covered through Health Share of Oregon. To identify the prevalence of chronic conditions in the region's Medicare population, Health Share of Oregon provided member utilization data from 2016 and 2017.

Asian

Between 2016 and 2017, the prevalence of **obesity had the greatest increase** for Asian Health Share of Oregon members in Clackamas County (Figure G.2-2).²

Figure G.2- 2. Health Share of Oregon 2016 and 2017: Asian.



Note: 2016 N = 1,548; 2017 N = 1,455.

Source: Health Share of Oregon.

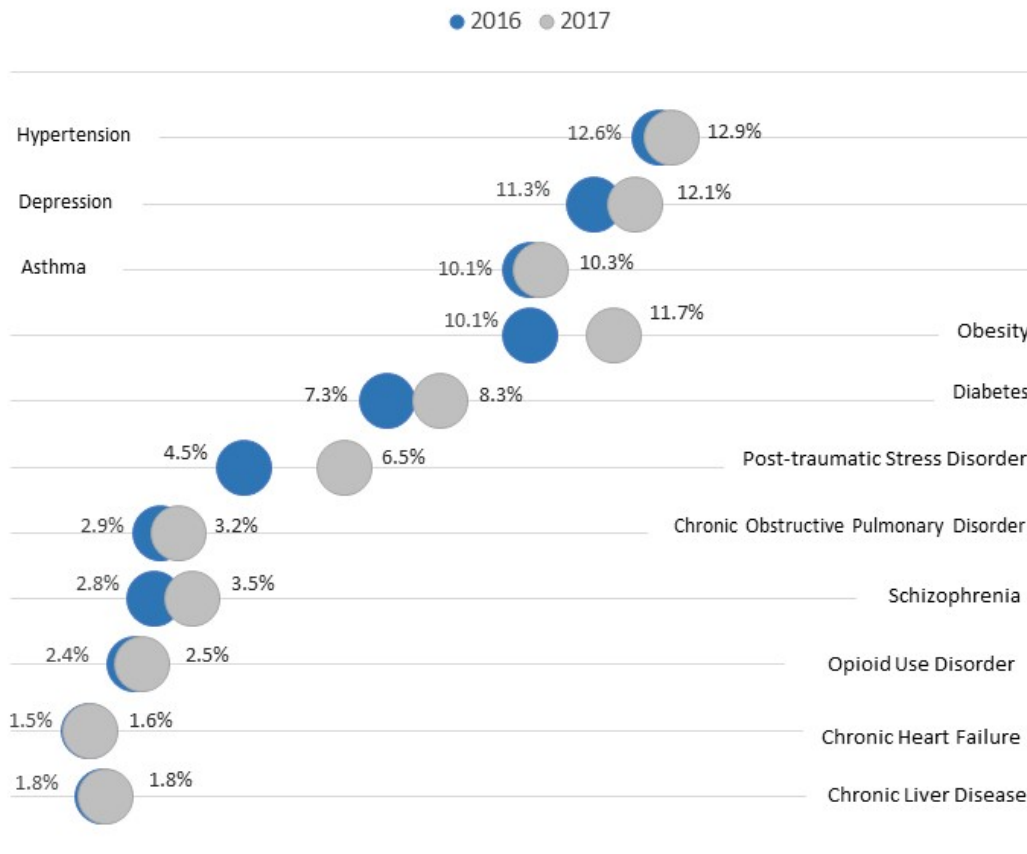
¹ Centers for Medicare & Medicaid Services. 2013 CMS Statistics. U.S. DHHS, Baltimore, MD; 2013.

² "Asian" at Health Share of Oregon includes Chinese, Vietnamese, Korean, Hmong, Laotian, Filipino/a, Japanese, South Asian, Asian India, Other Asian, and Asian.

Black/African American

Between 2016 and 2017, the prevalence **of obesity, diabetes, and post-traumatic stress disorder had the greatest increase** for Black/African American Health Share of Oregon members in Clackamas County (Figure G.2-3).

Figure G.2-3. Health Share of Oregon 2016 and 2017: Black/African American.



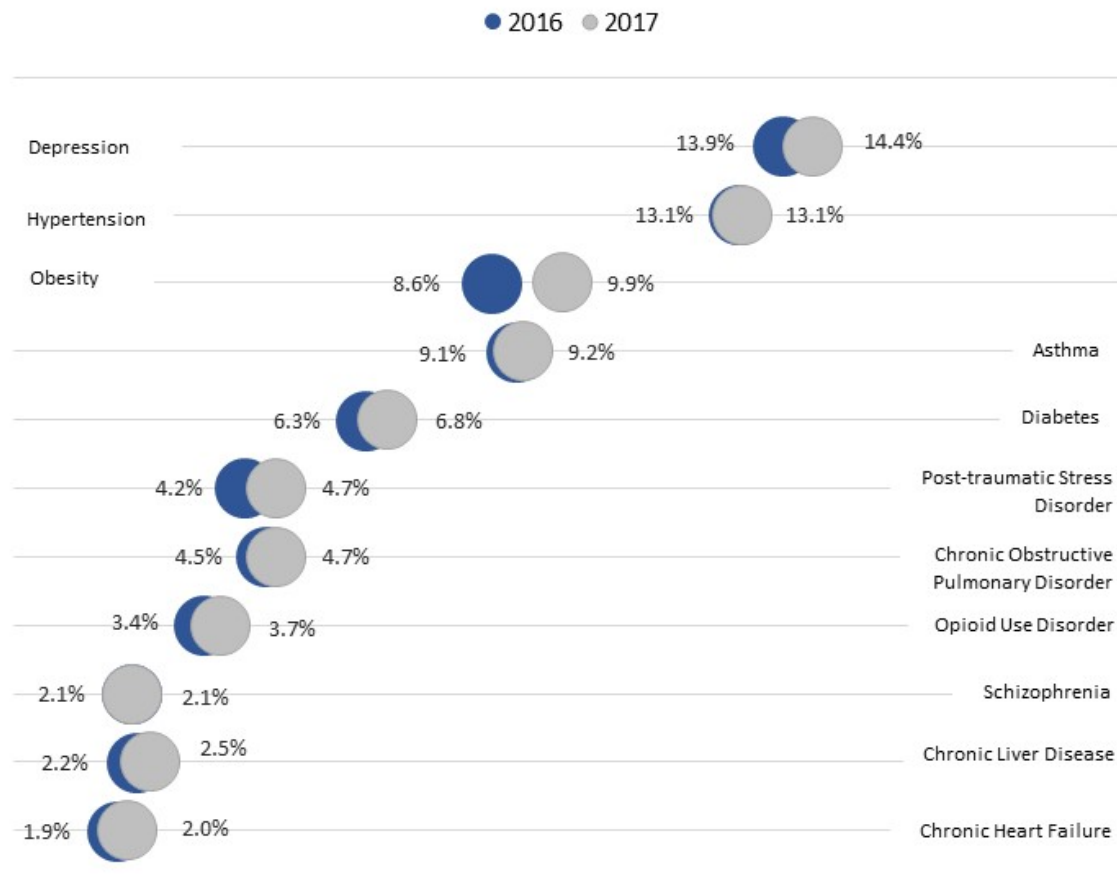
2016 *N* = 793; 2017 *N* = 708.

Source: Health Share of Oregon

Caucasian

Between 2016 and 2017, the prevalence of **obesity had the greatest increase** for Caucasian Health Share of Oregon members in Clackamas County (Figure G.2-4).

Figure G.2-4. Health Share of Oregon 2016 and 2017: Caucasian.



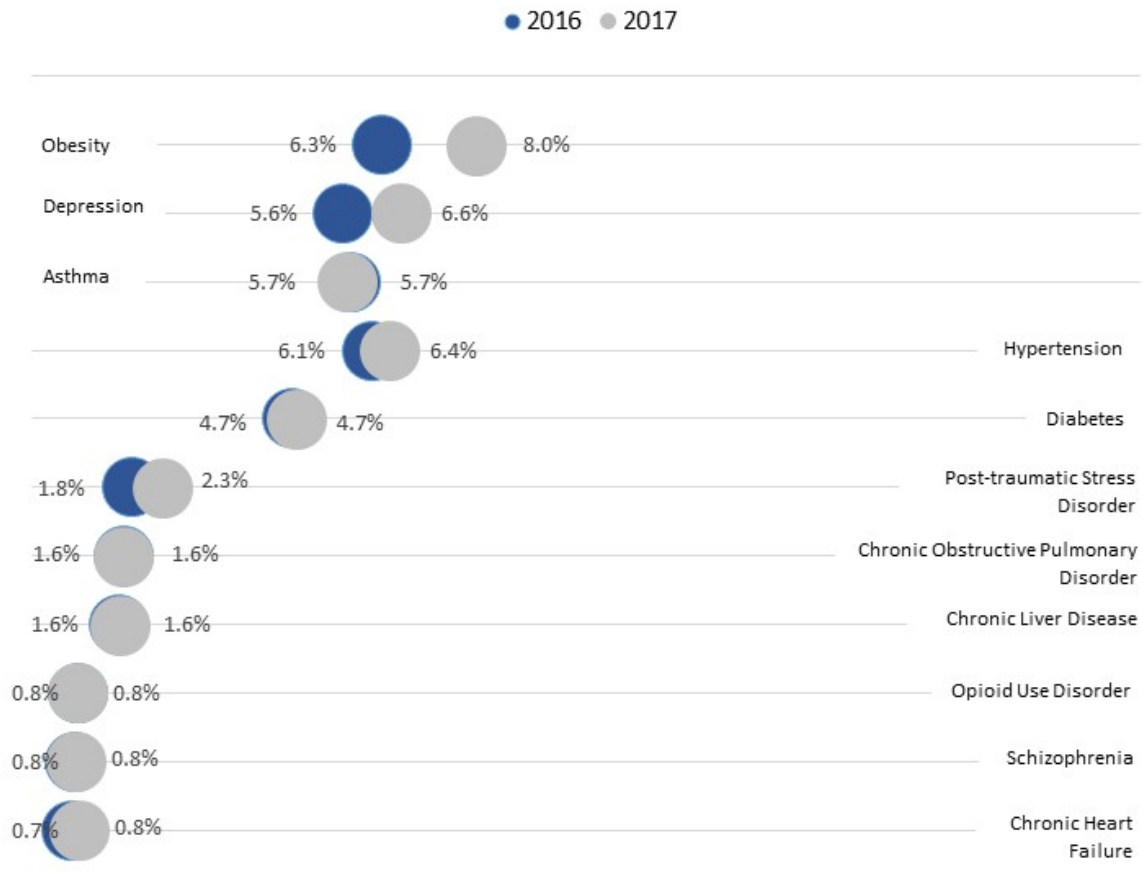
2016 N = 28,149; 2017 N = 25,378.

Source: Health Share of Oregon.

Hispanic

Between 2016 and 2017, the prevalence of **obesity and depression had the greatest increase** for Hispanic (of any race) Health Share of Oregon members in Clackamas County (Figure G.2-5).

Figure G.2-5. Health Share of Oregon 2016 and 2017: Hispanic.



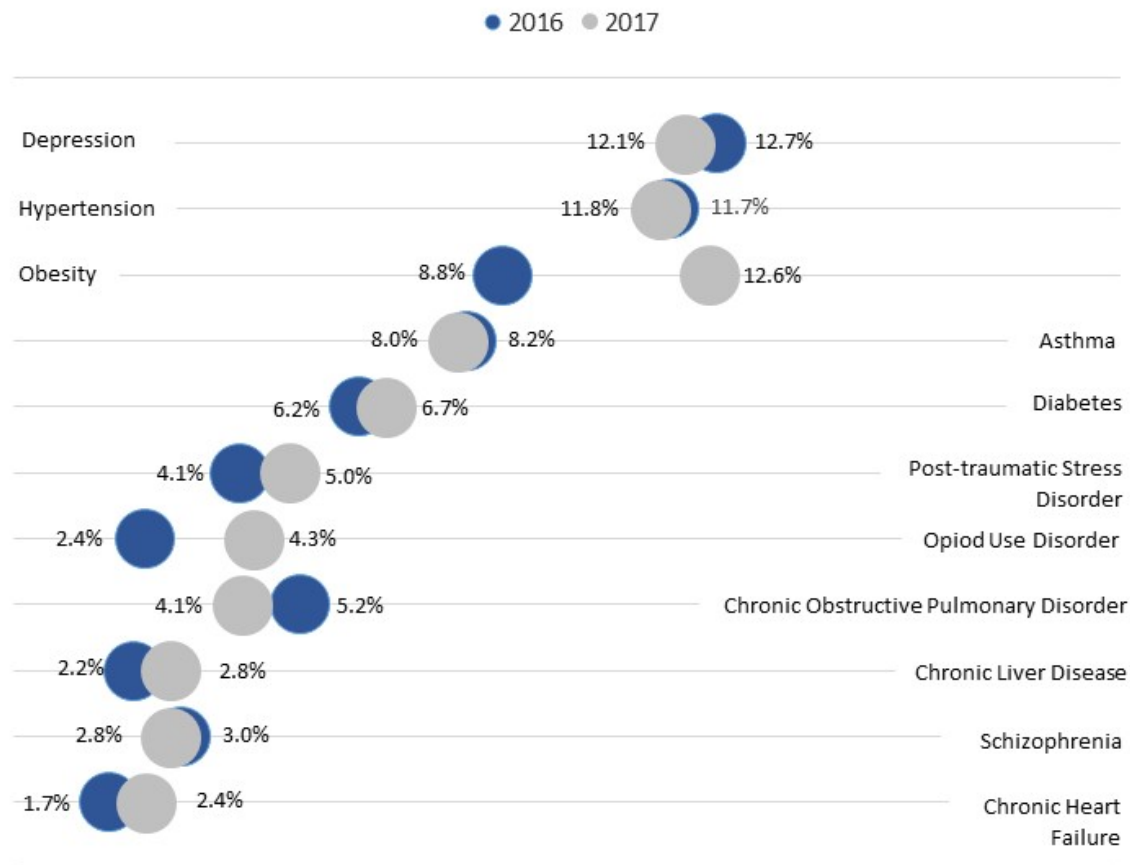
2016 N = 3,956; 2017 N = 3,390.

Source: Health Share of Oregon.

Native American

Between 2016 and 2017, the prevalence of **obesity and opioid use disorder** had the greatest increase for Native American Health Share of Oregon members in Clackamas County (Figure G.2-6).

Figure G.2-6. Health Share of Oregon 2016 and 2017: Native American.



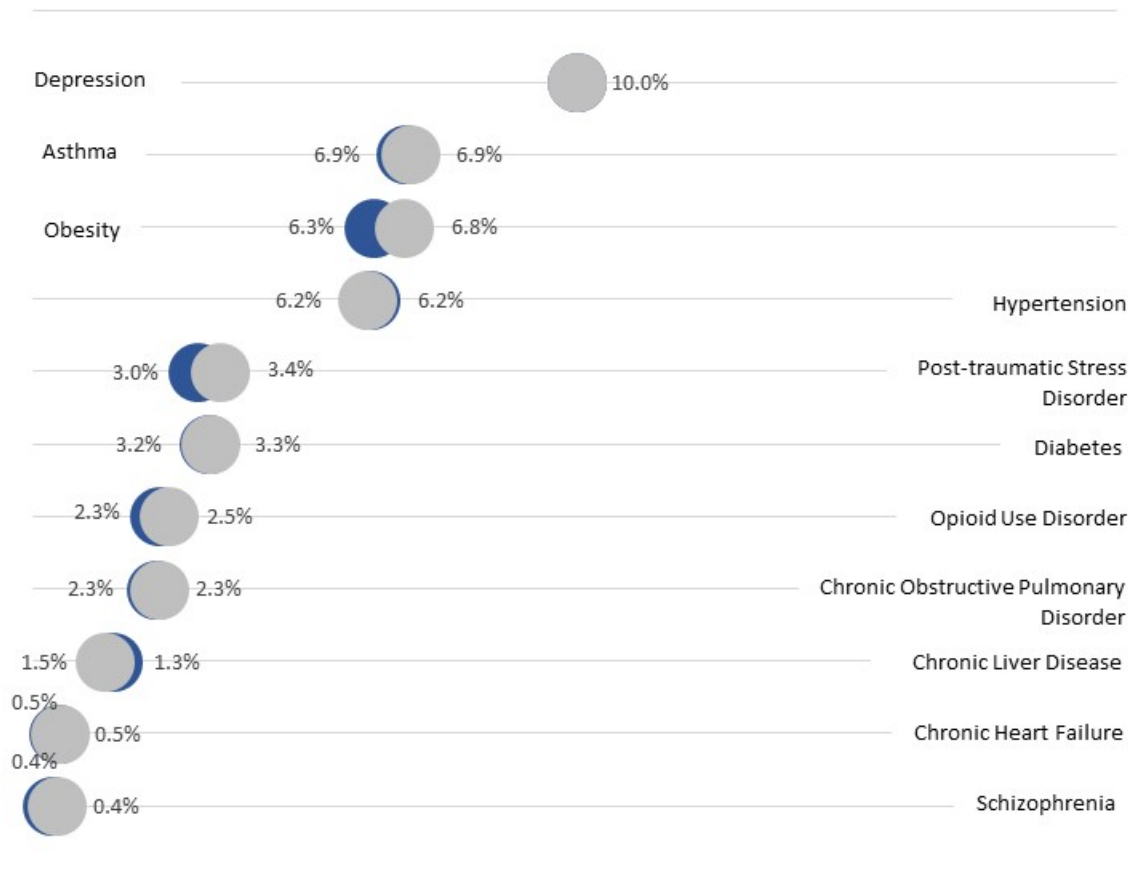
Note. 2016 *N* = 465; 2017 *N* = 462.

Source: Health Share of Oregon.

Race Not Provided

In 2016 and 2017, the prevalence of chronic conditions remained relatively unchanged for Health Share of Oregon members in Clackamas County who did not provide their race or ethnicity at intake (Figure G.2-7).

Figure G.2-7. Health Share of Oregon 2016 and 2017: Race Not Provided.



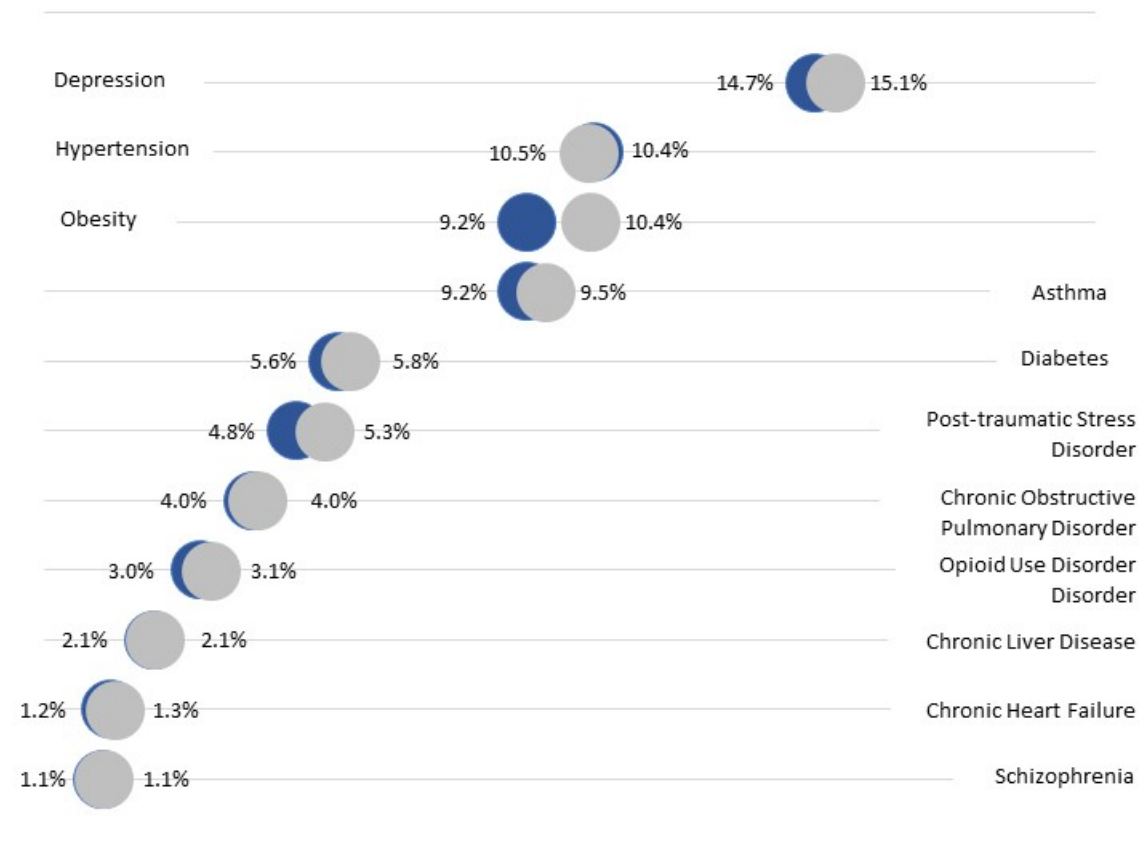
2016 *N* = 18,644; 2017 *N* = 19,071.

Source: Health Share of Oregon.

Female

Between 2016 and 2017, the prevalence of **obesity had the greatest increase** for female Health Share of Oregon members in Clackamas County (Figure G.2-8).

Figure G.2-8. Health Share of Oregon 2016 and 2017: Female.



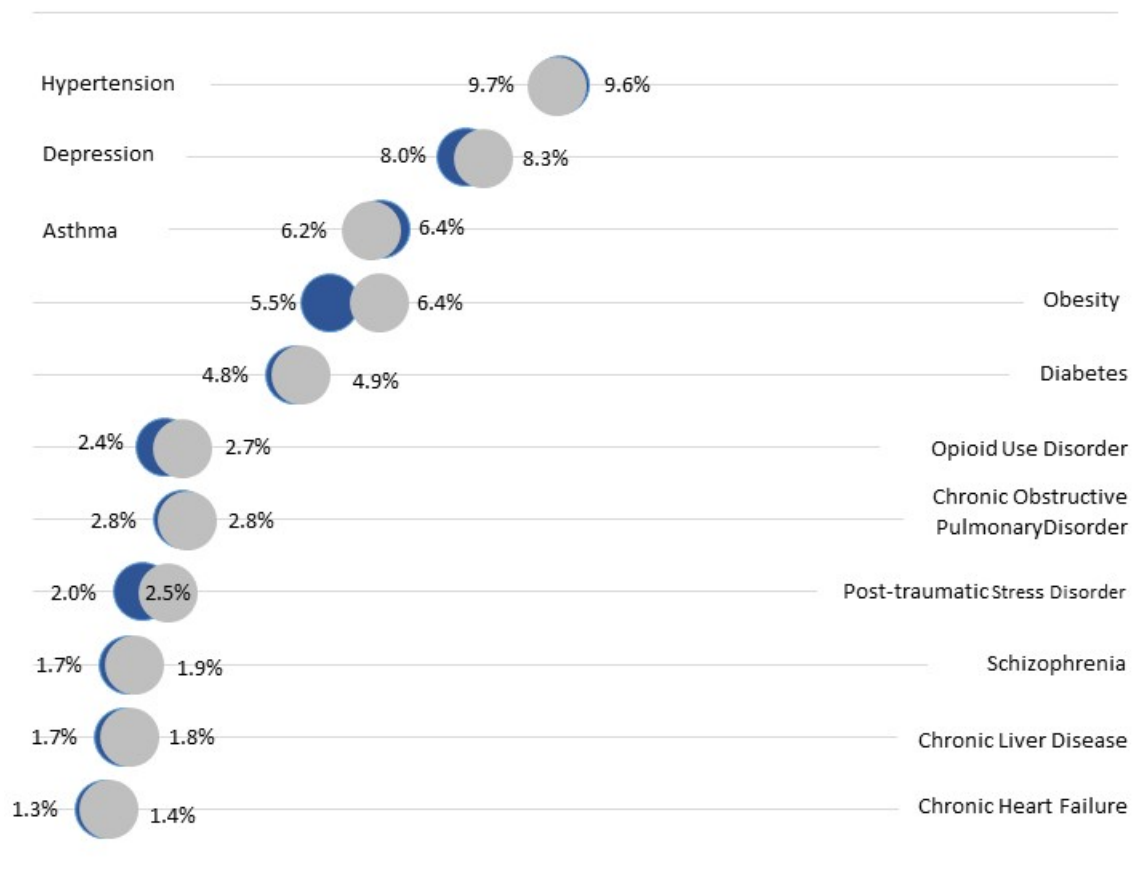
2016 *N* = 29,165; 2017 *N* = 27,521

Source: Health Share of Oregon.

Male

Between 2016 and 2017, the prevalence of **obesity had the greatest increase** for male Health Share of Oregon members in Clackamas County.

Figure G.2-9. Health Share of Oregon 2016 and 2017: Male.



2016 *N* = 25,340; 2017 *N* = 23,679.

Source: Health Share of Oregon.

Communicable Disease

Communicable diseases are infections, usually viral or bacterial, that are spread from person to person. Table G.2-2 presents the age-adjusted incidence rates for the 10 most common communicable diseases in Clackamas County across three time periods.

Table G.2-2. Top 10 Communicable Diseases in Clackamas County.

Rank	Communicable Disease	2007–2009	2009–2011	2014–2016
1	Chlamydia	236.2	272.8	326.0
2	Hepatitis C (chronic)	91.3	71.7	96.8
3	Gonorrhea	21.9	22.6	56.0
4	Campylobacteriosis	17.5	19.7	23.0
5	Pertussis (whooping cough)	5.1	10.4	13.9
6	Salmonellosis (non-typhoidal)	11.4	11.7	11.6
7	Cryptosporidiosis	7.3	9.5	10.2
8	Hepatitis B (chronic)	11.4	9.5	9.9
9	Syphilis (Early)	1.3	2.7	8.5
10	Giardiasis	8.2	7.8	6.4

Note: All rates are per 100,000 population and are age-adjusted to the 2000 U.S. standard population. Source: Oregon Public Health Assessment Tool (OPHAT).

G.3. Multnomah County Overview

Demographics	G.3-2
Mortality Rate	G.3-3
Chronic Disease in the Multnomah County Medicaid Population	G.3-4
Asian.....	G.3-4
Black/African American.....	G.3-5
Caucasian	G.3-6
Hispanic.....	G.3-7
Native American.....	G.3-8
Pacific Islander	G.3-9
Race Not Provided	G.3-10
Female.....	G.3-11
Male	G.3-12
Communicable Disease	G.3-13

Demographics

In Table G.3-1, basic demographic characteristics of the population are outlined: number of people in Multnomah County, age, racial/ethnic identify, disability, immigration status, language, and sex.

Table G.3-1. Selected Demographic Characteristics in Multnomah County:
Total Population=778,193.

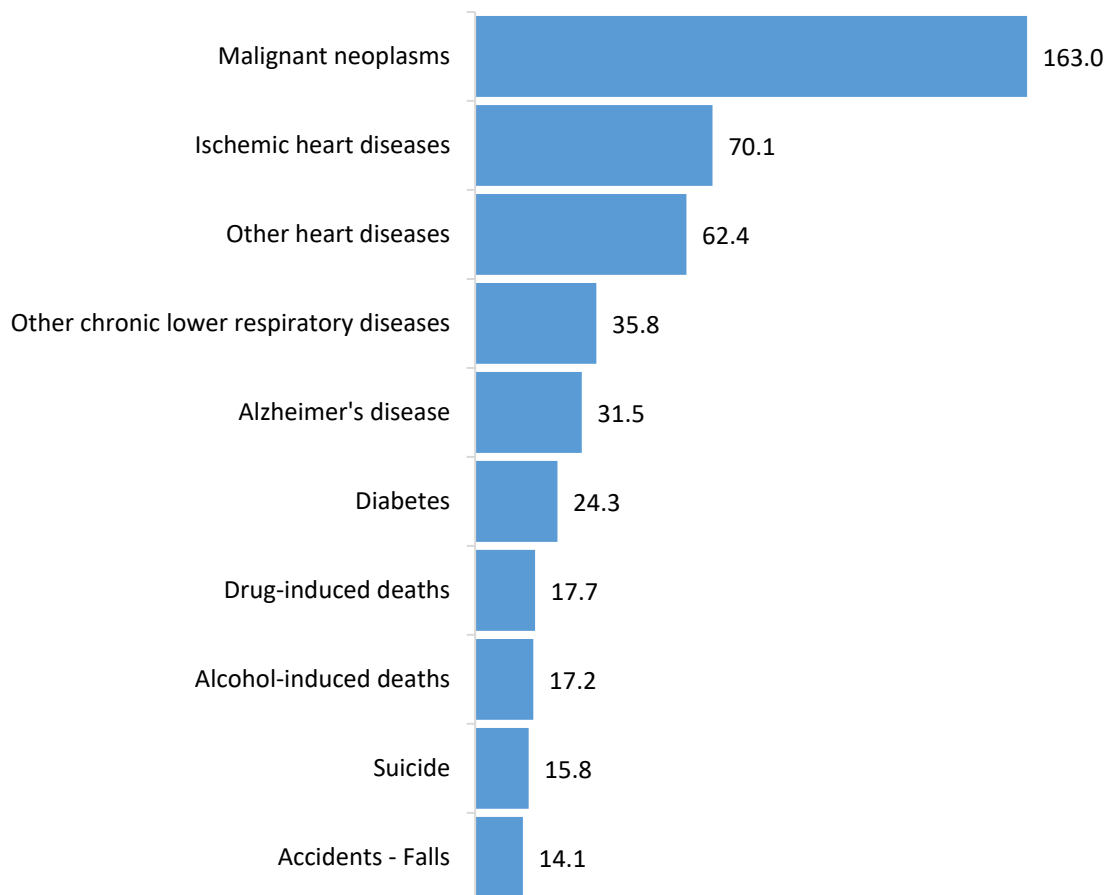
Demographic characteristic	% of Population
Gender	
Male	49.5%
Female	50.5%
Age	
Median age (years)	36.7
Under 5 years	5.9%
5 to 19 years	15.9%
20 to 44 years	41.1%
45 to 64 years	25.2%
65 years and older	11.9%
Race/ethnicity	
American Indian and Alaska Native	0.8%
Asian	6.9%
Black or African American	5.4%
Native Hawaiian and Other Pacific Islander	0.6%
Hispanic or Latino (of any race)	11.1%
Two or more races	5.2%
White	78.2%
With a disability	13.3%
Foreign born	13.9%
Language other than English spoken at home	19.7%

Source: American Community Survey 5-year estimates 2012-2016.

Mortality Rate

The mortality rate is the number of deaths per 100,000 people in a defined population over a specific time period. The following figure (G.3-1) shows the mortality rates of the leading causes of death in Multnomah County between 2012 and 2016.

Figure G.3-1. Multnomah County Mortality Rates 2012–2016.



Note: All rates are per 100,000 population and are age-adjusted to the 2000 U.S. standard population. Source: Community Health Assessment Tool (CHAT).

Chronic Disease in the Multnomah County Medicaid Population

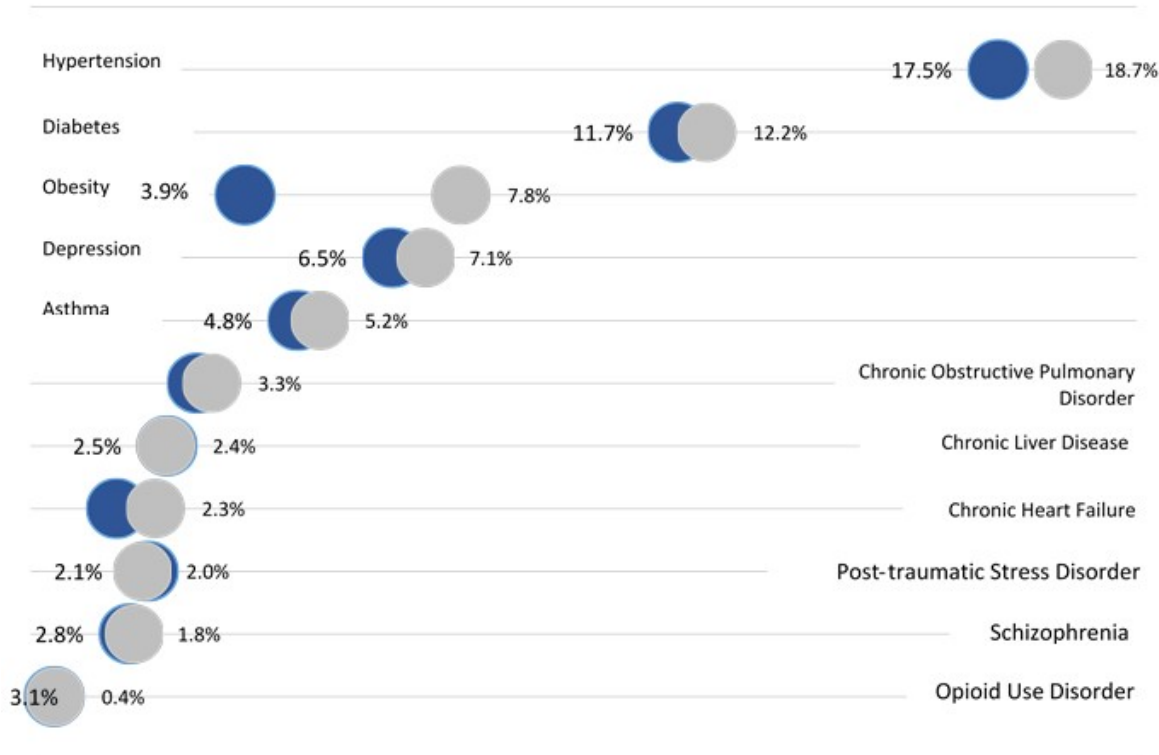
Medicaid is the second largest source of health insurance in the United States after employer-provided insurance and historically has covered low-income children and parents, pregnant women, and people with disabilities.¹

In Multnomah County, Medicaid beneficiaries are covered through Health Share of Oregon. To identify the prevalence of chronic conditions in the region's Medicare population, Health Share of Oregon provided member utilization data from 2016 and 2017.

Asian

Between 2016 and 2017, the prevalence of **hypertension and obesity had the greatest increase** for Asian Health Share of Oregon members in Multnomah County (Figure G.3-2).²

Figure G.3-2. Health Share of Oregon 2016 and 2017: Asian.



N = 10,708; 2017 N = 10,117.

Source: Health Share of Oregon.

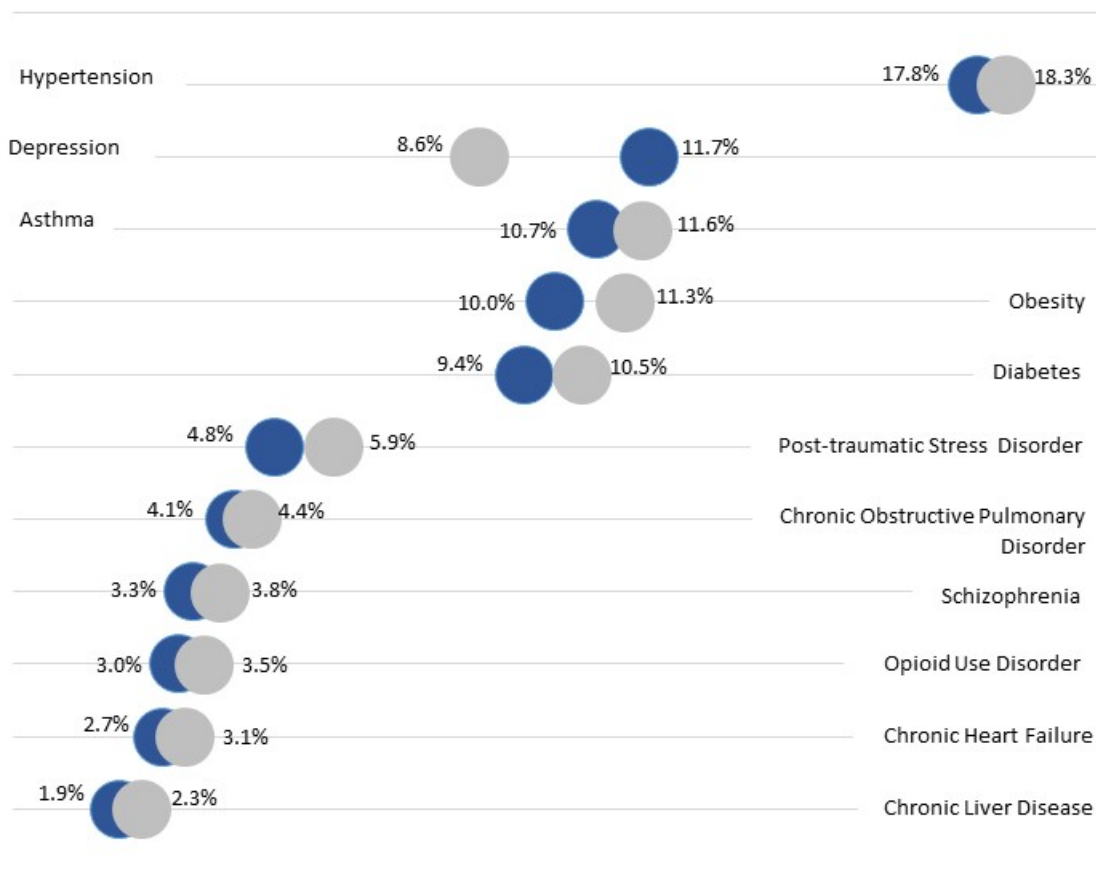
¹ Centers for Medicare & Medicaid Services. 2013 CMS Statistics. U.S. DHHS, Baltimore, MD; 2013.

² Asian at Health Share of Oregon includes Chinese, Vietnamese, Korean, Hmong, Laotian, Filipino/a, Japanese, South Asian, Asian India, Other Asian, and Asian.

Black/African American

Between 2016 and 2017, the prevalence of **depression, obesity, diabetes, and post-traumatic stress disorder had the greatest increase** for Black/African American Health Share of Oregon members in Multnomah County (Figure G.3-3).

Figure G.3-3. Health Share of Oregon 2016 and 2017: Black/African American.



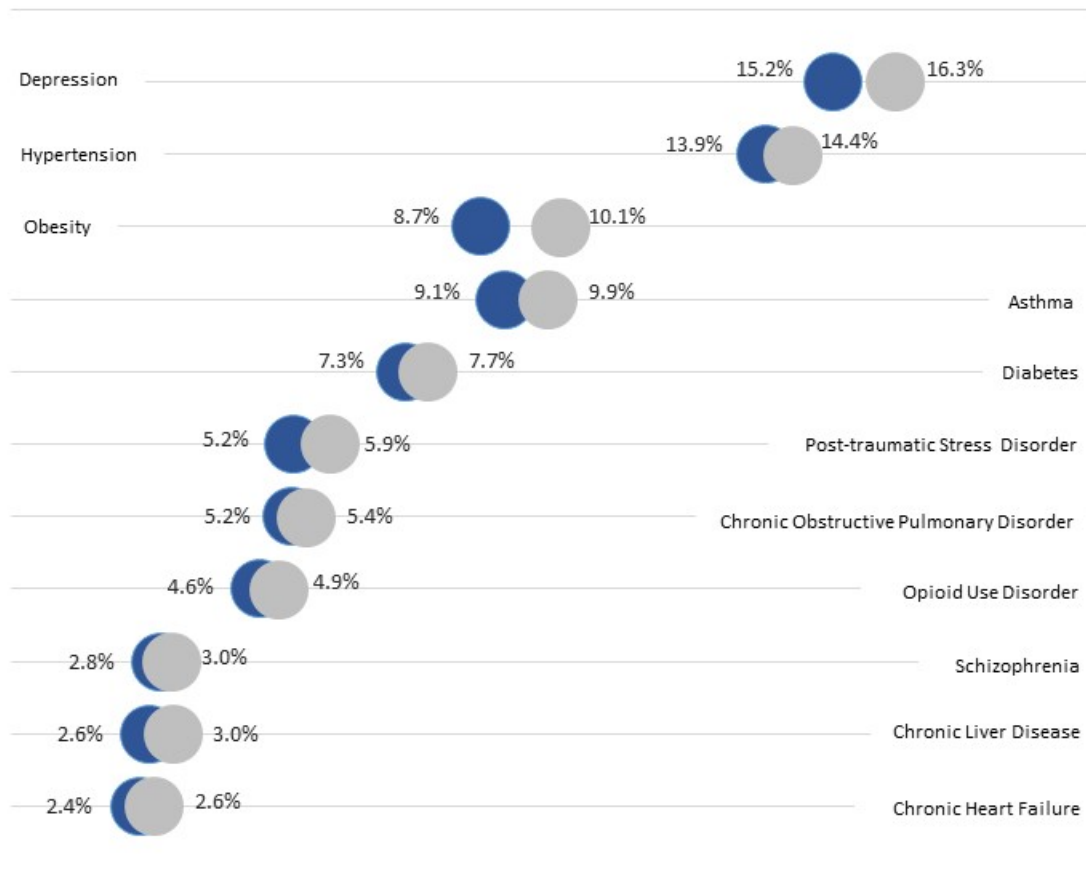
2016 N = 13,879; 2017 N = 12,770.

Source: Health Share of Oregon.

Caucasian

Between 2016 and 2017, rates of **depression and obesity had the greatest increase** for Caucasian Health Share of Oregon members in Multnomah County (Figure G.3-4).

Figure G.3-4. Health Share of Oregon 2016 and 2017: Caucasian.



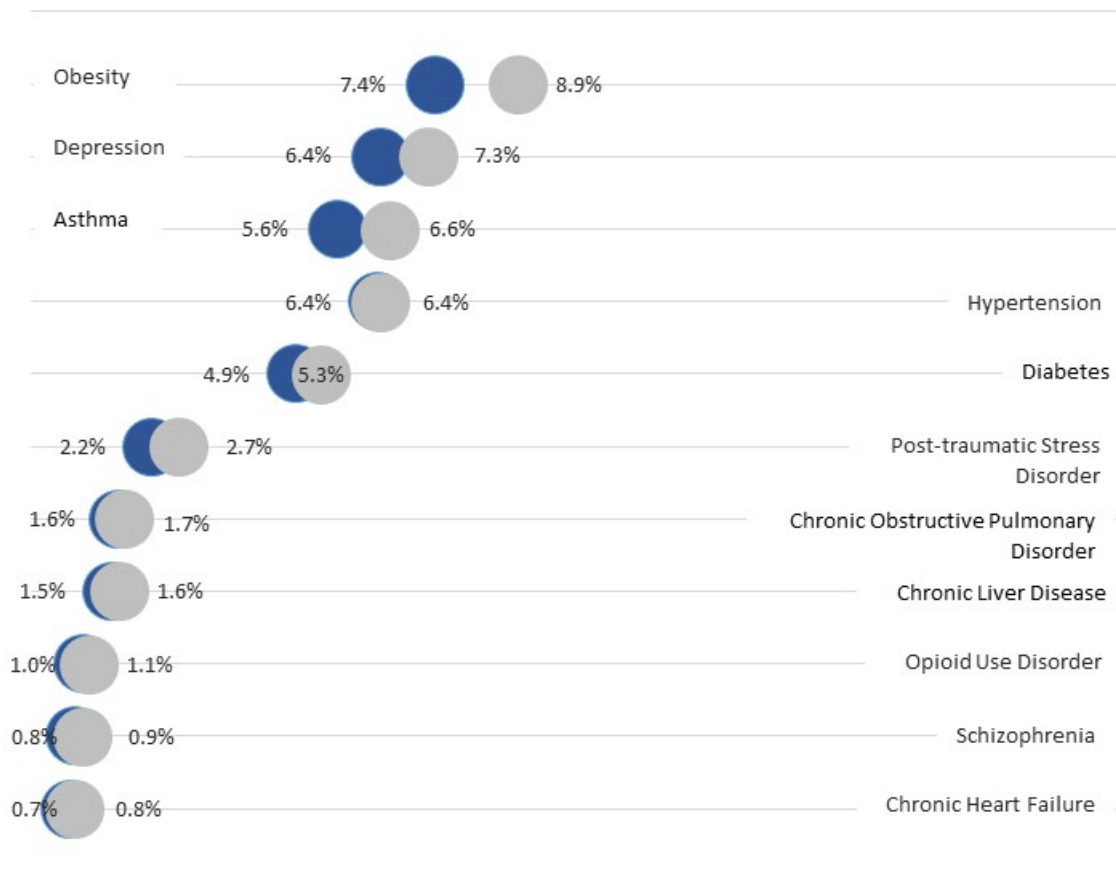
2016 N = 61,357; 2017 N = 55,255.

Source: Health Share of Oregon

Hispanic

Between 2016 and 2017, the prevalence of **obesity, depression, and asthma** had the greatest **increase** for Hispanic (of any race) Health Share of Oregon members in Multnomah County (Figure G.3-5).

Figure G.3-5. Health Share of Oregon 2016 and 2017: Hispanic.



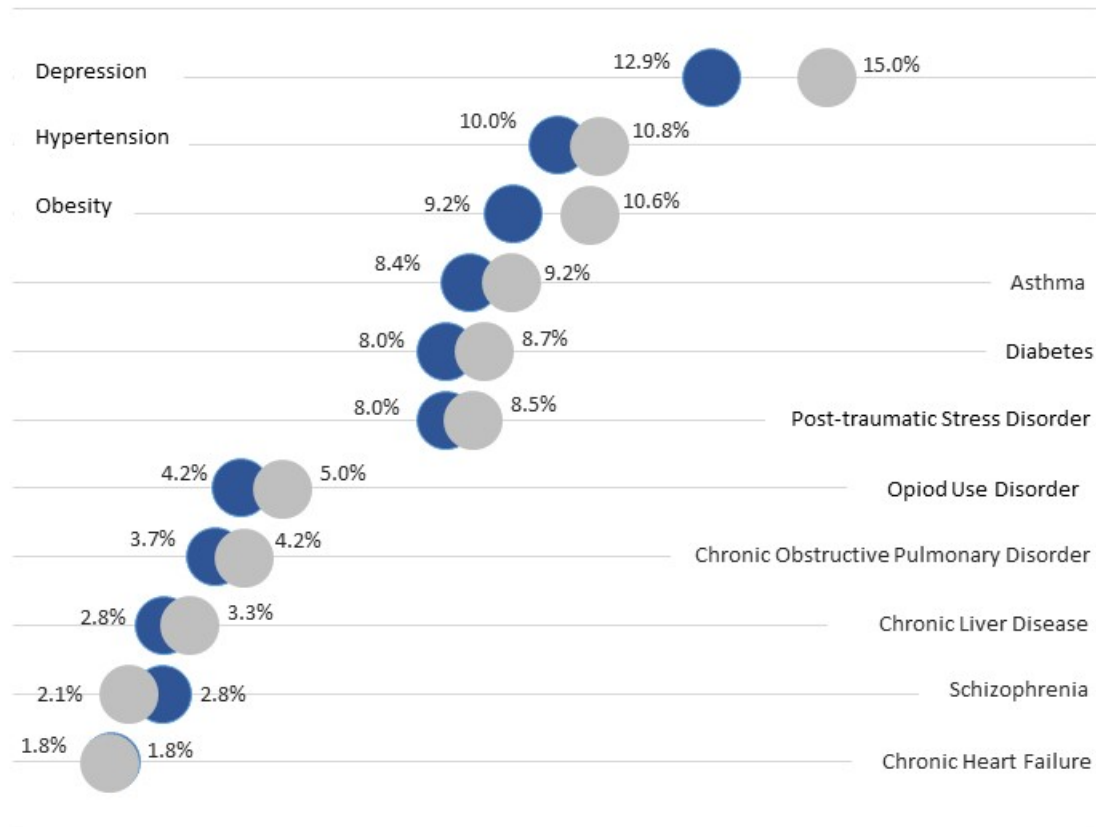
2016 *N* = 12,834; 2017 *N* = 11,116.

Source: Health Share of Oregon

Native American

Between 2016 and 2017, the prevalence of **depression and obesity** had the greatest increase for Native American Health Share of Oregon members in Multnomah County (Figure G.3-6).

Figure G.3-6. Health Share of Oregon 2016 and 2017: Native American.



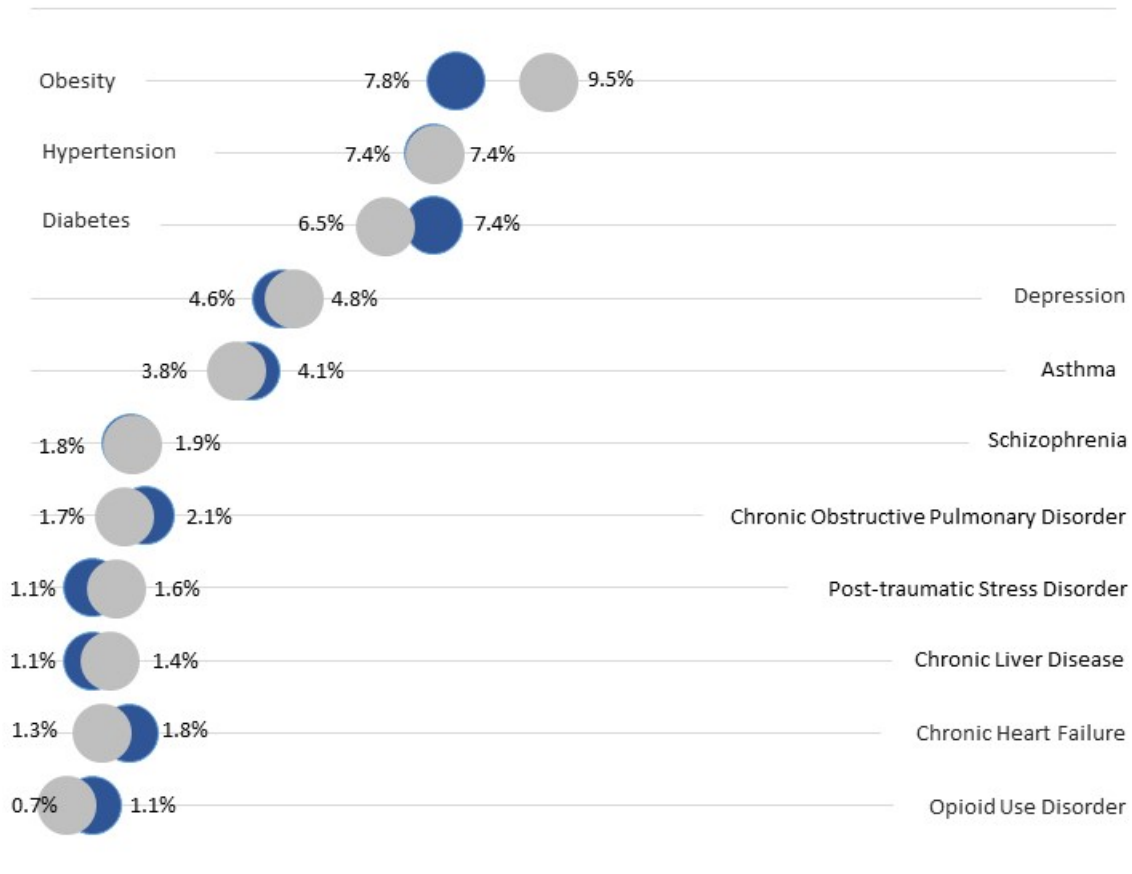
2016 N = 1,614; 2017 N = 1,535.

Source: Health Share of Oregon

Pacific Islander

Between 2016 and 2017, the prevalence of **obesity had the greatest increase** for Pacific Islander Health Share members in Multnomah County (Figure G.3-7). Rates of **diabetes, chronic obstructive pulmonary disorder, chronic heart failure, and opioid use disorder decreased**.

Figure G.3-7. Health Share of Oregon 2016 and 2017: Pacific Islander



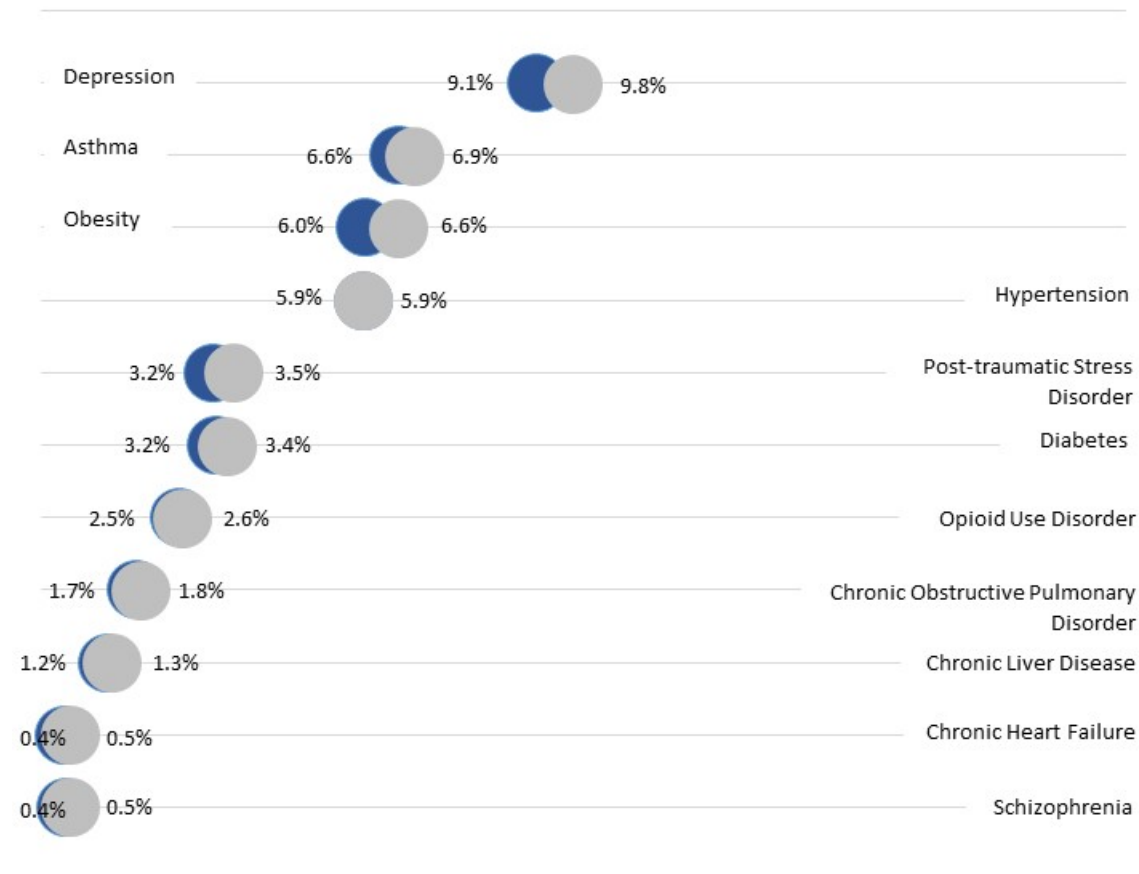
2016 *N* = 714; 2017 *N* = 767.

Source: Health Share of Oregon

Race Not Provided

In 2016 and 2017, the prevalence of **depression and obesity had the greatest increase** for Health Share of Oregon members in Multnomah County who did not provide their race or ethnicity at intake (Figure G.3-8).

Figure G.3- 8. Health Share of Oregon 2016 and 2017: Race Not Provided



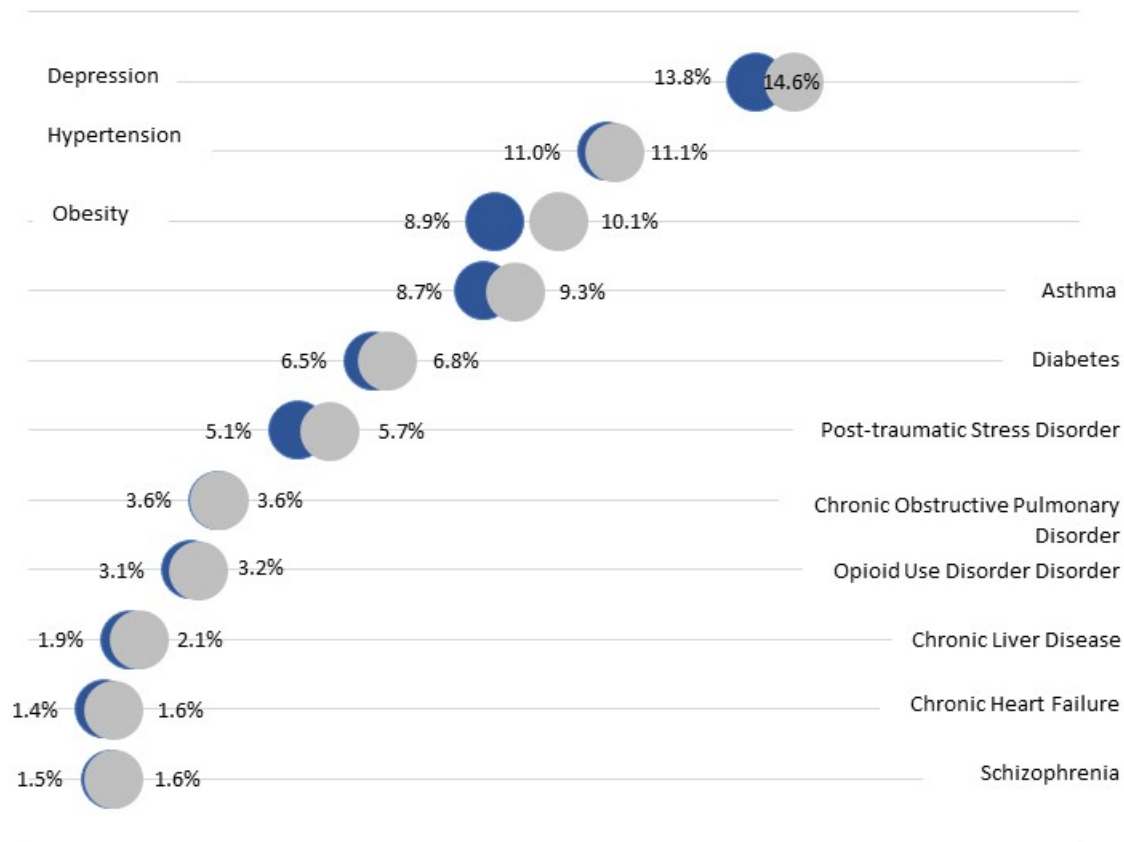
2016 N = 57,297; 2017 N = 57,669.

Source: Health Share of Oregon

Female

Between 2016 and 2017, the prevalence of **depression and obesity had the greatest increase** for female Health Share of Oregon members in Multnomah County (Figure G.3-9).

Figure G.3-9. Health Share of Oregon 2016 and 2017: Female.



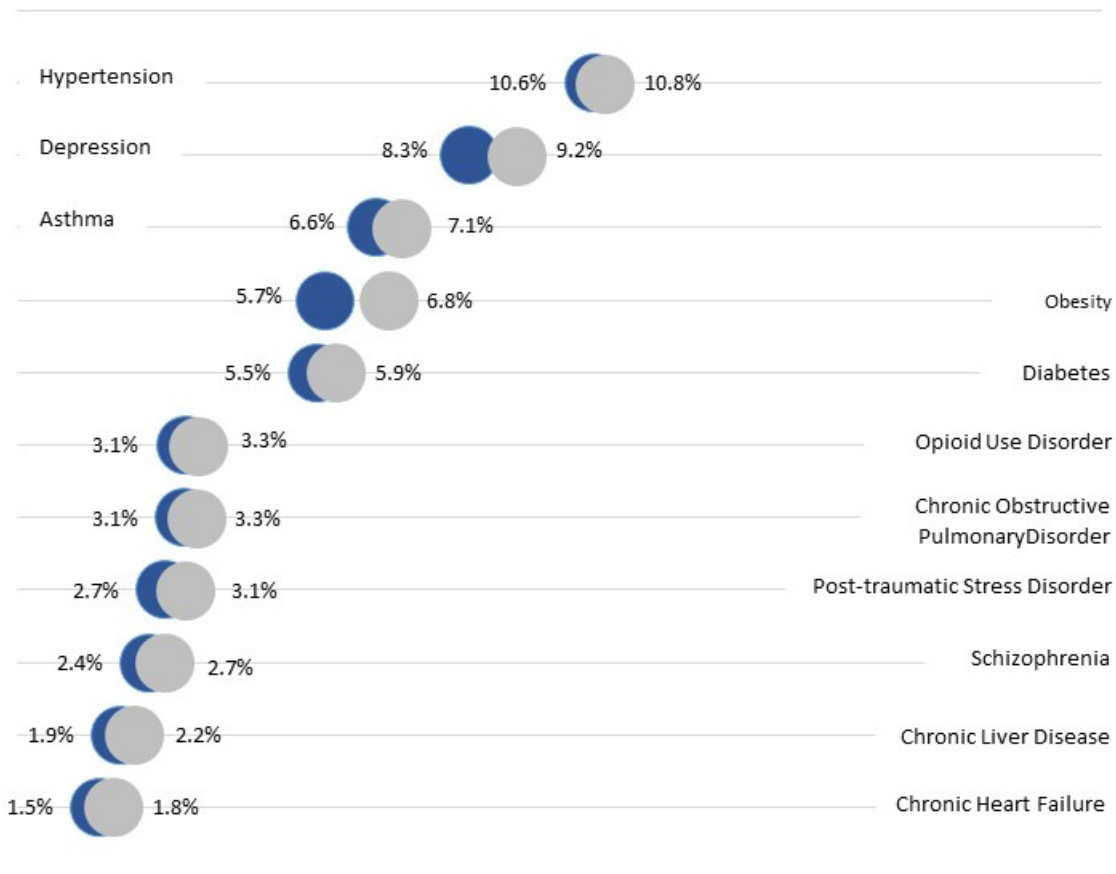
2016 N = 83,561; 2017 N = 78,970

Source: Health Share of Oregon

Male

Between 2016 and 2017, **the prevalence of depression and obesity had the greatest increase** for male Health Share of Oregon members in Multnomah County (Figure G.3-10).

Figure G.3-10. Health Share of Oregon 2016 and 2017: Male.



2016 *N* = 77,542; 2017 *N* = 72,300.

Source: Health Share of Oregon

Communicable Disease

Communicable diseases are infections, usually viral or bacterial, that are spread from person to person. The following table presents the age-adjusted incidence rates for the 10 most common communicable diseases in Multnomah County across three time periods.

Table G.3-2. Top 10 Communicable Diseases in Multnomah County.

Rank	Communicable Disease	2007–2009	2009–2011	2014–2016
1	Chlamydia	435.6	484.0	605.7
2	Gonorrhea	83.1	88.2	178.8
3	Hepatitis C (chronic)	207.9	174.9	158.2
4	Syphilis (Early)	4.0	10.0	30.6
5	Campylobacteriosis	20.8	24.7	26.4
6	Hepatitis B (chronic)	25.8	24.0	24.6
7	Giardiasis	20.2	21.9	18.7
8	Salmonellosis (non-typhoidal)	11.6	12.7	11.9
9	HIV/AIDS	15.8	14.6	11.4
10	Pertussis (whooping cough)	5.5	11.2	8.3

Note. All rates are per 100,000 population and are age-adjusted to the 2000 U.S. standard population.

G.4. Washington County Overview

Demographics	G.4-2
Mortality Rate	G.4-3
Chronic Disease in the Washington County Medicaid Population	G.4-4
Asian	G.4-4
Black/African American.....	G.4-5
Caucasian	G.4-6
Hispanic.....	G.4-7
Native American.....	G.4-8
Pacific Islander.	G.4-9
Race Not Provided	G.4-10
Female.....	G.4-11
Male	G.4-12
Communicable Disease	G.4-13

Demographics

In Table G.4-1, basic demographic characteristics of the population are outlined: number of people in Washington County, age, racial/ethnic identify, disability, immigration status, language, and sex.

Table G.4-1. Selected Demographic Characteristics in Washington County:
Total Population=564,088.

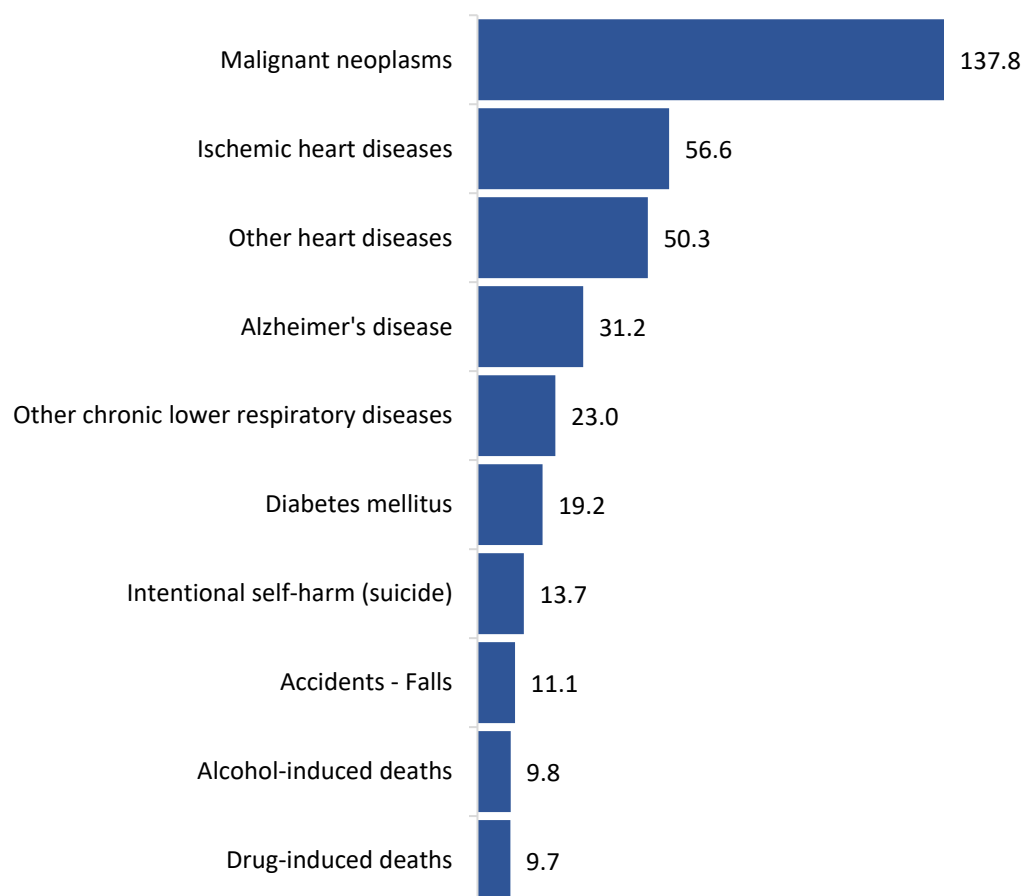
Demographic characteristic	% of Population
Gender	
Male	49.3%
Female	50.7%
Age	
Median age (years)	36.2
Under 5 years	6.6%
5 to 19 years	19.9%
20 to 44 years	36.4%
45 to 64 years	25.2%
65 years and older	11.8%
Race/ethnicity	
American Indian and Alaska Native	0.6%
Asian	9.5%
Black or African American	1.8%
Hispanic or Latino (of any race)	16.2%
Native Hawaiian and Other Pacific Islander	0.4%
Two or more races	4.9%
White	77.6%
With a disability	10.2%
Foreign born	17.0%
Language other than English spoken at home	24.1%

Source: American Community Survey 5-year estimates 2012-2016.

Mortality Rate

The mortality rate is the number of deaths per 100,000 people in a defined population over a specific time period. Figure G-4-1 shows the mortality rates of the leading causes of death in Washington County between 2012 and 2016.

Figure 1. Washington County Mortality Rates 2012–2016.



Note: All rates are per 100,000 population and are age-adjusted to the 2000 US standard population. Source: Oregon Public Health Assessment Tool (OPHAT).

Chronic Disease in the Washington County Medicaid Population

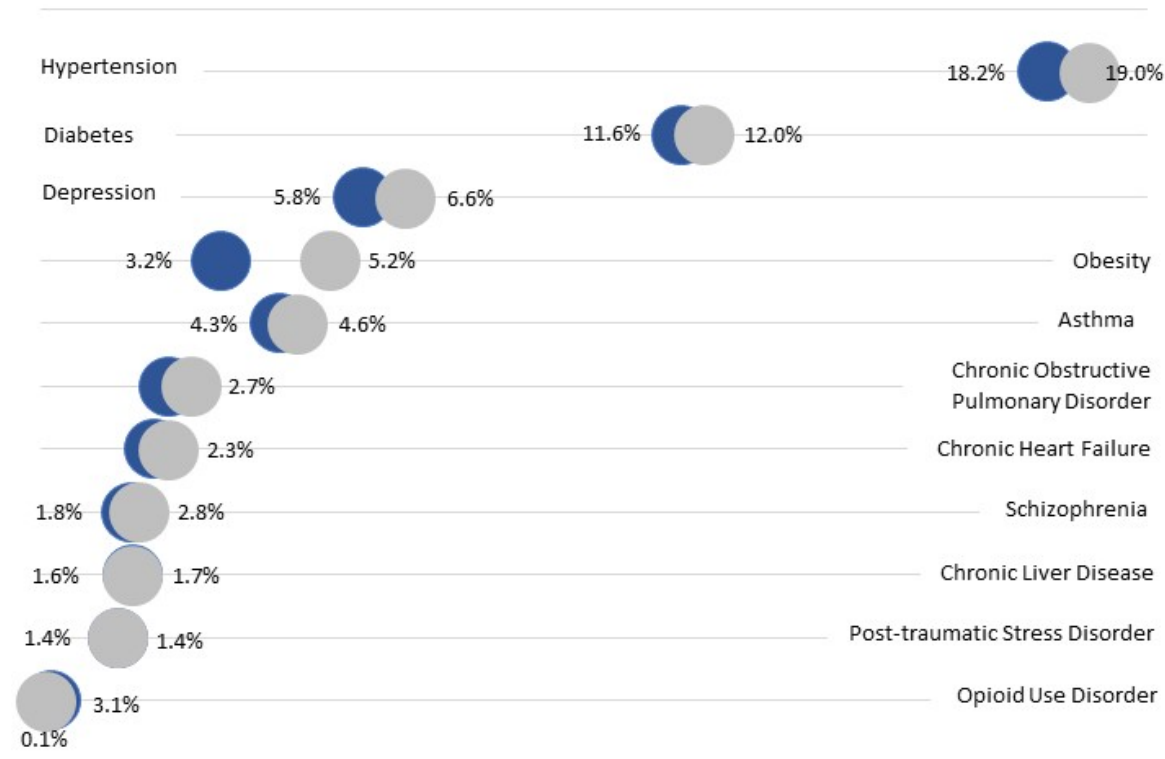
Medicaid is the second largest source of health insurance in the United States after employer-provided insurance and historically has covered low-income children and parents, pregnant women, and people with disabilities.¹

In Washington County, Medicaid beneficiaries are covered through Health Share of Oregon. To identify the prevalence of chronic conditions in the region's Medicare population, Health Share of Oregon provided member utilization data from 2016 and 2017.

Asian

Between 2016 and 2017, the prevalence of **obesity had the greatest increase** for Asian Health Share of Oregon members in Washington County².

Figure G.4-2. Health Share of Oregon 2016 and 2017: Asian.



Note: 2016 N = 10,708; 2017 N = 10,117.

Source: Health Share of Oregon.

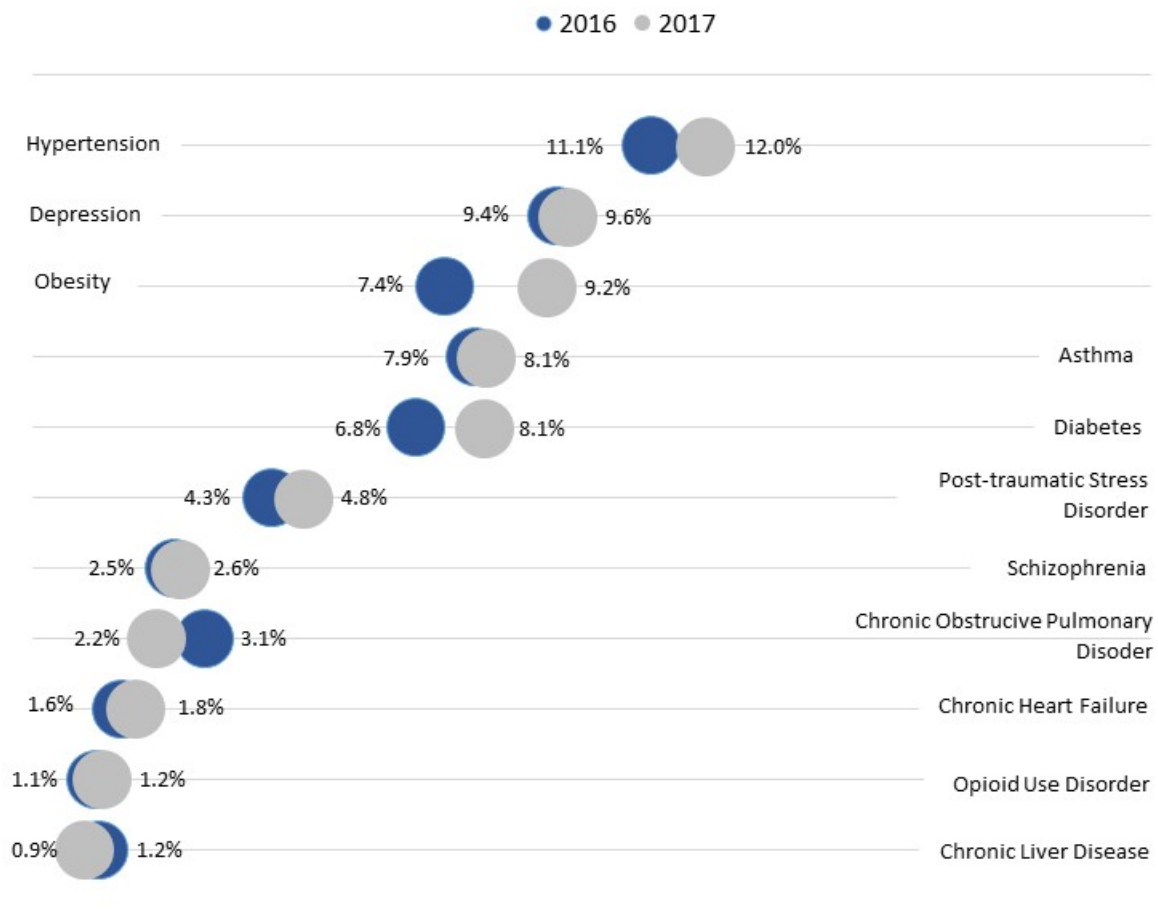
¹ Centers for Medicare & Medicaid Services. 2013 CMS Statistics. U.S. DHHS, Baltimore, MD; 2013.

² Asian at Health Share of Oregon includes Chinese, Vietnamese, Korean, Hmong, Laotian, Filipino/a, Japanese, South Asian, Asian India, Other Asian, and Asian.

Black/African American

Between 2016 and 2017, the prevalence of **hypertension and obesity** the greatest increase for Black/African American Health Share of Oregon members in Washington County.

Figure G.4-3. Health Share of Oregon 2016 and 2017: Black/African American.



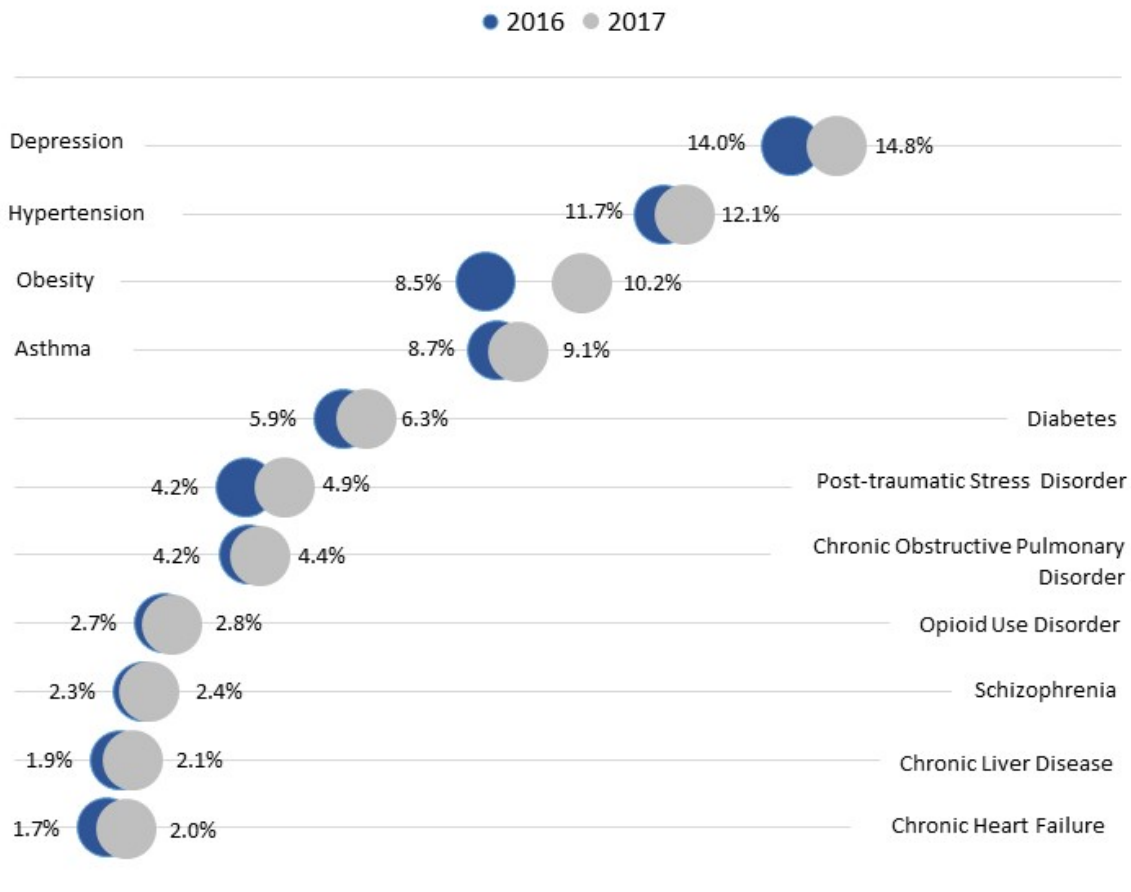
Note: 2016 N = 13,879; 2017 N = 12,770.

Source: Health Share of Oregon.

Caucasian

Between 2016 and 2017, rates of **depression and obesity had the greatest increase** for Caucasian Health Share of Oregon members in Washington County.

Figure G.4-4. Health Share of Oregon 2016 and 2017: Caucasian.



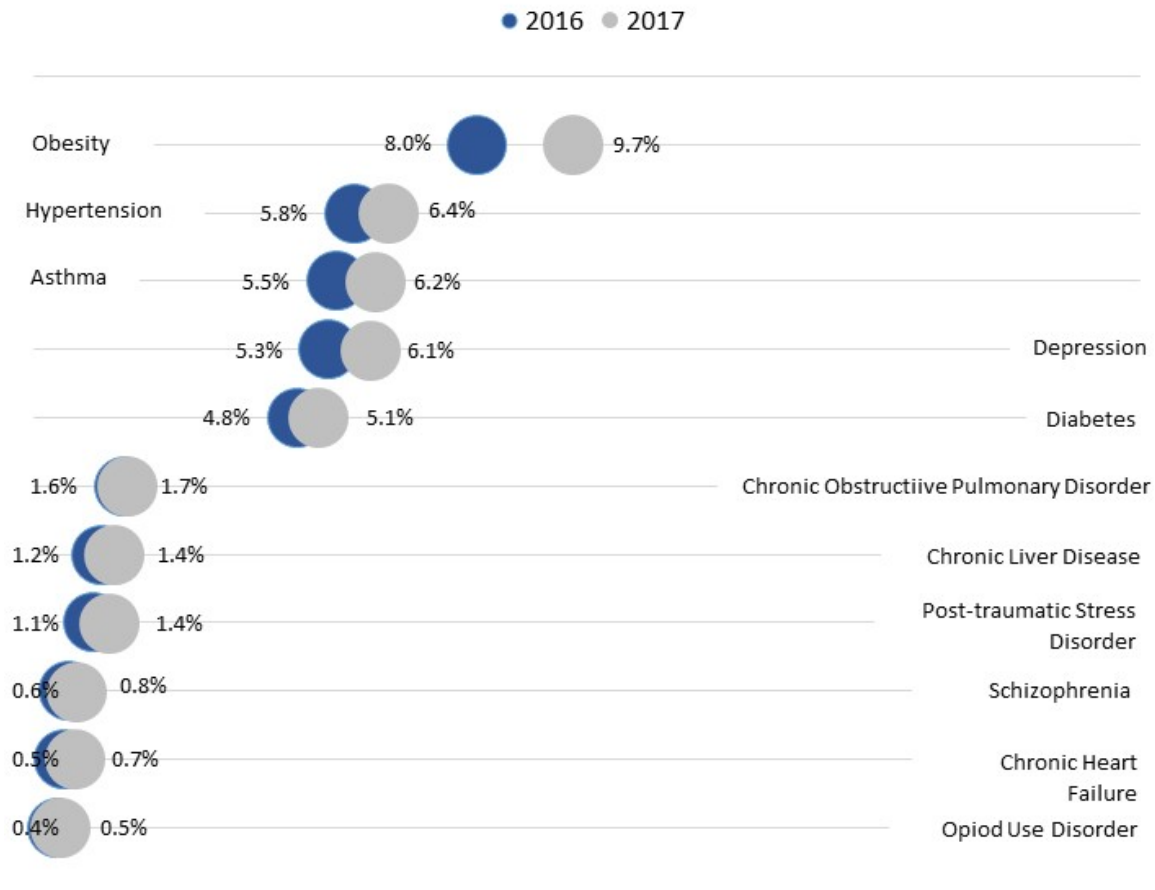
Note: 2016 N = 61,357; 2017 N = 55,255.

Source: Health Share of Oregon.

Hispanic

Between 2016 and 2017, the prevalence of **obesity had the greatest increase** for Hispanic (of any race) Health Share of Oregon members in Washington County.

Figure G.4-5. Health Share of Oregon 2016 and 2017: Hispanic.



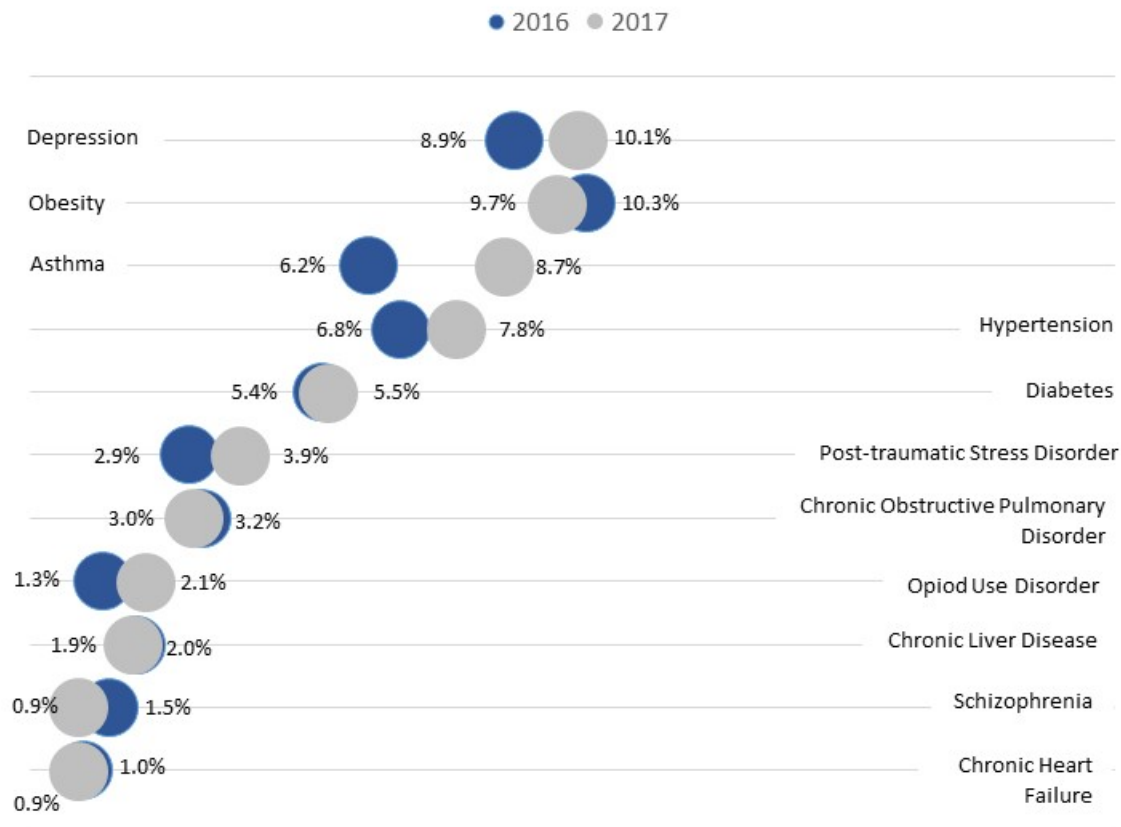
Note: 2016 N = 12,834; 2017 N = 11,116.

Source: Health Share of Oregon.

Native American

Between 2016 and 2017, the prevalence of **depression, asthma, and hypertension** had the greatest increase for Native American Health Share of Oregon members in Washington County.

Figure G.4-6. Health Share of Oregon 2016 and 2017: Native American.



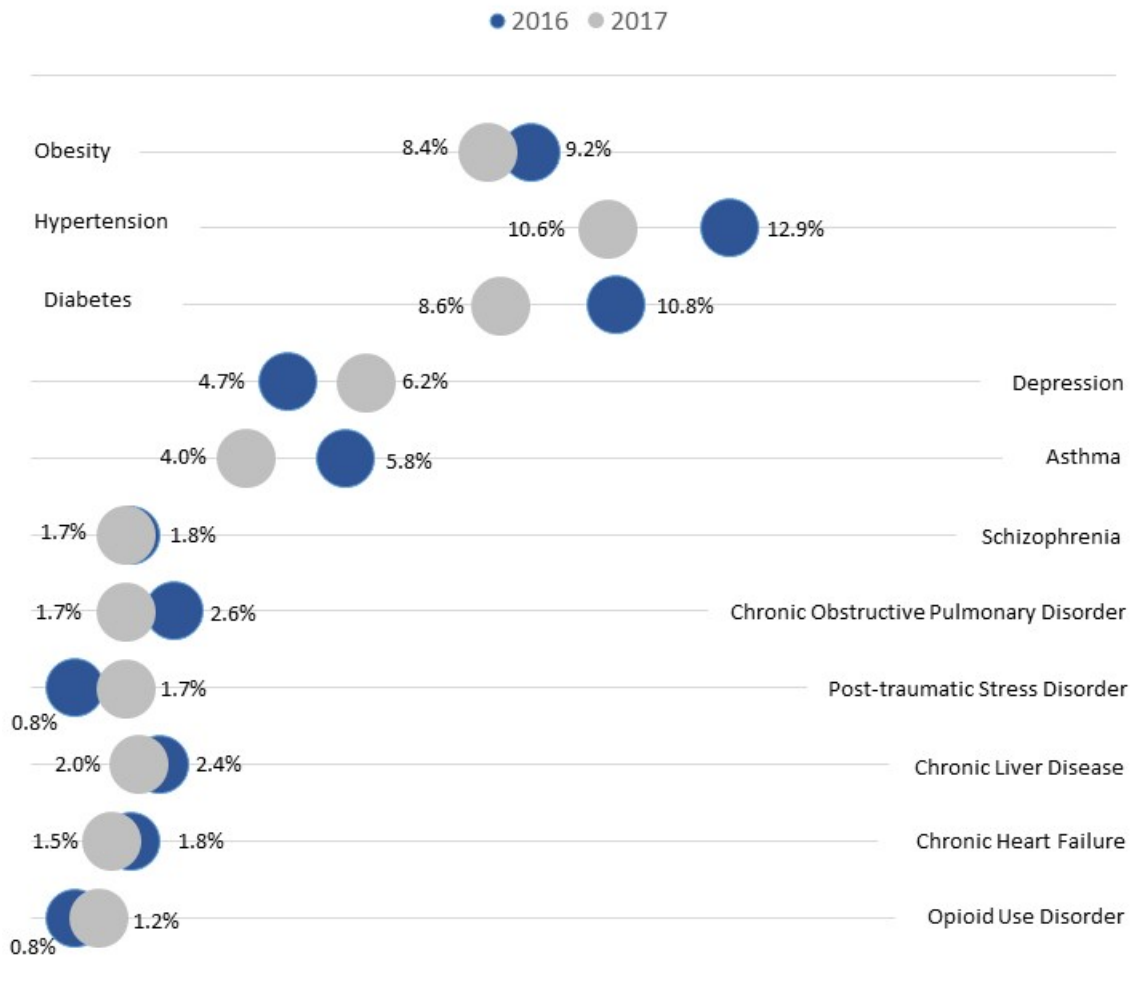
Note: 2016 N = 1,614; 2017 N = 1,535.

Source: Health Share of Oregon.

Pacific Islander

Between 2016 and 2017, the prevalence of **depression had the greatest increase** for Pacific Islander Health Share members in Washington County. Rates of **hypertension, diabetes, asthma, and chronic obstructive pulmonary disorder decreased**.

Figure G.4-7. Health Share of Oregon 2016 and 2017: Pacific Islander.



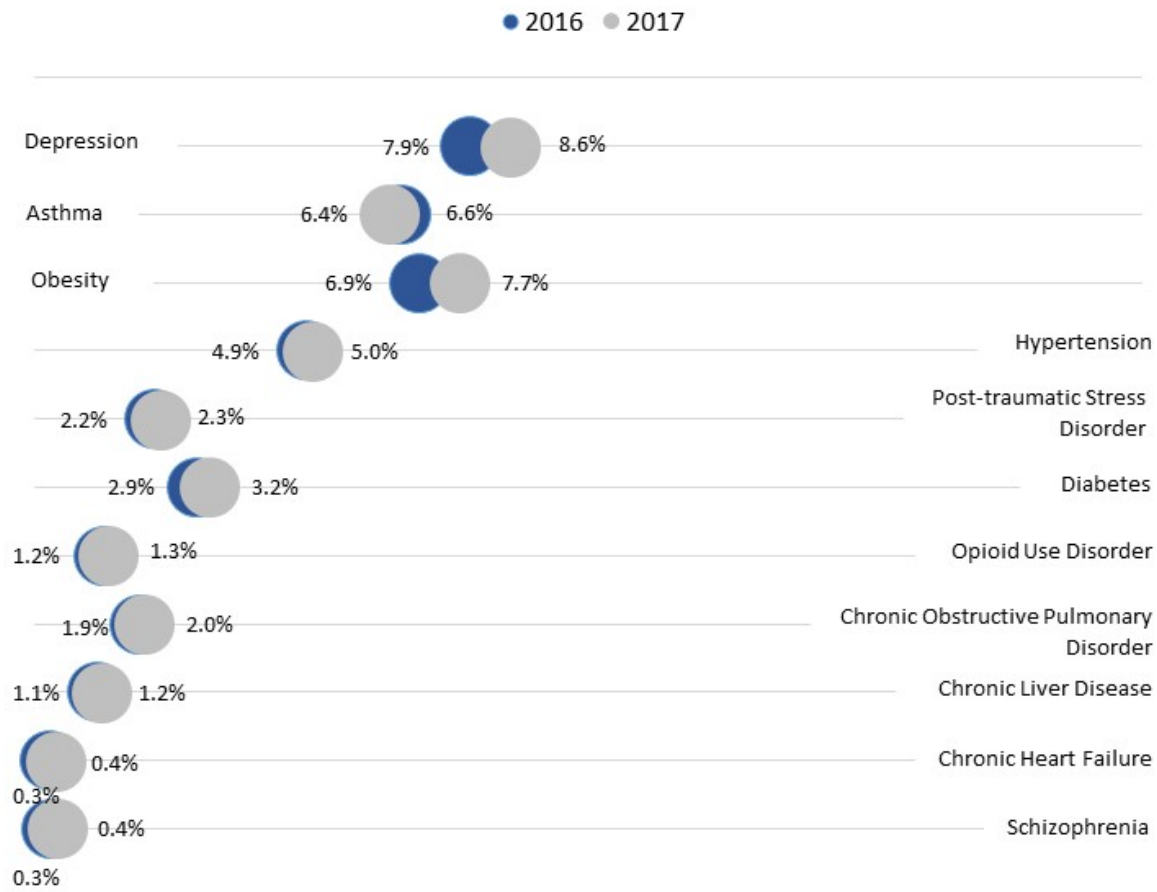
2016 N = 714; 2017 N = 767.

Source: Health Share of Oregon.

Race Not Provided

In 2016 and 2017, the prevalence of **depression and obesity had the greatest increase** for Health Share of Oregon members in Washington County who did not provide their race or ethnicity at intake.

Figure 8. Health Share of Oregon 2016 and 2017: Race Not Provided.



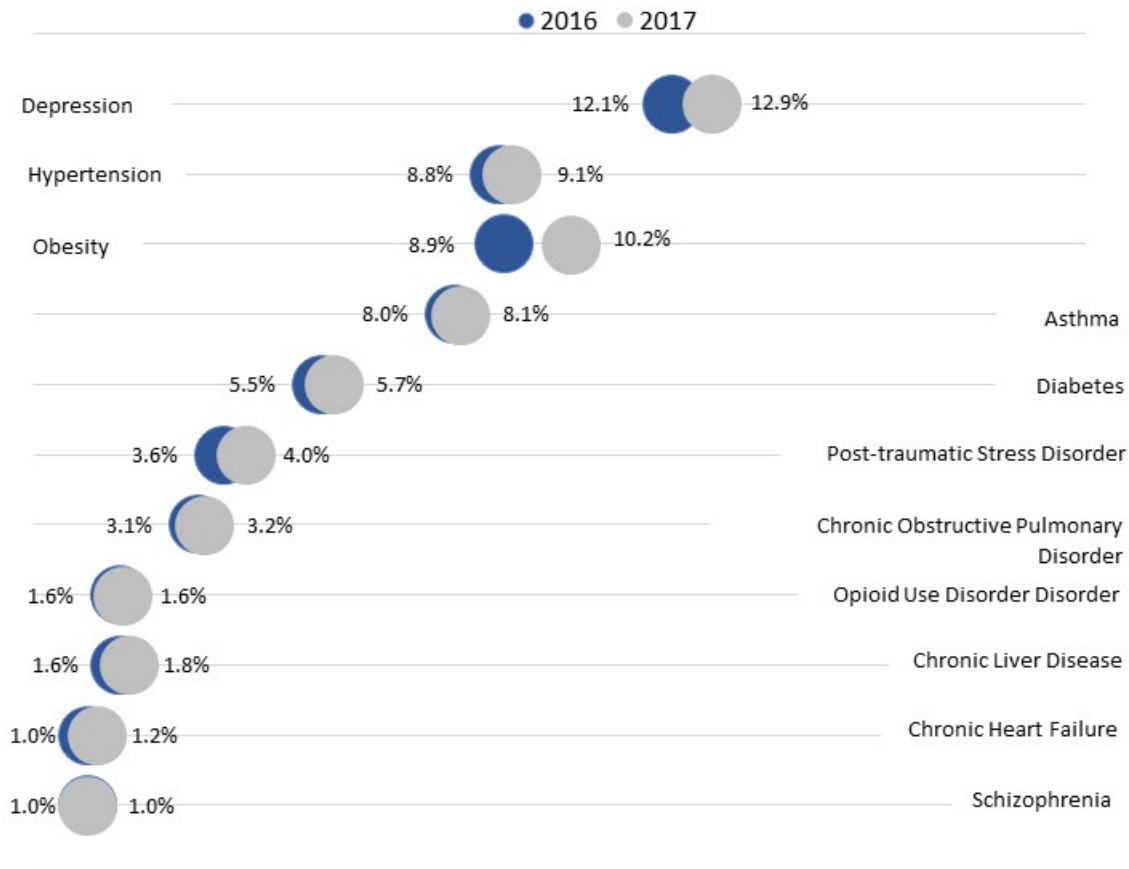
2016 N = 57,297; 2017 N = 57,669.

Source: Health Share of Oregon

Female

Between 2016 and 2017, the prevalence of **depression and obesity had the greatest increase** for female Health Share of Oregon members in Washington County.

Figure G.4-9. Health Share of Oregon 2016 and 2017: Female.

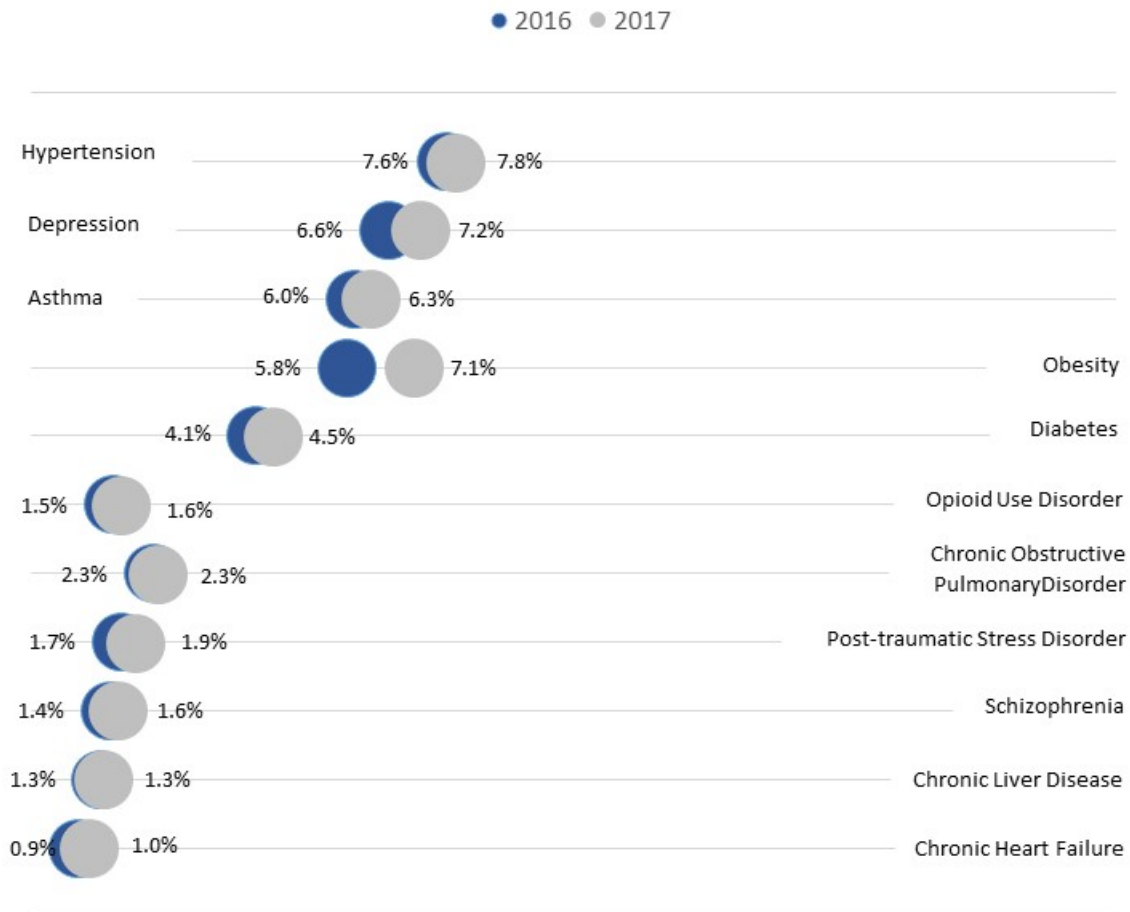


2016 N = 83,561; 2017 N = 78,970.

Source: Health Share of Oregon.

Male

Between 2016 and 2017, the prevalence of **depression and obesity** had the greatest increase for male Health Share of Oregon members in Washington County.



2016 N = 77,542; 2017 N = 72,300.

Source: Health Share of Oregon.

Communicable Disease

Communicable diseases are infections, usually viral or bacterial, that are spread from person to person. The table below presents the age-adjusted incidence rates for the 10 most common communicable diseases in Washington County across three time periods.

Table G.4-2. Top 10 Communicable Diseases in Washington County.

Rank	Communicable Disease	2007-2009	2009-2011	2014-2016
1	Chlamydia	229.2	282.0	383.6
2	Hepatitis C (chronic)	99.6	74.3	87.0
3	Gonorrhea	20.5	20.5	57.7
4	Campylobacteriosis	19.0	21.3	20.2
5	Hepatitis B (chronic)	17.9	14.5	18.6
6	Syphilis (Early)	0.9	3.2	14.1
7	Salmonellosis (non-typhoidal)	11.9	11.4	11.1
8	Pertussis (whooping cough)	3.6	4.4	10.1
9	Giardiasis	8.3	8.8	7.0
10	HIV/AIDS	6.9	5.6	5.9

Note: All rates are per 100,000 population and are age-adjusted to the 2000 US standard population. Source: Oregon Public Health Assessment Tool (OPHAT).